STATE OF IOWA

IOWA DENTAL BOARD

KIM REYNOLDS, GOVERNOR
ADAM GREGG, LT. GOVERNOR

JILL STUECKER
EXECUTIVE DIRECTOR

IOWA DENTAL BOARD
MEETING AGENDA

August 7, 2020

Updated 8/5/2020

The mission of the Iowa Dental Board is to ensure that all Iowans receive professional, competent, and safe dental care of the highest quality.

Meeting Location: This meeting will held via Zoom. Board offices are not currently open due to COVID-19. To access the meeting, see details below.

Board Members: *Will McBride, D.D.S.; Monica Foley, D.D.S.; Lisa Holst, D.D.S.; Gregory Ceraso, D.D.S.; Jonathan DeJong, D.D.S; Jillian Travis, R.D.H.; Nancy Slach, R.D.H.; Lori Elmitt, Public Member; Bruce Thorsen, Public Member*

FRIDAY, AUGUST 7, 2020

COMMITTEE MEETINGS:

DENTAL HYGIENE COMMITTEE: 8:15 A.M.
(See separate agenda)

EXECUTIVE COMMITTEE: 9:00 A.M.

BOARD MEETING:

Click here to join the Zoom meeting
Meeting ID: 872 5278 2480
Password: 711391
Call Line for Phone Access: 312-626-6799

OPEN SESSION: 9:30 A.M.

I. CALL MEETING TO ORDER – ROLL CALL *Will McBride*

II. OPPORTUNITY FOR PUBLIC COMMENT *Will McBride*

III. APPROVAL OF OPEN SESSION MINUTES *Will McBride*

a. June 5, 2020, Quarterly Meeting

IV. REPORTS

A. EXECUTIVE DIRECTOR REPORT *Jill Stuecker*

B. BUDGET REPORT *Jill Stuecker*

C. ANESTHESIA CREDENTIALS COMMITTEE REPORT *Christel Braness*

a. Review of Actions Taken by the Committee on General Anesthesia & Moderate Sedation Permit Applications

D. CONTINUING EDUCATION COMMITTEE REPORT *Lori Elmitt*

a. Vote on Recommendations: Course Applications
b. Vote on Recommendations: Sponsor Applications
c. Vote on Other Committee Recommendations, if any

E. DENTAL HYGIENE COMMITTEE REPORT

a. Committee Meeting Overview
b. Items for Ratification
   i. Claire Nieman, Dental Hygiene Graduate, IAC 650 – 11.5, Dental Hygiene Licensure by Exam
   ii. Chelsey Kloft, Dental Hygiene Graduate, IAC 650 – 11.5, Dental Hygiene Licensure by Exam
   iii. Lindsey Berge, Dental Hygiene Graduate, IAC 650 – 11.5, Dental Hygiene Licensure by Exam
   iv. Des Moines Area Community College on Behalf of Dental Hygiene Graduates, IAC 650 –11.5, Dental Hygiene Licensure by Exam
   v. Indian Hills Community College on Behalf of Dental Hygiene Graduates, IAC 650 –11.5, Dental Hygiene Licensure by Exam
   vi. Carmen Cannon, R.D.H, IAC 650 –11.7, Dental Hygiene Application for Local Anesthesia Permit
   vii. Vote to Delegate Authority to Staff to Administratively Approve Waivers Related to Licensure Exams as Outlined by the Committee
   viii. K.H., Dental Hygiene Graduate, IAC 650 – 12.5 System of Retaking Dental Hygiene Examinations
   (May go into closed session pursuant to Iowa Code 21.5(1)(a), to review or discuss records which are required or authorized by state or federal law to be kept confidential)
   ix. D.A., Dental Hygiene Graduate, IAC 650 – 12.5 System of Retaking Dental Hygiene Examinations
   (May go into closed session pursuant to Iowa Code 21.5(1)(a), to review or discuss

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Please Note: At the discretion of the Board Chair, agenda items may be taken out of order to accommodate scheduling requests of Board members, presenters or attendees or to facilitate meeting efficiency.

If you require the assistance of auxiliary aids or services to participate in or attend the meeting because of a disability, please call the office of the Board at 515-281-5157.

records which are required or authorized by state or federal law to be kept confidential)

V. RULEMAKING *Will McBride*

a. Discussion on Rulemaking Related to HF 2267, An Act Relating to the Regulation of Dental Hygienists and Dental Assistants and the Practice of Dentistry, and Providing Administrative Penalties
b. Discussion on Next Steps Related to Rulemaking for Clinical Examinations
c. Discussion and Vote on Proposed Notice of Intended Action: Revisions Regarding Volunteer Service as Continuing Education, Amendments to Chapter 25

VI. RULE WAIVER REQUESTS *Jill Stuecker*

a. Hannah Quade, Dental Assistant Trainee, IAC 650 –20.6, Registration Requirements
b. Samantha Johnson, IAC 650 – 20.6, Registration Requirements and 20.10, Examination Requirements
c. Robert Alt, D.D.S., IAC – 29.7(2), Deep Sedation or General Anesthesia Standards

VII. LEGISLATION *Jill Stuecker*

a. Discussion on HF 2627
b. Discussion on Potential Board Legislation for 2021 Legislative Session

VIII. OTHER BUSINESS *Will McBride*

a. Discussion on University of Iowa College of Dentistry Aerosol Study
b. COVID-19 Update and Discussion on Board Guidelines
c. Review of Public Health Supervision Reports Submitted by IDPH
d. Vote on Amy Lesch, D.D.S. Silver Diamine Fluoride Course Submitted by IDPH

CLOSED SESSION: Motion to go into closed session pursuant to Iowa Code section 21.5(1)(a), to review or discuss records which are required or authorized by state or federal law to be kept confidential; and pursuant to Iowa Code section 21.5(1)(d), to discuss whether to initiate licensee disciplinary investigations or proceedings; and pursuant to Iowa Code section 21.5(1)(f), to discuss the decision to be rendered in a contested case conducted according to the provisions of chapter 17A.

I. ITEMS FOR REVIEW AND DISCUSSION

a. Closed Session Minutes, June 5, 2020 (21.5(1)(a))
b. Compliance with Board Orders (21.5(1)(d))
c. Complaints and Investigative Reports (21.5(1)(d))
d. Notice of Hearing and Statement of Charges (21.5(1)(d))
e. Combined Statement of Charges, Settlement Agreement and Final Order (21.5(1)(d) & 21.5(1)(f))

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OPEN SESSION

II. ACTION, IF ANY, ON CLOSED SESSION AGENDA ITEMS

a. Closed Session Minutes, June 5, 2020
b. Compliance with Board Orders
c. Complaints and Investigative Reports
d. Notice of Hearing and Statement of Charges
e. Combined Statement of Charges, Settlement Agreement and Final Order

III. ADJOURN

NEXT REGULARLY SCHEDULED MEETING: SEPTEMBER 25, 2020

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If you require the assistance of auxiliary aids or services to participate in or attend the meeting because of a disability, please call the office of the Board at 515-281-5157.

IOWA DENTAL BOARD

MINUTES
June 5, 2020
Conference Room
400 SW 8th St. Suite D
Des Moines, Iowa

Board Members	**June 5, 2020**
Gregory Ceraso, D.D.S.,	Present
Jonathan DeJong, D.D.S.	Present
Monica Foley, D.D.S.	Present
Lisa Holst, D.D.S.	Present
William McBride, D.D.S.	Present
Nancy Slach, R.D.H.	Present
Jillian Travis, R.D.H.	Present
Bruce Thorsen, Public Member	Present
Lori Elmitt, Public Member	Present

Staff Members
Jill Stuecker, Christel Braness, Dee Ann Argo, David Schultz

Attorney General's Office
Laura Steffensmeier, Assistant Attorney General

I. CALL TO ORDER FOR JUNE 5, 2020

Dr. McBride called the meeting of the Iowa Dental Board to order at 9:30 a.m., on Friday, June 5, 2020. The meeting was held by electronic means in compliance with Iowa Code Section 21.8 due to the COVID-19 pandemic.

Roll Call:

Member	McBride	Foley	Ceraso	DeJong	Holst	Slach	Travis	Elmitt	Thorsen
Present	x	x	x	x	x	x	x	x	x
Absent									

A quorum was established with all members present.

Dr. McBride thanked the Board members and staff for their extra work during this period. Dr. McBride also thanked the other organizations and interested parties who continue to assist the Board in their efforts.

DRAFT

II. THE COMISSION ON DENTAL COMPETENCY ASSESSMENTS (CDCA)

- *Overview and Discussion on Non-Patient Dental Hygiene Exam*

Mr. Alexander Vandiver, CEO of the Commission of Dental Competency Assessments (CDCA), provided an overview of the intended discussion.

Ms. Connolly-Atkins, M.S., R.D.H., Senior Advisor and Member of the ADEX Dental Hygiene Examination Committee, provided a detailed overview of the non-patient examination for dental hygienists. Ms. Connolly-Atkins also addressed the limitations of the manikin portion of the examination. The tissue in the typodont is workable; however, Ms. Connolly-Atkins admitted that it was not ideal.

Ms. Connolly-Atkins opened the discussion up to questions. Ms. Slach asked several questions about the examination and differences between the patient-based and non-patient testing.

Mr. Vandiver stated that the CDCA does not currently administer testing at Iowa schools; however, there were some students from Minnesota who are interested in the examination who may be coming to Iowa.

III. SOUTHERN REGIONAL TESTING AGENCY (SRTA)

- *Overview and Discussion on Non-Patient Dental Hygiene Exam*

Dr. George Martin, SRTA president provided an overview of the examination. Dr. Martin also addressed the question of using ultrasonic equipment during the COVID-19 response. Dr. Martin stated that they are allowing the use of this equipment on the typodonts. Scoring of the non-patient examination is similar to the patient-based examination. SRTA will begin administering the non-patient examination later this month.

Dr. Martin allowed the opportunity for questions. Dr. McBride asked if comparisons were done between the patient-based examination and the non-patient based examination. Dr. Martin stated that a formal study was not completed; however, those who attempted the examination believed that the examinations were comparable.

Dr. Holst asked if the students would be able to prepare for testing on the models. Dr. Martin stated that models were available for purchase from the vendor.

IV. CENTRAL REGIONAL DENTAL TESTING SERVICE (CRDTS)

- *Overview and Discussion on Non-Patient Dental Hygiene Exam*

Due to technical difficulties, Dr. McBride briefly allowed the opportunity for questions and public comment until Ms. Kimber Cobb was able to connect with audio to the meeting.

V. OPPORTUNITY FOR PUBLIC COMMENT

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Dr. McBride allowed the opportunity for public comment and asked that participants introduce themselves when making comments.

VI. APPROVAL OF OPEN SESSION MINUTES

- *April 3, 2020 – Quarterly Meeting*
- *April 17, 2020 – Teleconference*
- *April 24, 2020 – Teleconference*
- *May 1, 2020 – Teleconference*
- *May 5, 2020 – Teleconference*
- *May 15, 2020 - Teleconference*

❖ MOVED by ELMITT, SECONDED by SLACH, to APPROVE the open session minutes of the meetings as drafted. Motion APPROVED unanimously.

CENTRAL REGIONAL DENTAL TESTING SERVICE (CRDTS)

- *Overview and Discussion on Non-Patient Dental Hygiene Exam*

Ms. Kimber Cobb, executive director of CRDTS, was able to connect to the meeting with audio and provided an overview of the new non-patient dental hygiene examination.

Ms. Cobb opened the discussion up to questions. Ms. Slach asked a few questions about the examination.

Dr. Foley inquired as to whether the non-patient examination had been administered yet. Ms. Cobb stated that CRDTS would be offering the examination starting next week and arrangements were being made to offer it at more schools.

Dr. Holst asked about the modifications to the dental examination. Ms. Cobb stated that the periodontal section would be quite similar on the dental side.

After the discussion ended, Dr. McBride introduced Dr. DeJong and Ms. Travis, the new Board members and welcomed them to the Board. Dr. DeJong and Ms. Travis introduced themselves.

➢ The Board took a brief recess at 10:27 a.m.
➢ The Board reconvened at 10:40 a.m.

I. REPORTS

EXECUTIVE DIRECTOR REPORT

Ms. Stuecker reported that Board staff was working through a database upgrade. The upgrades should improve the renewal process for licensees.

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BUDGET REPORT

Ms. Stuecker reported that the Board was provided an updated financial status report. Expenditures to date are less than budgeted. Ms. Stuecker addressed the vacancy and the effects on the budget and staff workload.

The Board will need to have additional budget discussions going forward.

ANESTHESIA CREDENTIALS COMMITTEE

- *Review of Actions Taken by the Committee on General Anesthesia & Moderate Sedation Permit Applications*

Ms. Braness reported that the Anesthesia Credentials Committee met on May 14, 2020. The committee approved one general anesthesia permit application.

CONTINUING EDUCATION ADVISORY COMMITTEE

- *Vote on Recommendations: Course Applications*
- *Vote on Recommendations: Sponsor Applications*
- *Vote on Other Committee Recommendations*

Ms. Elmitt provided an overview of the committee's recommendations.

❖ MOVED by SLACH, SECONDED by TRAVIS, to APPROVE the recommendations as submitted. Motion APPROVED unanimously.

REGISTRATION APPLICATIONS FOR CONSIDERATION

- *Vote on Joey Brown, Application for Registration as a Dental Assistant*

Ms. Braness provided an overview of the information reported on the application. Ms. Brown has applied for registration as a dental assistant. The Board discussed Ms. Brown's application at the April 3, 2020 meeting and directed staff to offer Ms. Brown a Stipulated Registration Agreement. Ms. Brown has agreed to the stipulations and signed a draft of the order.

❖ MOVED by FOLEY, SECONDED by CERASO, to APPROVE the Stipulated Registration Agreement as drafted. Motion APPROVED unanimously.

❖ *Vote on Victor Falaiye, D.M.D., Application for Licensure as a Dentist*

Ms. Braness provided an overview of the application. Dr. Falaiye reported disciplinary action in the state of Virginia in 2010. Dr. Falaiye has complied with terms of the Virginia Consent Order.

❖ MOVED by HOLST, SECONDED by ELMITT, to APPROVE with an LOW.

DENTAL HYGIENE COMMITTEE

- *Committee Meeting Overview*

Ms. Slach reported that the committee met earlier that morning. The meeting was brief since the committee preferred to hear the examination presentations before holding more thorough discussions. Ms. Slach reported that the Board issued at least one temporary dental hygiene license to date. A list of temporary licenses will be posted to the website as an additional source of information.

- *Item(s) for Ratification*
  - *Request for Rule Waiver: Jessica Garrett, R.D.H. Graduate, Iowa Administrative Code 650 – 11.5, Dental Hygiene Licensure by Exam*

Ms. Stuecker and Ms. Slach provided an overview of the request. Ms. Garrett was a 2020 graduate of a dental hygiene program in Missouri that closed following graduation. As a result of COVID-19, Ms. Garrett requested approval to complete the CDCA OSCE examination for the purposes of licensure. Kansas and Missouri have indicated that they would accept the CDCA OSCE examination for the purposes of licensure as a dental hygienist.

Dr. McBride asked Ms. Steffensmeier to weigh in on the options. Ms. Steffensmeier indicated that the Board has 120 days to issue a decision or it defaults to a denial. The Board could choose to delay the decision if appropriate.

Dr. Foley recommended that Ms. Garrett pursue a temporary license and allow her the year to complete a Board-approved examination. To date, there wasn't a precedent to allow an OSCE-only examination for the purposes of licensure. Dr. Ceraso agreed.

- ❖ MOVED by FOLEY, SECONDED by CERASO, to DENY the waiver request as submitted and inform her of the option to pursue a temporary license. Motion APPROVED unanimously.

II. ADMINISTRATIVE RULE WAIVERS

- *Rule Waiver Request: Dustin Svatos, D4 Student and Creighton University on behalf of the D4 Students, Iowa Administrative Code 650 – 11.2, Dental Licensure by Exam*
- *Rule Waiver Request: Brian Langston, D4 Student, Iowa Administrative Code 650 – 11.2, Dental Licensure by Exam*

Ms. Stuecker provided an overview of the requests. Mr. Langston, a student at A T Still University, and Mr. Svatos and other D4 students at Creighton University requested that the Board accept the modified WREB examination using manikins for the endodontic, prosthodontic and simulated operative portions of the examination in conjunction with the written Comprehensive Treatment Plan (CTP) in lieu of the periodontal portion of the examination.

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Dr. McBride provided an overview of the requirements of the operative section and addressed some of the differences between the various modified examinations reviewed by the Board to date.

Dr. Ceraso was in favor of approving this examination with the additional sections addressing hand skills. Dr. Foley was also in favor to approve the examination with the changes as submitted.

- ❖ MOVED by FOLEY, SECONDED by HOLST to APPROVE the waiver as drafted. Motion APPROVED unanimously.

- *Rule Waiver Request: Nathan Kartchner, D4 Student, Iowa Administrative Code 650 – 11.2, Dental Licensure by Exam*
- *University of Iowa College of Dentistry on behalf of D4 Students, Iowa Administrative Code 650 – 11.2, Dental Licensure by Exam*

Ms. Stuecker provided an overview of the requests. Mr. Kartchner requested that the Board accept the modified CDCA/ADEX CompeDont™ examination using manikins for the operative and restorative portions of the examination. The manikin examination would not include the periodontal section.

The D4 students at the University of Iowa College of Dentistry also requested that the Board modify the previous rule waiver to also allow students the option of completing a manikin-based examination, such as the CDCA CompeDont™ examination.

Dr. Holst asked about the modification of the waiver for the D4 students at the University of Iowa College of Dentistry. Ms. Stuecker addressed the periodontal section of the proposed examination. The periodontal section is optional for some testing agencies; however, the Board currently requires all sections offered.

Ms. Braness noted that the addition of this option may allow more portability to other states. The students could choose which examination to complete.

Dr. Ceraso asked for clarification about what the Board would be approving. Ms. Stuecker clarified that the CompeDont™ examination would be approved without the requirement that the periodontal section be completed. It would remain optional. Dr. McBride addressed some of the concerns. The OSCE portion addressed the periodontal section. The final version of this examination was now available. Therefore, this was being proposed as an option.

Ms. Slach expressed some concerns about the lack of a periodontal component to the modified examination. The Board discussed the concerns briefly.

- ❖ MOVED by SLACH, SECONDED by FOLEY, to APPROVE the waivers as submitted based on the recent precedent. Motion APPROVED unanimously.

- *Vote to Delegate Authority to Staff to Administratively Approve Waivers Related to Licensure Exams as Outlined by the Board*

Dr. McBride provided an overview of the discussion. If the Board members agreed, staff would be given authority to approve additional requests received by dental students if the requests are either identical to waivers previously approved by the Board, or that are identified per this discussion. This would eliminate unnecessary delays in licensure since the Board only meets every 2 months.

Dr. McBride recommended that all regional non-patient-based examinations performed on manikins be eligible for approval. Dr. Howe asked which clinical examinations would be accepted by the Board for the purposes of licensure. Dr. Howe listed the CDCA CompeDont™ examination as an example of an alternative to patient-based examinations. Dr. McBride stated that he would be inclined to accept the modified CDCA, WREB and CRDTS examinations based on the comprehensive information provided to date. Dr. Foley asked if this would also be in conjunction with the ADA or CDCA OSCE examination. Dr. Foley noted that CRDTS does not have a computerized version.

To date, Dr. McBride stated that the Board has not received much information from SRTA regarding a modified non-patient dental examination. Therefore, additional information would be required prior to making a decision on the SRTA dental examination. Dr. McBride stated that he was disinclined to require an OSCE if the modified non-patient examination included a periodontal section. If a modified non-patient examination did not include a periodontal section, Dr. McBride recommended that an OSCE be required.

- ❖ MOVED by ELMITT, SECONDED by SLACH, to DELEGATE AUTHORITY to staff to make decisions on additional waivers as discussed and to consult with the Board as needed. Motion APPROVED unanimously.

Ms. Slach asked for clarification on the status of the approvals for non-patient dental hygiene examinations. Dr. McBride stated that the Board received one waiver request from a dental hygienist to date. Testing agencies had non-patient dental examination options prior to the availability of non-patient dental hygiene options. Ms. Slach recommended approval of the non-patient dental hygiene examinations discussed to date. Dr. McBride did not believe that a decision needed to be made now. A separate meeting could be scheduled to address that sooner if needed.

- ▪ *Possible Board Legislation for 2021*

Ms. Stuecker reported that the legislature recently reconvened, following a session delay as a result of COVID-19, to finish session business for the year. Ms. Stuecker noted that the second funnel was today.

Ms. Stuecker noted that the legislature was discussing SF 2393, which was a comprehensive regulatory reform bill. The bill would standardize the way boards review criminal history and streamline the application process for out-of-state practitioners. Additionally, it included a fee waiver for applicants who make less than 200% of the federal poverty threshold. The discussion regarding the bill was ongoing.

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Ms. Stuecker stated that if Board wanted to consider possible legislation for the 2021 session, that discussion should be started. Dr. McBride noted that the Board previously discussed changes to prescribing regulations and the administration of vaccines. The administration of vaccines is allowed in a few other states. In light of COVID-19, it may make sense to allow dentists to administer vaccines for conditions such as HPV and the flu.

COVID-19 point of care testing is part of the scope of practice to determine whether dental care should be provided. Testing would be limited to determine whether or not to provide dental services to a patient. Statutory changes would be required to permit testing by dentists for other purposes. The Board may want to review and discuss this at the next meeting. Ms. Slach asked if the point of care testing could be delegated. Dr. McBride believed so; however, Ms. Steffensmeier may need to review that further.

Ms. Slach referenced the possibility of allowing dental hygienists to have limited prescribing authorities related to dental hygiene. Dr. McBride agreed that it would be something to consider.

Dr. Foley asked whether a change in supervision level for the administration of local anesthesia could be done via rulemaking or if this would require a statutory change. Ms. Steffensmeier indicated that she would need to review that further. Dr. Holst also recommended allowing the administration of nitrous oxide by a dental hygienist under general supervision as well.

Ms. Stuecker indicated that she and staff will begin drafting proposals. The Board would need to approve language by the November 2020 meeting to pre-file the legislation for the 2021 session.

III. OTHER BUSINESS

- *COVID-19 Update and Discussion on Board Guidelines*

Dr. McBride provided an update on the current status. Governor Reynolds' proclamation issued on May 6, 2020 requires compliance with the Guidelines for the Safe Transition Back to Practice adopted by the Iowa Dental Board on May 5, 2020. After the proclamation expires, the Board may need to pursue rulemaking for continued compliance with these or similar requirements.

Dr. McBride noted that the CDC issued updated guidelines on May 19, 2020. Most of the Board's guidelines are consistent with their recommendations; though, the Board may need to require more than 2003 infection control requirements going forward.

Ms. Slach inquired if the Board could issue a statement to adhere to recent guidelines. Ms. Steffensmeier noted that rulemaking has currently been halted. Ms. Steffensmeier also stated that there were potential problems with the use of the terms "recent" or "current" in rulemaking. The use of those words in rulemaking effectively allows third parties to make binding decisions. Rulemaking requires vetting of potential requirements. There may be some regulatory language to require consistency with guidelines; however, there would need to be limitations since additional review would not be allowed.

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Dr. McBride referenced a question the Board received about letting operatories sit for 15 minutes before cleaning it after each patient. Dr. McBride noted that this was a recommendation from the CDC; however, it would not be required. Dr. McBride noted that every situation is different; therefore, it was hard to know what will work for all offices.

Dr. McBride addressed another question about fit testing of N95 masks. Dr. McBride requested that remaining questions be forwarded to the Board office via email.

- *Vote on Board Officers*

Ms. Stuecker reported that the Board needed to elect officers for the upcoming year. The composition of the executive committee would also be reviewed.

- ❖ MOVED by FOLEY, SECONDED by SLACH, to NOMINATE Dr. McBride as chair.

Dr. McBride appreciated the support. Dr. McBride said that having served as the chair during the last year has been enlightening and humbling. Dr. McBride was proud of what the Board has accomplished.

- ❖ Vote taken. Motion APPROVED unanimously.

- ❖ MOVED by ELMITT, SECONDED by SLACH, to NOMINATE Dr. Foley to serve as vice-chair.

Dr. Foley stated that she would be happy to continue serving as the vice-chair.

- ❖ Vote taken. Motion APPROVED unanimously.

- ❖ MOVED by FOLEY, SECONDED by HOLST, to NOMINATE Ms. Elmitt as secretary.

Ms. Elmitt stated that she would be happy to serve during her last year on the Board.

- ❖ Vote taken. Motion APPROVED unanimously.

- *Appointment of Executive Committee Members*

In addition to the officers, Dr. McBride appointed Ms. Slach to serve on the executive committee. Ms. Slach stated that would be happy to serve on the committee.

- *Vote on Board Committees*
  - *Continuing Education Advisory Committee*

Ms. Stuecker reported that Ms. Beasler, R.D.H. was stepping down from the committee. Ms. Stuecker also noted that Dr. Foley has also asked to step down due to time constraints.

Ms. Stuecker reported that the Board did not receive letters of interest from other licensees. Dr. Foley nominated Dr. Holst to serve in her place if she were interested.

- MOVED by ELMITT, SECONDED by SLACH, to NOMINATE Dr. Holst in place of Dr. Foley and Ms. Travis in place of Ms. Beasler. Motion APPROVED unanimously.

  - *Anesthesia Credentials Committee*

Ms. Stuecker reported that Dr. Roth recently retired. Dr. Roth, who holds a moderate sedation permit, was willing to continue serving on the committee or step down as needed. Ms. Stuecker reported that two dentists submitted applications for consideration. Both dentists hold moderate sedation permits.

Dr. DeJong stated that he knows both dentists. Dr. DeJong reported that Dr. Roth was happily retired. Dr. DeJong thought either dentist would be good; though, Dr. Zirker was involved in teaching sedation at the university.

- MOVED by DEJONG, SECONDED by FOLEY, to APPOINT Dr. Zirker to the committee.

Ms. Travis noted that Dr. Binkowski works at her office providing sedation services and she could recuse herself from the vote if needed. Ms. Travis was happy with the services that Dr. Binkowksi has provided to date.

Ms. Slach also noted that there was another educator on the committee.

Roll Call:

Member	McBride	Foley	Ceraso	DeJong	Holst	Slach	Travis	Elmitt	Thorsen
Yes	x	x	x	x	x	x	x	x	x
No									

Motion APPROVED unanimously by roll call.

- *Review of 2023 Meeting Dates*

Ms. Stuecker asked the Board members to review the proposed meeting dates for 2023. The Board members did not have any conflicts and the meeting 2023 dates were set as proposed.

IV. COMPLAINTS AND INVESTIGATIVE INFORMATION FOR UNLICENSED PRACTICE

Ms. Stuecker provided an update on the complaints. To date, the Board has closed complaints wherein the businesses only sold tooth whitening kits and did not provide any service. In cases where a product was applied to a customer, those have been turned over to the county attorney for the practice of dentistry without a license.

- *Case #19-0194, Beauty Operators*

Ms. Stuecker provided a brief update on case #19-0194. Ms. Slach asked for clarification as to when the services were provided and then ceased. Ms. Slach asked if a letter of warning could be issued. Ms. Steffensmeier stated that the letter would be limited to advising her of the current law.

Dr. Holst asked if this letter had already sent. Ms. Stuecker reported that an investigative request had been mailed; however, Ms. Stuecker noted that a written response had not been received to date. Ms. Slach noted that it appeared that the respondent was reached by phone. Respondent indicated that she would not continue with that service when she reopens.

Dr. Foley believed that a letter of information would be appropriate based on the precedent and indication that the individual does not intend to provide this service going forward. Ms. Steffensmeier asked for clarification regarding the closing of the complaint. The Board members agreed unless information was provided indicating a failure to comply.

- ❖ MOVED by FOLEY, SECONDED by HOLST, to CLOSE with a letter of information. Motion APPROVED unanimously.

- ▪ *Case #20-0021, Voltage Ink*

Ms. Stuecker provided a brief overview. A previous complaint was closed without action. This was a new complaint.

Dr. Foley recommended the same action since it appears that this location is just selling a whitening kit.

- ❖ MOVED by FOLEY, SECONDED by THORSEN, to CLOSE with a letter of information. Motion APPROVED unanimously.

- ▪ *Case #20-0047, Sparkle Iowa*

Ms. Stuecker provided a brief overview.

Dr. Holst expressed some concern. The current website still has patient testimonials on the site. Additionally, information about scheduling appointments, purchasing packages or treatments was available. Dr. Holst believed that there were six locations altogether.

Dr. Foley agreed. Ms. Stuecker stated that Ms. Steffensmeier may need to weigh in. A complaint was referred to the county attorney in 2017. Ms. Steffensmeier stated that the same action could be taken again. Dr. Foley believed that this was a good step.

- ❖ MOVED by FOLEY, SECONDED by THORSEN, to REFER the complaint to the county attorney and send another letter of information. Motion APPROVED unanimously.

- ➢ The Board took a brief recess at 11:45 a.m.
- ➢ The Board reconvened at 12:02 p.m.

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CLOSED SESSION

- MOVED by MCBRIDE, SECONDED by ELMITT, to go into CLOSED SESSION pursuant to Iowa Code section 21.5(1)(a), to review or discuss records which are required or authorized by state or federal law to be kept confidential; pursuant to Iowa Code section 21.5(1)(d), to discuss whether to initiate licensee disciplinary investigations or proceedings; and pursuant to Iowa Code section 21.5(1)(f), to discuss the decision to be rendered in a contested case conducted according to the provisions of chapter 17A.

Roll Call:

Member	McBride	Foley	Ceraso	DeJong	Holst	Slach	Travis	Elmitt	Thorsen
Yes	x	x	x	x	x	x	x	x	x
No									

Motion APPROVED by roll call.

- The Board convened in closed session at 12:03 p.m.

- MOVED by MCBRIDE, SECONDED by SLACH, to RETURN to OPEN SESSION. Motion APPROVED unanimously.

- The Board reconvened in open session at 2:57 p.m.

OPEN SESSION

V. ACTION, IF ANY, ON CLOSED SESSION AGENDA ITEMS

a. Closed Session Minutes

- MOVED by SLACH, SECONDED by THORSEN, to APPROVE the closed session minutes for the April 3, 2020 quarterly meeting. Motion APPROVED unanimously.

b. Compliance

- MOVED by CERASO, SECONDED by THORSEN, to APPROVE the removal of this licensee from probation in the Matter of Ala'a Al Arabi, D.D.S., file number 19-0008. Motion APPROVED unanimously.

c. Disciplinary Orders

- MOVED by THORSEN, SECONDED by ELMITT, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Lyn M. Rolling, R.D.A., file number 19-0127. Motion APPROVED unanimously.

DRAFT

- MOVED by FOLEY, SECONDED by SLACH, to APPROVE the Settlement Agreement and Final Order as proposed in the Matter of Thomas R. Cooney, D.D.S., file number 19-0044. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Kenneth S. Wolf, D.D.S., file number 19-0025. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Matthew W. Platt, D.D.S., file number 19-0147. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Jennifer L. Grove, D.D.S., file number 19-0174. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Mark W. Platt, D.D.S., file number 19-0175. Motion APPROVED unanimously.

d. Action on Cases

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0016. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0022. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0024. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0026. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0027. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0028. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by MCBRIDE, to CLOSE file number 20-0029. Motion APPROVED unanimously. Dr. Holst recused herself.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0033. Motion APPROVED unanimously.

DRAFT

- MOVED by ELMITT, SECONDED by HOLST, to KEEP OPEN file number 20-0034. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0040. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0043. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0044. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0051. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0053. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0054. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to KEEP OPEN file number 20-0056. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0058. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0059. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0060. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0061. Motion APPROVED unanimously. Dr. McBride recused himself.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0063. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0064. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0065. Motion APPROVED unanimously.

DRAFT

- MOVED by ELMITT, SECONDED by HOLST, to KEEP OPEN file number 20-0079. Motion APPROVED unanimously. Dr. Ceraso recused himself.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0082. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0083. Motion APPROVED unanimously.

- MOVED by ELMITT, SECONDED by HOLST, to CLOSE file number 20-0052. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0062. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0070. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0071. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0072. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0073. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0074. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0078. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0080. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0084. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0085. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0086. Motion APPROVED unanimously.

DRAFT

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0087. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0088. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0089. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0090. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0091. Motion APPROVED unanimously.

- MOVED by FOLEY, SECONDED by CERASO, to CLOSE file number 20-0093. Motion APPROVED unanimously.

- MOVED by SLACH, SECONDED by THORSEN, to KEEP OPEN file number 19-0141. Motion APPROVED unanimously.

- MOVED by SLACH, SECONDED by THORSEN, to CLOSE file number 20-0055. Motion APPROVED unanimously.

- MOVED by SLACH, SECONDED by THORSEN, to KEEP OPEN file number 19-0155. Motion APPROVED unanimously.

- MOVED by SLACH, SECONDED by THORSEN, to CLOSE file number 19-0156. Motion APPROVED unanimously.

- MOVED by HOLST, SECONDED by SLACH, to CLOSE file number 19-0190. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to KEEP OPEN file number 18-0108. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to CLOSE file number 19-0176. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to CLOSE file number 19-0177. Motion APPROVED unanimously.

- MOVED by CERASO, SECONDED by ELMITT, to KEEP OPEN file number 19-0122. Motion APPROVED unanimously.

DRAFT

- MOVED by CERASO, SECONDED by ELMITT, to KEEP OPEN file number 19-0061. Motion APPROVED unanimously.

VI. ADJOURN

- MOVED by MCBRIDE, SECONDED by CERASO, to ADJOURN. Motion APPROVED unanimously.

The meeting of the Iowa Dental Board adjourned at 3:08 p.m. on June 5, 2020.

NEXT MEETING OF THE COMMITTEE

The next meeting of the Iowa Dental Board is scheduled for August 7, 2020, in Des Moines, Iowa.

These minutes are respectfully submitted by Christel Braness, Program Planner 2, Iowa Dental Board.

DRAFT

REPORT TO THE IOWA DENTAL BOARD

DATE OF MEETING: August 7, 2020

RE: Actions Taken by the Committee

SUBMITTED BY: Anesthesia Credentials Committee

ACTION REQUESTED: Board Action on Committee Recommendation(s)

ACTIONS TAKEN BY THE COMMITTEE

APPLICATION(S) FOR GENERAL ANESTHESIA PERMIT:

- Eric Schmidt, D.M.D. – Approved issuance of the permit.
- *Timothy Albright, D.D.S. – Pending review at the July 23, 2020 meeting.*
- *James Barton, D.D.S. – Pending review at the July 23, 2020 meeting.*

APPLICATION(S) FOR MODERATE SEDATION PERMITS:

- Christopher Stevenson, D.D.S. – Approved issuance of the permit with qualification to sedate pediatric patients and medically-compromised patients.
- Amy Lesch, D.D.S. – Approved issuance of the permit with qualification to sedate pediatric patients.
- *Alison Christensen, D.D.S. – Pending review at the July 23, 2020 meeting.*

MODERATE SEDATION TRAINING PROGRAM:

- DOCS EDUCATION: IV Sedation Certification in Affiliation with Idaho State University and Meharry Medical College – Committee recommended approval of the training program of the purposes of obtaining a sedation permit.

ACTION

REPORT TO THE IOWA DENTAL BOARD

DATE OF MEETING: August 7, 2020

RE: Recommendations: Course, Sponsor & Other Requests

SUBMITTED BY: Continuing Education Advisory Committee

ACTION REQUESTED: Board Action on Committee Recommendation

The committee recommended approval as follows unless otherwise noted.

CONTINUING EDUCATION COURSE REVIEW

1. **Grand Dental**: "Functional Clinical Application of the 2017 Periodontal Classification System" – Requested 1 hour. *
2. **CE Zoom, Britta Alpen:** "Radiology Update & Safety" – Requested 2 hours*
3. **Impact Dental Training**:
    a. "HIPAA Overview" – Requested 1 hour. *
    b. "OSHA Update" – Requested 1 hour. *
    c. "OSHA Update + Hazard Communication Standard" – Requested 1.5 hours. *
    d. "Laser Certification Course for Dentists" – Requested 9 hours. (6 hours didactic, 3 hours clinical) *
    e. "Soft Tissue Diode Laser Non-Surgical Dental Hygiene Certification" – Requested 7 hours. (5 hours didactic, 2 hours clinical) *

*Board staff recommended APPROVAL to the committee of the courses pursuant to Iowa Administrative Code 650—25.5(2) or as otherwise noted.

CONTINUING EDUCATION SPONSOR APPLICATIONS FOR REVIEW

The following sponsor applications are recertification applications unless otherwise noted and recommended for approval.

1. Applewhite Dental Iowa, P.C.
2. Black & Gold Study Club
3. Clinton Dental Study Club
4. Compliance Training Partners, L.L.C.
5. The DALE Foundation
6. Des Moines County Dental Society
7. Dickinson County Dental Society
8. Eastern Iowa Oral & Maxillofacial Surgery
9. Family 1st Dental
10. Great River Oral & Maxillofacial Surgery, P.C.
11. G.V. Black Dental Study Group of Des Moines
12. Hawkeye Community College
13. ILIowa Study Club
14. Impact Dental Training, L.L.C.
15. Iowa Academy of General Dentistry
16. Iowa Dental Association
17. Iowa Society of Orthodontists

18. Pacific Medical Training
19. Oral Surgeons, P.C.
20. Oral Surgery and Dental Implant Center
21. Sioux City Dental Society
22. Spring Park Dental Implant Study Club
23. Western Iowa Tech Community College
24. Western Schools
25. The Proctor & Gamble Company
26. Iowa Western Community College
27. Kirkwood Community College
28. University of Iowa College of Dentistry
29. Iowa Dental Hygienists' Association
30. Fort Dodge District Dental Society**
31. Dental Dynamix, LLC**

**Applications received after July 15, 2020 CEAC meeting. Forwarding directly to the Board for approval of the recertification of sponsor status.

Recertification approvals will also include a reminder to review IAC 650—Chapter 25 to ensure compliance with Board rules when offering courses to Iowa licensees/registrants.

Iowa Dental Board Petition for Waiver

State of Iowa

Submitted On:
June 22, 2020 3:22pm
America/New_York

Full Name	Claire Nieman
Address Autocomplete	581 Birch Ridge South, Peosta, IA, USA
Phone Number	5635426560
Email	clairenieman12@gmail.com
List each rule you are requesting to be waived.	Accepting a non patient clinical exam for the Dental Hygiene Board Exam.
Describe the circumstances that makes it necessary for your to request a waiver.	I attend school in Illinois, where they are accepting a non patient exam. My school is scheduling a non patient exam and I would have to schedule a separate exam date because my school will not be scheduling their own patient exam date.
Start Date	6 22 2020
End Date	9 1 2020
Explain why applying the rule would result in undue hardship:	Applying this rule would help reduce the amount of time it takes for me to become a Registered Dental Hygienist.
Explain why waiving the rule would not prejudice the substantial legals rights of any person:	If this rule was waived, I would not have to worry about producing aerosols with use of USS and polisher. It would be less stress to perform the exam on a mannequin, for everyone involved.
Indicate whether the requirements of the rule, from which you are seeking a waiver, are also contained in statute or other provision of law:	No.
Explain how will the public's health, safety, and welfare be substantially protected in an equal manner if the rule is waived in your case:	If the rule is waived, there would be less aerosols produced as well as less PPE used in order to save proper PPE for others.
Provide a brief history of any prior contacts between you and the Board regarding the activity or license/registration that would be affected by the waiver	I have not had any prior contact.
Provide information known to you regarding the Board's action in similar cases	I have no information regarding the Board’s action in similar cases as this case is unique to today’s circumstances.

Provide the name, address ,and telephone number of any public agency or political subdivision that also regulates the activity in question, or that may be affected by the petition	I have no known contacts.
Provide the name, address, and telephone number of any person or entity that you are aware of who would be adversely affected by granting this waiver.	I have no known contacts that would be affected by this waiver.
Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.	Stacy Kosier, 209 E Main Street Galesburg, IL 61401, 309-344-2246
Sign Here	Claire Nieman clairenieman12@gmail.com Signed at: June 22, 2020 2:22pm America/New_York
Receipt	0000004

Iowa Dental Board Petition for Waiver

State of Iowa

Submitted On:
June 23, 2020 10:12pm
America/New_York

Full Name	Chelsey Kloft
Address Autocomplete	22749 State Highway 64, Maquoketa, IA, USA
Phone Number	5632195772
Email	ckloft12@gmail.com
List each rule you are requesting to be waived.	Concerned with whether the Iowa Dental board will except a manikin based exam for the clinical portion of licenser.
Describe the circumstances that makes it necessary for your to request a waiver.	I am a recent dental hygiene graduate from Iowa Central. My classmates and myself have one hurdle until we are fully licensed which is clinical boards. I am aware you, as the Board, aren't holding a meeting until August. Our reschedule date for clinical boards is the end of August and after that, there isn''t currently many options to test within a reasonable distance until next spring. Majority of us have had our original patients cancel on us that we had planned to take for clinical boards. At the last meeting there was discussion on manikin based exams but no decision was made. As we appreciate all you have done for us as new grads, we still have this stress of unknown. We would appreciate the option of a manikin based exam to be excepted for Iowa and would be grateful for the consideration.
Start Date	6 23 2020
End Date	8 7 2020
Explain why applying the rule would result in undue hardship:	Due to COVID-19, we have had our clinical boards cancelled. They have finally been rescheduled for the end of July. As new grads, we are just starting to work or still looking for jobs. Legally screening patients for clinical boards has been a hardship. As we are grateful for the option of a temporary license, having the option of a manikin based exam would greatly help.
Explain why waiving the rule would not prejudice the substantial legals rights of any person:	I don't believe this would effect any legal rights of any person. With a manikin based exam as an option, I believe it would make things more equal for testers.
Indicate whether the requirements of the rule, from which you are seeking a waiver, are also contained in statute or other provision of law:	As it is required to take a clinical board to be licensed in the state of Iowa as a dental hygienist, I am not asking to be exempt from this. I realize the importance of this step in licensure. I'm just asking you, as the Iowa Dental Board, to just highly consider the option of a manikin based exam.
Explain how will the public's health, safety, and welfare be substantially protected in an equal manner if the rule is waived in your case:	I believe this would be the safest way to keep the public healthy with a manikin based exam for dental hygiene students/ new grads. With concerns of COVID-19, a manikin based exam would take out the concerns of patients being a clinical board patient. As well as us as clinicians, the health of our boards patients.

Provide a brief history of any prior contacts between you and the Board regarding the activity or license/registration that would be affected by the waiver	I have contacted the Iowa Dental Board about questions with the option of temporary licensure and have had nothing helpful responses in a timely manor.
Provide information known to you regarding the Board's action in similar cases	I am not aware of the board excepting the option of a manikin based exam previously.
Provide the name, address ,and telephone number of any public agency or political subdivision that also regulates the activity in question, or that may be affected by the petition	CRDTS 1725 SW Gage Blvd. Topeka, Kansas 66604-3333 (785)273-0380
Provide the name, address, and telephone number of any person or entity that you are aware of who would be adversely affected by granting this waiver.	NA
Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.	NA
Sign Here	Chelsey Kloft ckloft12@gmail.com Signed at: June 23, 2020 10:03pm America/New_York
Receipt	0000005

Iowa Dental Board Petition for Waiver

State of Iowa

Submitted On:
July 8, 2020 3:37pm
America/New_York

Full Name	Lindsey Berge
Address Autocomplete	24023 71st Ave N, Port Byron, IL, USA
Phone Number	3097984879
Email	lindz16@frontier.com
List each rule you are requesting to be waived.	Iowa Dental board to accept manikin exam for dental hygiene boards.
Describe the circumstances that makes it necessary for your to request a waiver.	I live on the Illinois/Iowa boarder and my school is in Illinois. Illinois recently passed the manikin exam but I want to be licensed in both states.
Start Date	7 8 2020
End Date	7 23 2020
Explain why applying the rule would result in undue hardship:	Accepting the manikin exam would be benefit for all hygiene students graduating this year due to the setback of COVID19 and not being about to use USS, etc.
Explain why waiving the rule would not prejudice the substantial legals rights of any person:	Many other states have already passed the manikin exam.
Indicate whether the requirements of the rule, from which you are seeking a waiver, are also contained in statute or other provision of law:	No
Explain how will the public's health, safety, and welfare be substantially protected in an equal manner if the rule is waived in your case:	If the rule is waived many students will be able to get a job and help clean patients teeth who have been waiting for a cleaning since many have been canceled.
Provide a brief history of any prior contacts between you and the Board regarding the activity or license/registration that would be affected by the waiver	No
Provide information known to you regarding the Board's action in similar cases	Many other states have passed the manikin exam

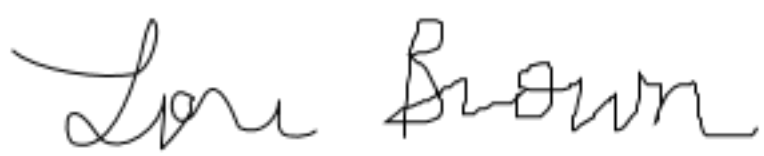
Provide the name, address ,and telephone number of any public agency or political subdivision that also regulates the activity in question, or that may be affected by the petition	None?
Provide the name, address, and telephone number of any person or entity that you are aware of who would be adversely affected by granting this waiver.	None
Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.	Carl Sandburg College Dental Hygiene teachers
Sign Here	Lindsey Berge lindz16@frontier.com Signed at: July 8, 2020 2:37pm America/New_York
Receipt	0000008

Iowa Dental Board Petition for Waiver

State of Iowa

Submitted On:
June 24, 2020 12:54pm
America/New_York

Full Name	Lori Brown
Address Autocomplete	2006 South Ankeny Boulevard, Ankeny, IA, USA
Phone Number	5159646309
Email	lmbrown@dmacc.edu
List each rule you are requesting to be waived.	I would like to ask the Iowa Dental Board to waive the requirement of passing a live patient-based examination for licensure for the DMACC Dental Hygiene Class of 2020, as well as those who choose to do so in the future, and replace it with a mannequin-based skills exam.
Describe the circumstances that makes it necessary for your to request a waiver.	Due to the COVID-19 pandemic and the closure of dental clinics, including those located in educational institutions, it has been nearly impossible to find patients that are willing to volunteer for this exam. Many patients are still afraid of traveling to the examination site and participating in any dental services at this time. Additionally, the mannequin based exams seem to be well devised tests of students'' skills and do solve many ethical and safety issues for the students and the patients.
Start Date	6 23 2020
End Date	12 31 2025
Explain why applying the rule would result in undue hardship:	Again, due to the COVID-19 pandemic, patients may not feel comfortable participating in this examination, or even though they are willing, may present with symptoms on the day of the exam, which would eliminate them from participating, leaving the student without a patient at the last minute.
Explain why waiving the rule would not prejudice the substantial legals rights of any person:	The candidate would have the legal option to take the skills examination of their own choosing. The Dental Board protection would be that a comprehensive skills examination was performed to the equivalent level as a patient-based exam.
Indicate whether the requirements of the rule, from which you are seeking a waiver, are also contained in statute or other provision of law:	I do not believe there has been a rule made yet that addresses this issue.
Explain how will the public's health, safety, and welfare be substantially protected in an equal manner if the rule is waived in your case:	The mannequin based exam would be only one test of a candidate''s skill level. The applicant would had to have completed numerous clinical competencies prior to graduation from an accredited Dental Hygiene program, which is also required by the Iowa Dental Board and the Commission on Dental Accreditation of the American Dental Association.
Provide a brief history of any prior contacts between you and the	I submitted a letter on behalf of the DMACC Dental Hygiene class of 2020 in March of this year that asked for consideration of a testing process that was similar to what was being expected of

Board regarding the activity or license/registration that would be affected by the waiver	the dental students, who would be our future supervisors.
Provide information known to you regarding the Board's action in similar cases	The dental students from the University of Iowa were allowed to take a mannequin based exam. or were exempted from the dental hygiene/ periodontal skills test, rather than the patient based exam to fulfill this requirement. Other states are also allowing this type of skills testing.
Provide the name, address ,and telephone number of any public agency or political subdivision that also regulates the activity in question, or that may be affected by the petition	Iowa Dental Board 400 SW 8th St. Ste D Des Moines, IA 50309 515-281-5157
Provide the name, address, and telephone number of any person or entity that you are aware of who would be adversely affected by granting this waiver.	I know of no one who would be adversely affected by granting this waiver.
Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.	Arthur C. Brown, Dean of Health and Public Services Des Moines Area Community College 2006 S. Ankeny Blvd. Ankeny, IA 50023 acbrown9@dmacc.edu 515-964-6394
Sign Here	Lori Brown lmbrown@dmacc.edu  Signed at: June 24, 2020 12:44pm America/New_York
Receipt	0000007

Hi Jill, Here is the list of the DMACC Dental Hygiene class of 2020. All twenty students have now successfully completed all their requirements for graduation. Thank goodness. Lori

Adivi, Dedeepya

Dainty, Darcy

Dualle, Shugri

Gonzalez, Janet

Hardee, Kayli

Hight, Rachel

Ikanovic, Majda

Johnston, Megan

Karrmann, Megan

Kuehl, Kaley

Kuhn, Camille

Lasswell, Julie

Majava, Kathryn

March, Cherisse

McCool, Samantha

Nielsen, Monica

Tabor, Jamie

Tarchinski, Katherine

Teachout, Danielle

Voss, Kassidy

Iowa Dental Board Petition for Waiver

State of Iowa

Submitted On:
June 24, 2020 9:56am
America/New_York

Full Name	Jody Williams
Address Autocomplete	Indian Hills Community College, 525 Grandview Avenue, Ottumwa, IA, USA
Phone Number	6416835120
Email	Jody.Williams@Indianhills.edu
List each rule you are requesting to be waived.	Replace the CRDTS Dental Hygiene Clinical Examination live patient requirement to CRDTS equivalent with manikin clinical examination for Iowa Dental Hygiene License. This would apply to the Indian Hills Community College Class of 2020.
Describe the circumstances that makes it necessary for your to request a waiver.	1. The Iowa Dental Board has replaced live patients with dental manikins in CRDTS Dental Examination for full dental license. Dental Hygiene students should have the same offering for clinical testing as Dental students. 2. COVID-19 risk of exposure or no access to ultrasonic technology because of the difficulty in accessing N95 masks will not provide a fair balanced exam with the current required CRDTS Dental Hygiene examination on a live patient.
Start Date	8 13 2020
End Date	8 13 2021
Explain why applying the rule would result in undue hardship:	Students at IHCC are not treating patients due to the college providing the IHCC''s PPE to the medical community at the start of the COVID-19 National Emergency. All training has been approved by the Commission on Dental Accreditation to replace live patient with manikin case study based learning and Objective Structured Clinical Examination. Students are unable to secure a live patient for care because of lack of proper PPE''s that are needed to provide screening and examination.
Explain why waiving the rule would not prejudice the substantial legals rights of any person:	The Covid-19 National Emergency has created a need for front line providers to have PPE''s. This has created a non emergency PPE shortage for dental education.
Indicate whether the requirements of the rule, from which you are seeking a waiver, are also contained in statute or other provision of law:	Usage of CRDTS manikin based dental examination has been accepted for dental licensing.
Explain how will the public's health, safety, and welfare be substantially protected in an equal manner if the rule is waived in your case:	The usage of CRDTS manikin based clinical examination with OSCE will provide a balanced, fair and equitable evaluation for entry level dental hygiene. The community at large will have the same evaluation result as a live patient. Each student will have the same calibrated result.

Provide a brief history of any prior contacts between you and the Board regarding the activity or license/registration that would be affected by the waiver	There are no previous conflicts with the Iowa Dental Board.
Provide information known to you regarding the Board's action in similar cases	The Iowa Dental Board has approved CRDTS manikin based testing for Iowa dental licensing.
Provide the name, address ,and telephone number of any public agency or political subdivision that also regulates the activity in question, or that may be affected by the petition	No one will be affected negatively by the petition.
Provide the name, address, and telephone number of any person or entity that you are aware of who would be adversely affected by granting this waiver.	No one will be affected negatively by the petition
Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.	Jody Williams RDH, MA Program Director Dental Hygiene 641-683-5120 Jody.Williams@Indianhills.edu
Sign Here	Jody Williams Jody.Williams@Indianhills.edu Signed at: June 24, 2020 8:55am America/New_York
Receipt	0000006

INDIAN HILLS
COMMUNITY COLLEGE

Indian Hills Community College Dental Hygiene Class of 2020

Valerie Bowen

Angela Bowie

Maria Campos Sanchez

Alyssa Conway

Kaylee Ford

Kylie Garman

Lesley Gent

Cameryn Gheer

Bailey Grgurich

Grace Hall

Gracie Hitt

Courtney Jaeger

Andrea Loving

Megan Metzger

Taylor Mills

Taylor Mustion

Kailey Stansbery

Abbie Swift

Erin Vincent

Sadie Westfall

Iowa Dental Board
400 S.W. 8th St. Ste. D
Des Moines, IA 50309-4688
515-281-5157
dentalboard.iowa.gov

Petition for Waiver Form

Please review the Board's rules governing waivers and variances in 650 IAC chapter 7.4 prior to filing a petition for waiver. Complete this form and submit it, including supporting documentation, to the Board by mail or email to IDB@iowa.gov Deadline for inclusion on the Board's agenda is two weeks prior to a Board meeting.

Licensee/Registrant Name: Carmen Cannon

License/Registration No.: RDH-04069

Street Address: 3620 Middle Rd

City: Keokuk State: IA Zip Code: 52632

Contact Person for Petition for Waiver: Carmen Cannon

Phone Number: 319-520-8875 Email: cannoncarmen0918@gmail.com

List each rule you are requesting to be waived:

11.7(1) b.c ; 11.7 (4)

Describe specifically which requirements you are requesting to be waived:

I am requesting that training within the last 12 Months be waived and ongoing practice of administration of local anesthesia.

List the time period for which you are seeking a waiver. The start date must be a future date. An end date must be requested.

Start date: August 2020

End date: Date of Permit issuance

Have you previously requested a waiver of any of the rules listed above? If so, what was the outcome? If a prior petition for waiver was granted, attach a copy of Board's prior written ruling or correspondence. NO

For each rule you are requesting to be waived, provide the following explanations:

1. Explain why following the rule would pose an undue hardship:
2. Explain how waiving the rule may impact other people:
3. Explain how the rule is intended to protect the public health, safety, or welfare:
4. Explain how the public health, safety, or welfare can still be protected if the rule is waived:

See attached paper for answers to questions 1-4

Have you spoken to a Board staff member about your request? If so, who? Attach copies of any relevant email correspondence. Yes. Christel Braness

Do you plan to attend the Board meeting when this Petition will be considered?

Probably not with all the restrictions at this time.

Attach any relevant documentation to support your answers.

I am attaching both emails from U of M and UMKC. They are about the courses I was scheduled to take that got canceled due to COVID-19.

I hereby attest to the accuracy and truthfulness of the information contained herein.

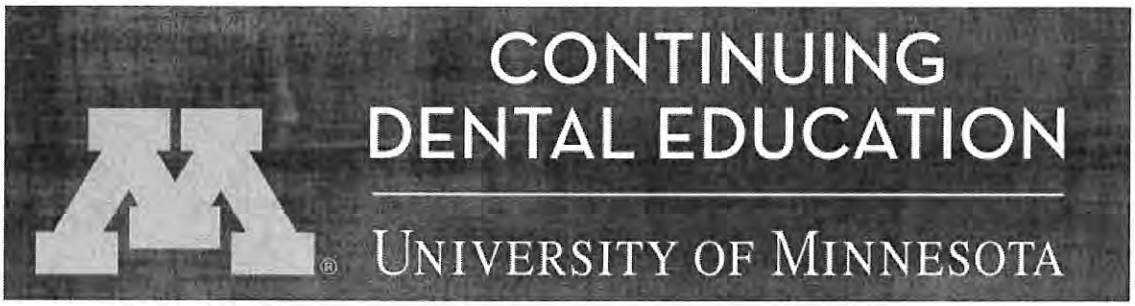
Signature: _____ Date: 6-11-20

Printed Name: Carmen Cannon Title: RDH

1. Explain why following the rule would pose an undue hardship: It would not allow me to fulfill my current jobs contract to be able to administer local anesthesia. If I can not fulfill my contract it will pose undue hardship on my family as I will not have a job. It would also pose undue hardship on my company as they will have to find someone to replace me and will not have a hygienist at that time.
2. Explain how waiving the rule may impact other people: It would impact my entire office. We are a community health center and I would be able to help administer local anesthesia to all patients to help work flow so we can see more patients.
3. Explain how the rule is intended to protect the public health, safety, or welfare: The rule is intended to protect the public health, safety, & welfare by making sure we(I) are all properly trained and keep up on training to administer local anesthesia. It is in place to make sure the utmost precautions are taken to make sure accidental paresthesia does not happen due to poor or inadequate training.
4. Explain how the public health, safety, or welfare can still be protected if the rule is waived: If the rule is waived the public health, safety & welfare is still going to be protected because I have had previous training along with administering local anesthesia for 6 years before moving to Montana where WREB does not accept CRDTS so I could not administer unless I certified there. I did not certify with WREB because my previous boss did not require me to. That resulted in my not administering local anesthesia for 4 years now. I moved back to Iowa in December 2019 and have been scheduled to take 2 local anesthesia courses that have been cancelled due to COVID-19 restrictions. Although the rule will be waived, I will still be working under two dentists that will be here to supervise if needed.

Carmen Cannon

From: Continuing Dental Education, University of Minnesota <cdeumn@umn.edu>
Sent: Friday, March 27, 2020 8:46 AM
To: Carmen Cannon
Subject: 3/27/20 Update: Local Anesthesia CE CANCELLED. Full Refunds.



YOUR LOCAL ANESTHESIA CE COURSE IS CANCELLED

I am so sorry.

After meeting with instructors and leadership at the University of Minnesota, I have decided to cancel your Local Anesthesia course from May 4 to 6, 2020.

Why? Our instructors are being asked to focus on ensuring that students graduate from their DH and DDS programs with the skills they need. They're being stretched far. I understand that, and I am sure you do too.

FULL REFUND BY 5/30/20

Given I cannot provide you with a future date for this course, we will refund you. You will receive a full refund for this course. While we are committed to returning your revenue as soon as we can, the U's financial teams are strained too.

QUESTIONS OR CONCERNS?

Connect with us at cdeumn@umn.edu if you have questions or concerns.

TAKE CARE OF YOURSELF, YOUR FAMILY & PATIENTS

Thank you for your kindness and patience. I will miss seeing your shining faces.

Jo Peterson, PhD
Director, Continuing Dental Education

Our mailing address is:
Continuing Dental Education University of Minnesota
515 Delaware St SE
6-406 Moos Health Sciences Tower
Minneapolis, MN 55455-0357

Add us to your address book

This email was sent to carmencannon@chcseia.com
why did I get this? unsubscribe from this list update subscription preferences

Carmen Cannon

From: Bruno, Audriana <brunoaj@umkc.edu>
Sent: Tuesday, June 02, 2020 10:55 AM
Subject: IMPORTANT: Local Anesthesia Course at UMKC Rescheduled

Good afternoon all –

I'm reaching out regarding the Local Anesthesia Continuing Education course you signed up for, scheduled for August 7 – 9 at the UMKC School of Dentistry.

I just spoke with our instructors, and with current policies and transitions happening at the dental school due to COVID-19, **we are having to reschedule the course.** We were so looking forward to having you in August, but with the restrictions we're facing, we don't have a choice.

That said, we are looking down the line at **March 5 – 7, 2021** to have the course.

Please respond to let me know if you are able to make that date/are interested in attending that date. I know it's far down the line, so if you would like me to mark you as tentative, I'm happy to do so and you can let me know as it gets closer.

If you are unable or uninterested in attending the March course, I will work on processing a full refund for you.

I apologize for having to make the date change, but the safety of attendees is of the utmost importance.

Please let me know if you have any questions, and I appreciate your understanding during this time!

Take care,
Audriana

Audriana Bruno Thompson
Dental Alumni and Continuing Education
University of Missouri-Kansas City School of Dentistry
650 East 25th St. | Kansas City, MO 64108
Phone: (816) 235-2142 | Fax: (816) 235-5892
brunoaj@umkc.edu | http://dentistry.umkc.edu

Until further notice, our office is working remotely

650—11.7 (147,153) Dental hygiene application for local anesthesia permit. A licensed dental hygienist may administer local anesthesia provided the following requirements are met:

1. The dental hygienist holds a current local anesthesia permit issued by the board of dental examiners.

2. The local anesthesia is prescribed by a licensed dentist.

3. The local anesthesia is administered under the direct supervision of a licensed dentist.

11.7(1) Application for permit. A dental hygienist shall make application for a permit to administer local anesthesia on the form approved by the dental hygiene committee and provide the following:

a. The fee for a permit to administer local anesthesia as specified in 650—Chapter 15; and

b. Evidence that formal training in the administration of local anesthesia has been completed within 12 months of the date of application. The formal training shall be approved by the dental hygiene committee and conducted by a school accredited by the American Dental Association Commission on Dental Education; or

c. Evidence of completion of formal training in the administration of local anesthesia approved by the dental hygiene committee and documented evidence of ongoing practice in the administration of local anesthesia in another state or jurisdiction that authorizes a dental hygienist to administer local anesthesia.

11.7(2) Permit renewal. The permit shall expire on August 31 of every odd-numbered year. To renew the permit, the dental hygienist must:

a. At the time of renewal, document evidence of holding an active Iowa dental hygiene license.

b. Submit the application fee for renewal of the permit as specified in 650—Chapter 15.

11.7(3) Failure to meet the requirements for renewal shall cause the permit to lapse and become invalid.

11.7(4) A permit that has been lapsed for two years or less may be reinstated upon the permit holder's application for reinstatement and payment of the reinstatement fee as specified in 650—Chapter 15. A permit that has been lapsed for more than two years may be reinstated upon application for reinstatement, documentation of meeting the requirements of 11.7(1)*"b"* or *"c,"* and payment of the reinstatement fee as specified in 650—Chapter 15.

This rule is intended to implement Iowa Code sections 147.10 and 147.80 and chapter 153.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

Last Name	First Name	Rule/Subrule	Topic	Decision	Date of Ruling	Background Information
Meyer	Mackenzie	11.7(1)b	Local Anesthesia Permit Requirements	Approved	1/22/2015	Made application for LA permit (and requested waiver) less than 24 months following completion of formal training through Carl Sandburg College.
Houston	Gina	11.7(1)b	Local Anesthesia Permit Requirements	Approved	7/23/2015	Completed additional training at Hawkeye Community College, which included local anesthesia components. Asked that this additional training serve as sufficient training within the 12 month period.
Pike	Rebecca	11.7(1)b	Local Anesthesia Permit Requirements	Approved	8/13/2015	Completed training in 1998 and provided local anesthesia for 11 years following. After being not practicing for 6 years, asked that her previous training and education serve as a sufficient alternate to the current requirements.
Waibel	Tayt	11.7(1)(b)	Local Anesthesia Permit Requirements	Approved	11/15/2019	Requested approval for previous local anesthesia training completed while in dental hygiene school. Rule requires that training be completed within 12 months of application or have administered local anesthesia in another state ("ongoing practice"). Ms. Waibel graduated approximately 13 months prior to application and had not yet practiced as a dental hygienist.

KIM REYNOLDS
GOVERNOR

OFFICE OF THE GOVERNOR

ADAM GREGG
LT GOVERNOR

March 12, 2020

The Honorable Paul Pate
Secretary of State of Iowa
State Capitol
Des Moines, Iowa 50319

Dear Mr. Secretary,

I hereby transmit:

House File 2267, an Act relating to the regulation of dental hygienists and dental assistants, and the practice of dentistry, and providing administrative penalties.

The above House File is hereby approved on this date.

Sincerely,

Kim Reynolds
Governor of Iowa

cc: Secretary of the Senate
Clerk of the House

House File 2267

AN ACT

RELATING TO THE REGULATION OF DENTAL HYGIENISTS AND DENTAL ASSISTANTS, AND THE PRACTICE OF DENTISTRY, AND PROVIDING ADMINISTRATIVE PENALTIES.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

Section 1. Section 153.15, Code 2020, is amended to read as follows:

153.15 Dental hygienists — scope of term.

A licensed dental hygienist may perform those services which are educational, therapeutic, and preventive in nature which attain or maintain optimal oral health as determined by the board and may include but are not necessarily limited to complete oral prophylaxis, application of preventive agents to oral structures, exposure and processing of radiographs, administration of medicaments prescribed by a licensed dentist, obtaining and preparing nonsurgical, clinical and oral diagnostic tests for interpretation by the dentist, and preparation of preliminary written records of oral conditions for interpretation by the dentist. Such services, except educational services, shall be performed under supervision of a licensed dentist ~~and in a dental office, a public or private school, public health agencies, hospitals, and the armed forces,~~ but nothing herein shall be construed to authorize a dental hygienist to practice dentistry. Educational services shall be limited to assessing the need for, planning, implementing, and evaluating oral health education programs

for individual patients and community groups; and conducting workshops and in-service training sessions on dental health for nurses, school personnel, institutional staff, community groups, and other agencies providing consultation and technical assistance for promotional, preventive, and educational services.

Sec. 2. Section 153.33, Code 2020, is amended by adding the following new subsection:

NEW SUBSECTION. 5. *a.* The board may impose an administrative penalty of up to five hundred dollars on a licensee, registrant, or trainee of the board who does any of the following:

(1) Engages in a practice regulated by this chapter without a current license, registration, permit, or qualification.

(2) Employs a person without a current license, registration, permit, or qualification to engage in a practice regulated by this chapter.

(3) Fails to complete the continuing education required for renewal of a license or registration.

b. The assessment and payment of a penalty imposed pursuant to paragraph *"a"* shall not be considered a disciplinary action or reported as discipline and shall be confidential.

c. A licensee, registrant, or trainee may contest a penalty issued pursuant to paragraph *"a"* by initiating a contested case proceeding pursuant to chapter 17A.

d. This section shall not prohibit the board from imposing discipline on a licensee, registrant, or trainee for willful or repeated violations.

e. An administrative penalty collected pursuant to this subsection shall be deposited into the general fund of the state.

Sec. 3. Section 153.38, Code 2020, is amended to read as follows:

153.38 Dental assistants — scope of practice.

A registered dental assistant may perform those services of assistance to a licensed dentist as determined by the board by rule. ~~Such services~~ A registered dental assistant with additional education and training, as provided by the board by rule, may become certified to perform expanded functions

or become qualified to participate in dental radiography. A registered dental assistant who has successfully completed expanded function training through the university of Iowa college of dentistry or a program certified by the commission on dental accreditation may place dental sealants on teeth. Services performed by a registered dental assistant shall be performed under supervision of a licensed dentist ~~in a dental office, a public or private school, public health agencies, hospitals, and the armed forces~~, but this section shall not be construed to authorize a dental assistant to practice dentistry or dental hygiene. The board shall not adopt rules that delegate to a dental assistant the administration of local anesthesia or the removal of plaque, stain, calculus, or hard natural material except by toothbrush, floss, or rubber cup coronal polish. Every licensed dentist who utilizes the services of a registered dental assistant for the purpose of assistance in the practice of dentistry shall be responsible for acts delegated to the registered dental assistant. A dentist shall delegate to a registered dental assistant only those acts which are authorized to be delegated to registered dental assistants by the board.

Sec. 4. REPEAL. 2000 Iowa Acts, chapter 1002, section 7, is repealed.

PAT GRASSLEY
Speaker of the House

CHARLES SCHNEIDER
President of the Senate

I hereby certify that this bill originated in the House and is known as House File 2267, Eighty-eighth General Assembly.

MEGHAN NELSON
Chief Clerk of the House

Approved March 12th, 2020

KIM REYNOLDS
Governor

STATUS OF IDB EXAM REVIEW & WAIVERS

**All traditional exams are board approved.*

DENTAL EXAMS		Manikin Components		Patient Based Components		OSCE	Approved By The Board Via Waiver?
		Endo	Prosth.	Op.	Perio.		
Agencies	CRDTS Traditional Exam	Yes	Yes	Yes - Patient	Yes - Patient	No	-
	CRDTS Alternate Exam	Yes	Yes	Yes - Manikin	Yes - Manikin	No	Yes - Board Approved 6/5/20
	WREB Traditional Exam	Yes	Yes	Yes - Patient	Yes - Patient	Yes - CTP	-
	WREB Alternate Exam	Yes	Yes	Yes - Performance Based Simulation	No Perio	Yes - CTP	Yes - Board Approved 6/5/20
	CDCA Traditional Exam (ADEX)	Yes	Yes	Yes - On Patient	Yes - Patient	Yes - DSE OSCE	-
	CDCA Alternate Exam (ADEX)	Yes	Yes	Yes - CompeDont	No Perio	Yes - DSE OSCE	Yes - Board Approved 6/5/20
	SRTA Traditional Exam	Yes	Yes	Yes - Patient	Yes - Patient	No	-
	SRTA Alternate Exam	Yes	Yes	Yes - Typodont	No Perio	No	Waiver request has not been received
	ADA Alternate Exam	The Board reviewed in January, 2020			-	Yes - DL OSCE	No
	Combo Exam: ADA or CDCA OSCE + any Testing Agency Manikin Exam	Yes	Yes			Yes	Yes - Board Approved 4/3/20

DENTAL HYGIENE EXAMS		Patient Based Exam				OSCE	Approved By The Board Via Waiver?
Agencies	CRDTS Traditional Exam	Yes				No	-
	CRDTS Alternate Exam	Reviewed Manikin Exam on 6/5/20					
	WREB Traditional Exam	Yes				Yes	-
	WREB Alternate Exam	Received info on 7/21/20 - OSCE Exam Only (no manikin offered)					
	CDCA Traditional Exam (ADEX)	Yes				Yes	-
	CDCA Alternate Exam (ADEX)	Reviewed Manikin Exam on 6/5/20					
	SRTA Traditional Exam	Yes					-
	SRTA Alternate Exam	Reviewed Manikin Exam on 6/5/20				Optional Computerized Multiple Choice Exam	
	OSCE Only	The Board Reviewed A Waiver on 6/5/20					Denied on 6/5/20

CHAPTER 11
LICENSURE TO PRACTICE DENTISTRY OR DENTAL HYGIENE
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—11.1(147,153) Applicant responsibilities. An applicant for dental or dental hygiene licensure bears full responsibility for each of the following:

1. Paying all fees charged by regulatory authorities, national testing or credentialing organizations, health facilities, and educational institutions providing the information required to complete a license or permit application; and

2. Providing accurate, up-to-date, and truthful information on the application form including, but not limited to, prior professional experience, education, training, examination scores, and disciplinary history.

3. Submitting complete application materials. An application for a license, permit, or registration or reinstatement of a license or registration will be considered active for 180 days from the date the application is received. For purposes of establishing timely filing, the postmark on a paper submittal will be used, and for applications submitted online, the electronic timestamp will be deemed the date of filing. If the applicant does not submit all materials, including a completed fingerprint packet, within this time period or if the applicant does not meet the requirements for the license, permit, registration or reinstatement, the application shall be considered incomplete. An applicant whose application is filed incomplete must submit a new application and application fee.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—11.2(147,153) Dental licensure by examination.

11.2(1) Applications for licensure by examination to practice dentistry in this state shall be made on the form provided by the board and must be completely answered, including required credentials and documents. An applicant who has held a dental license issued in another state for one year or longer must apply for licensure by credentials pursuant to rule 650—11.3(153).

11.2(2) Applications for licensure must be filed with the board along with:

a. Documentation of graduation from dental college. Satisfactory evidence of graduation with a DDS or DMD from an accredited dental college approved by the board or satisfactory evidence of meeting the requirements specified in rule 650—11.4(153).

b. Certification of good standing from dean or designee. Certification by the dean or other authorized representative of the dental school that the applicant has been a student in good standing while attending that dental school.

c. Documentation of passage of national dental examination. Evidence of attaining a grade of at least 75 percent on the examination administered by the Joint Commission on National Dental Examinations.

d. Documentation of passage of a clinical examination.

(1) Successful passage of a board-approved clinical examination within the previous five-year period with a grade of at least 75 percent.

(2) The following regional clinical examinations are approved by the board for purposes of licensure by examination: the Central Regional Dental Testing Service, Inc. examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the Western Regional Examining Board examination as administered by the Western Regional Examining Board (WREB), the Southern Regional Testing Agency, Inc. examination as administered by the Southern Regional Testing Agency, Inc. (SRTA), and the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies, Inc. (CITA).

(3) Beginning January 1, 2018, the 2014 California portfolio examination is approved by the board for the purposes of licensure by examination. To be eligible for licensure on the basis of portfolio examination, an applicant must be a student at the University of Iowa College of Dentistry or

have graduated from the University of Iowa College of Dentistry within one year of the date of application.

Commented [J1]: Nobody has utilized this pathway for licensure to date. Keep or delete?

e. Explanation of any legal or administrative actions. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges.

f. Payment of application, fingerprint and background check fees. The nonrefundable application fee, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

g. Documentation of passage of jurisprudence examination. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

h. Current CPR certification. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

i. Completed fingerprint packet. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.2(3) The board may require a personal appearance or any additional information relating to the character, education and experience of the applicant.

11.2(4) Applications must be signed and verified as to the truth of the statements contained therein.

This rule is intended to implement Iowa Code sections 147.3, 147.29, and 147.34.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2870C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—11.3(153) Dental licensure by credentials.

11.3(1) Applications for licensure by credentials to practice dentistry in this state shall be made on the form provided by the board and must be completely answered, including required credentials and documents.

11.3(2) Applications must be filed with the board along with:

a. Satisfactory evidence of graduation with a DDS or DMD from an accredited dental college approved by the board or satisfactory evidence of meeting the requirements specified in rule 650—11.4(153).

b. Evidence of attaining a grade of at least 75 percent on the examination of the Joint Commission on National Dental Examinations or evidence of attaining a grade of at least 75 percent on a written examination during the last ten years that is comparable to the examination given by the Joint Commission on National Dental Examinations. Any dentist who has lawfully practiced dentistry in another state or territory for five years may be exempted from presenting this evidence.

c. A statement of any dental examinations taken by the applicant, with indication of pass/fail for each examination taken. Any dentist who has lawfully practiced dentistry in another state or territory for five or more years may be exempted from presenting this evidence.

d. Evidence of a current, valid license to practice dentistry in another state, territory or district of the United States issued under requirements equivalent or substantially equivalent to those of this state.

e. Evidence that the applicant has met at least one of the following:

(1) Has less than three consecutive years of practice immediately prior to the filing of the application and evidence of attaining a grade of at least 75 percent on a board-approved clinical examination within the previous five-year period. The following regional examinations are approved by the board for purposes of licensure by credentials: the Central Regional Dental Testing Service, Inc.

examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the Western Regional Examining Board examination as administered by the Western Regional Examining Board (WREB), the Southern Regional Testing Agency, Inc. examination as administered by the Southern Regional Testing Agency, Inc. (SRTA), the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies, Inc. (CITA), and the 2014 California portfolio examination; or

(2) Has for three consecutive years immediately prior to the filing of the application been in the lawful practice of dentistry in such other state, territory or district of the United States.

f. Evidence from the state board of dentistry, or equivalent authority, from each state in which applicant has been licensed to practice dentistry, that the applicant has not been the subject of final or pending disciplinary action.

g. A statement disclosing and explaining any disciplinary actions, investigations, malpractice claims, complaints, judgments, settlements, or criminal charges, including the results of a self-query of the National Practitioner Data Bank (NPDB).

h. The nonrefundable application fee for licensure by credentials, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

i. Current CPR certification. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a “hands-on” clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

j. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

k. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.3(3) The board may require a personal appearance or may require any additional information relating to the character, education, and experience of the applicant.

11.3(4) The board may also require such examinations as may be necessary to evaluate the applicant for licensure by credentials.

11.3(5) Applications must be signed and verified attesting to the truth of the statements contained therein.

This rule is intended to implement Iowa Code chapters 147 and 153.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2870C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—11.4(153) Graduates of foreign dental schools. In addition to meeting the other requirements for licensure specified in rule 650—11.2(147,153) or 650—11.3(153), an applicant for dental licensure who did not graduate with a DDS or DMD from an accredited dental college approved by the board must provide satisfactory evidence of meeting the following requirements.

11.4(1) The applicant must complete a full-time dental education program at an accredited dental college. The program must consist of either:

a. An undergraduate supplemental dental education program of at least two academic years. The undergraduate supplemental dental education program must provide didactic and clinical education to the level of a DDS or DMD graduate of the accredited dental college; or

b. A postgraduate general practice residency program of at least one academic year.

11.4(2) The applicant must receive a dental diploma, degree or certificate from the accredited dental college upon successful completion of the program.

11.4(3) The applicant must present to the board the following documents:

a. Satisfactory evidence of completion of board-approved dental education at an accredited dental college;

b. A final, official transcript verifying graduation from the foreign dental school at which the applicant originally obtained a dental degree. If the transcript is written in a language other than English, an original, official translation shall also be submitted; and

c. Verification from the appropriate governmental authority that the applicant was licensed or otherwise authorized by law to practice dentistry in the country in which the applicant received foreign dental school training and that no adverse action was taken against the license.

11.4(4) The applicant must demonstrate to the satisfaction of the board an ability to read, write, speak, understand, and be understood in the English language. The applicant may demonstrate English proficiency by submitting to the board evidence of achieving a score sufficient to be rated in the highest level of ability on each section of the Test of English as a Foreign Language (TOEFL) as administered by the Educational Testing Service (ETS).

This rule is intended to implement Iowa Code chapters 147 and 153.

[**ARC 3961C**, IAB 8/15/18, effective 9/19/18]

650—11.5(147,153) Dental hygiene licensure by examination.

11.5(1) Applications for licensure to practice dental hygiene in this state shall be made on the form provided by the dental hygiene committee and must be completely answered, including required credentials and documents. An applicant who has held a dental hygiene license issued in another state for one year or longer must apply for licensure by credentials pursuant to rule 650—11.6(153).

11.5(2) Applications for licensure must be filed with the dental hygiene committee along with:

a. Documentation of graduation from dental hygiene school. Satisfactory evidence of graduation from an accredited school of dental hygiene approved by the dental hygiene committee.

b. Certification of good standing from dean or designee. Certification by the dean or other authorized representative of the school of dental hygiene that the applicant has been a student in good standing while attending that dental hygiene school.

c. Documentation of passage of national dental hygiene examination. Evidence of attaining a grade of at least 75 percent on the examination administered by the Joint Commission on National Dental Examinations.

d. Documentation of passage of a regional clinical examination.

(1) Successful passage of a regional clinical examination within the previous five-year period with a grade of at least 75 percent.

(2) The following regional examinations are approved by the board for purposes of licensure by examination: the Central Regional Dental Testing Service, Inc. examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the Western Regional Examining Board examination as administered by the Western Regional Examining Board (WREB), the Southern Regional Testing Agency, Inc. examination as administered by the Southern Regional Testing Agency, Inc. (SRTA), and the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies, Inc. (CITA).

e. Payment of application, fingerprint and background check fees. The nonrefundable application fee, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

f. Documentation of passage of jurisprudence examination. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

g. Current CPR certification. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a “hands-on” clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

h. Explanation of any legal or administrative actions. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges.

i. Completed fingerprint packet. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.5(3) The dental hygiene committee may require a personal appearance or any additional information relating to the character, education and experience of the applicant.

11.5(4) Applications must be signed and verified as to the truth of the statements contained therein.

11.5(5) Following review by the dental hygiene committee, the committee shall make recommendation to the board regarding the issuance or denial of any license to practice dental hygiene. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1.

This rule is intended to implement Iowa Code chapters 147 and 153.

[**ARC 7790B**, IAB 5/20/09, effective 6/24/09; **ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2870C**, IAB 12/21/16, effective 1/25/17]

650—11.6(153) Dental hygiene licensure by credentials. To be issued a license to practice dental hygiene in Iowa on the basis of credentials, an applicant shall meet the following requirements.

11.6(1) Applications for licensure by credentials to practice dental hygiene in this state shall be made on the form provided by the dental hygiene committee and must be completely answered, including required credentials and documents.

11.6(2) Applications must be filed with the dental hygiene committee along with:

a. Satisfactory evidence of graduation from an accredited school of dental hygiene approved by the dental hygiene committee.

b. Evidence of attaining a grade of at least 75 percent on the examination of the Joint Commission on National Dental Examinations or evidence of attaining a grade of at least 75 percent on a written examination that is comparable to the examination given by the Joint Commission on National Dental Examinations. Any dental hygienist who has lawfully practiced dental hygiene in another state or territory for five or more years may be exempted from presenting this evidence.

c. A statement of any dental hygiene examinations taken by the applicant, with indication of pass/fail for each examination taken. Any dental hygienist who has lawfully practiced dental hygiene in another state or territory for five or more years may be exempted from presenting this evidence.

d. Evidence of a current, valid license to practice dental hygiene in another state, territory or district of the United States issued under requirements equivalent or substantially equivalent to those of this state.

e. Evidence that the applicant has met at least one of the following:

(1) Has less than three consecutive years of practice immediately prior to the filing of the application and evidence of attaining a grade of at least 75 percent on a regional clinical examination within the previous five-year period. The following regional examinations are approved by the board for purposes of licensure by examination: the Central Regional Dental Testing Service, Inc. examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the Western Regional Examining Board examination as administered by the Western Regional Examining Board (WREB), the Southern Regional Testing Agency, Inc. examination as administered by the Southern Regional Testing Agency, Inc. (SRTA), and the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies, Inc. (CITA); or

(2) Has for three consecutive years immediately prior to the filing of the application been in the lawful practice of dental hygiene in such other state, territory or district of the United States.

f. Evidence from the state board of dentistry, or equivalent authority, in each state in which applicant has been licensed to practice dental hygiene, that the applicant has not been the subject of final or pending disciplinary action.

g. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges, including the results of a self-query of the National Practitioner Data Bank (NPDB).

h. The nonrefundable application fee for licensure by credentials, the initial licensure fee and the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

i. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

j. Successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

k. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.6(3) Applicant shall appear for a personal interview conducted by the dental hygiene committee or the board by request only.

11.6(4) The dental hygiene committee may also require such examinations as may be necessary to evaluate the applicant for licensure by credentials.

11.6(5) Applications must be signed and verified attesting to the truth of the statements contained therein.

11.6(6) Following review by the dental hygiene committee, the committee shall make a recommendation to the board regarding issuance or denial of a dental hygiene license. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1.

This rule is intended to implement Iowa Code section 147.80 and chapter 153.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 0618C**, IAB 3/6/13, effective 4/10/13; **ARC 2870C**, IAB 12/21/16, effective 1/25/17]

650—11.7(147,153) Dental hygiene application for local anesthesia permit. A licensed dental hygienist may administer local anesthesia provided the following requirements are met:

1. The dental hygienist holds a current local anesthesia permit issued by the board of dental examiners.
2. The local anesthesia is prescribed by a licensed dentist.
3. The local anesthesia is administered under the direct supervision of a licensed dentist.

11.7(1) Application for permit. A dental hygienist shall make application for a permit to administer local anesthesia on the form approved by the dental hygiene committee and provide the following:

a. The fee for a permit to administer local anesthesia as specified in 650—Chapter 15; and

b. Evidence that formal training in the administration of local anesthesia has been completed within 12 months of the date of application. The formal training shall be approved by the dental hygiene committee and conducted by a school accredited by the American Dental Association Commission on Dental Education; or

c. Evidence of completion of formal training in the administration of local anesthesia approved by the dental hygiene committee and documented evidence of ongoing practice in the administration of local anesthesia in another state or jurisdiction that authorizes a dental hygienist to administer local anesthesia.

11.7(2) Permit renewal. The permit shall expire on August 31 of every odd-numbered year. To renew the permit, the dental hygienist must:

a. At the time of renewal, document evidence of holding an active Iowa dental hygiene license.

b. Submit the application fee for renewal of the permit as specified in 650—Chapter 15.

11.7(3) Failure to meet the requirements for renewal shall cause the permit to lapse and become invalid.

11.7(4) A permit that has been lapsed for two years or less may be reinstated upon the permit holder's application for reinstatement and payment of the reinstatement fee as specified in 650—Chapter 15. A permit that has been lapsed for more than two years may be reinstated upon application for reinstatement, documentation of meeting the requirements of 11.7(1)*"b"* or *"c,"* and payment of the reinstatement fee as specified in 650—Chapter 15.

This rule is intended to implement Iowa Code sections 147.10 and 147.80 and chapter 153.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—11.8(147,153) Review of applications. Upon receipt of a completed application, the executive director as authorized by the board has discretion to:

1. Authorize the issuance of the license, permit, or registration.

2. Refer the license, permit, or registration application to the license and registration committee for review and consideration when the executive director determines that matters including, but not limited to, prior criminal history, chemical dependence, competency, physical or psychological illness, malpractice claims or settlements, or professional disciplinary history are relevant in determining the applicants' qualifications for license, permit, or registration.

11.8(1) Following review and consideration of an application referred by the executive director, the license and registration committee may at its discretion:

a. Authorize the executive director to issue the license, permit, or registration.

b. Send the license, permit, or registration application to the board for further review and consideration.

11.8(2) Following review and consideration of a license, permit, or registration application referred by the license and registration committee, the board shall:

a. Authorize the issuance of the license, permit, or registration,

b. Deny the issuance of the license, permit, or registration, or

c. Authorize the issuance of the license, permit, or registration under certain terms and conditions or with certain restrictions.

11.8(3) The license and registration committee or board may require an applicant to appear for an interview before the committee or the full board as part of the application process.

11.8(4) The license and registration committee or board may defer final action on an application if there is an investigation or disciplinary action pending against an applicant, who may otherwise meet the requirements for license, permit, or registration, until such time as the committee or board is satisfied that licensure or registration of the applicant poses no risk to the health and safety of Iowans.

11.8(5) The dental hygiene committee shall be responsible for reviewing any applications submitted by a dental hygienist that require review in accordance with this rule. Following review by the dental hygiene committee, the committee shall make a recommendation to the board regarding issuance of the license or permit. The board's review of the dental hygiene committee's recommendation is subject to 650—Chapter 1.

11.8(6) An application for a license, permit, or reinstatement of a license will be considered complete prior to receipt of the criminal history background check on the applicant by the FBI for purposes of review and consideration by the executive director, the license and registration committee, or the board. However, an applicant is required to submit an additional completed fingerprint packet and fee within 30 days of a request by the board if an earlier fingerprint submission has been determined to be unacceptable by the DCI or FBI.

[**ARC 4187C**, IAB 12/19/18, effective 1/23/19]

650—11.9(147,153) Grounds for denial of application. The board may deny an application for license or permit for any of the following reasons:

1. Failure to meet the requirements for license or permit as specified in these rules.
2. Failure to provide accurate and truthful information, or the omission of material information.
3. Pursuant to Iowa Code section 147.4, upon any of the grounds for which licensure may be revoked or suspended.

This rule is intended to implement Iowa Code section 147.4.

650—11.10(147) Denial of licensure—appeal procedure.

11.10(1) *Preliminary notice of denial.* Prior to the denial of licensure to an applicant, the board shall issue a preliminary notice of denial that shall be sent to the applicant by regular, first-class mail. The preliminary notice of denial is a public record and shall cite the factual and legal basis for denying the application, notify the applicant of the appeal process, and specify the date upon which the denial will become final if it is not appealed.

11.10(2) *Appeal procedure.* An applicant who has received a preliminary notice of denial may appeal the notice and request a hearing on the issues related to the preliminary notice of denial by serving a request for hearing upon the executive director not more than 30 calendar days following the date when the preliminary notice of denial was mailed. The request is deemed filed on the date it is received in the board office. The request shall provide the applicant's current address, specify the factual or legal errors in the preliminary notice of denial, indicate if the applicant wants an evidentiary hearing, and provide any additional written information or documents in support of licensure.

11.10(3) *Hearing.* If an applicant appeals the preliminary notice of denial and requests a hearing, the hearing shall be a contested case and subsequent proceedings shall be conducted in accordance with 650—51.20(17A). License denial hearings are open to the public. Either party may request issuance of a protective order in the event privileged or confidential information is submitted into evidence.

a. The applicant shall have the ultimate burden of persuasion as to the applicant's qualification for licensure.

b. The board, after a hearing on license denial, may grant the license, grant the license with restrictions, or deny the license. The board shall state the reasons for its final decision, which is a public record.

c. Judicial review of a final order of the board to deny a license, or to issue a license with restrictions, may be sought in accordance with the provisions of Iowa Code section 17A.19.

11.10(4) *Finality.* If an applicant does not appeal a preliminary notice of denial, the preliminary notice of denial automatically becomes final and a notice of denial will be issued. The final notice of denial is a public record.

11.10(5) *Failure to pursue appeal.* If an applicant appeals a preliminary notice of denial in accordance with 11.10(2), but the applicant fails to pursue that appeal to a final decision within six months from the date of the preliminary notice of denial, the board may dismiss the appeal. The appeal may be dismissed after the board sends a written notice by first-class mail to the applicant at the applicant's last-known address. The notice shall state that the appeal will be dismissed and the preliminary notice of denial will become final if the applicant does not contact the board to schedule the appeal hearing within 14 days after the written notice is sent. Upon dismissal of an appeal, the preliminary notice of denial becomes final.

This rule is intended to implement Iowa Code sections 147.3, 147.4 and 147.29.

[**ARC 7789B**, IAB 5/20/09, effective 6/24/09]

650—11.11(252J) Receipt of certificate of noncompliance. The board shall consider the receipt of a certificate of noncompliance of a support order from the child support recovery unit pursuant to Iowa Code chapter 252J and 650—Chapter 33 of these rules. License denial shall follow the procedures in the statutes and board rules as set forth in this rule.

This rule is intended to implement Iowa Code chapter 252J.

[**ARC 4747C**, IAB 11/6/19, effective 12/11/19]

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CHAPTER 12
DENTAL AND DENTAL HYGIENE EXAMINATIONS
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—12.1(147,153) Clinical examination procedure for dentistry.

12.1(1) *Compliance with regional clinical examination testing requirements and procedures.* Examinees shall meet the requirements for testing and follow procedures established by each respective testing agency. Examinees must take all parts offered by the respective testing agency.

12.1(2) *Scoring requirements.* The examinee must attain a grade of not less than 75 percent on each clinical portion of the examination and on the written portion of the examination.

12.1(3) *Compliance with performance clinical operations requirements.* Each examinee shall be required to perform such clinical operations as may be required by each respective testing agency, for the purpose of sufficiently evaluating and testing the fitness of the examinee to practice dentistry.

[**ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2871C**, IAB 12/21/16, effective 1/25/17]

650—12.2(147,153) System of retaking dental examinations.

12.2(1) *Method of counting failures.* For the purposes of counting examination failures, the board shall utilize policies adopted by each respective testing agency.

12.2(2) *Remedial education required prior to third examination.*

a. Prior to the third examination attempt, a dental examinee must submit proof of additional formal education or clinical experience approved in advance by the board.

b. A dental examinee shall be required to retake only those parts of the examination that the examinee failed. However, a dental examinee who has not passed all parts of the examination within the time frame specified shall be required to retake the entire examination. The dental examinee shall refer to the policies of each respective testing agency to determine applicable time frames.

12.2(3) *Remedial education required prior to fourth examination.*

a. Prior to the fourth examination attempt, a dental examinee must submit proof of satisfactory completion of the equivalent of an additional senior year of an approved curriculum in dentistry at a university or school with an approved curriculum.

b. At the fourth examination, the dental examinee shall be required to retake only those parts of the examination that the examinee failed. However, a dental examinee who has not passed all parts of the examination within the time frame specified shall be required to retake the entire examination. The dental examinee shall refer to the policies of each respective testing agency to determine applicable time frames.

12.2(4) *Subsequent failures.* For the purposes of additional study prior to retakes, the fifth examination will be considered the same as the third.

12.2(5) *Failures of other examinations.* If a dental examinee applies for an examination after having failed any other state or regional examinations, the failure shall be counted for the purposes of retakes.

[**ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 2871C**, IAB 12/21/16, effective 1/25/17]

650—12.3(147,153) Portfolio examination procedure for dentistry.

Commented [J1]: Keep or delete?

12.3(1) *Completion of a portfolio examination.* The 2014 California portfolio examination is accepted for licensure by examination for University of Iowa graduates. To meet the requirements for dental licensure and portfolio examination, applicants shall complete the portfolio examination as administered at the University of Iowa College of Dentistry (College of Dentistry).

12.3(2) *Compliance with testing requirements and procedures.*

a. The board shall oversee all aspects of the portfolio examination process but shall not interfere with the College of Dentistry's authority to establish and deliver an accredited curriculum. The board shall determine an end-of-year deadline, in consultation with the College of Dentistry, to determine when the portfolio examinations shall be completed and submitted to the board for review by the

board's examiners.

b. The portfolio examination shall be conducted while the applicant is actively enrolled as a student at the College of Dentistry. This examination shall utilize uniform standards of clinical experiences and competencies as outlined in the 2014 California portfolio examination. The applicant shall pass a final assessment of the submitted portfolio at the end of the applicant's dental school education at the College of Dentistry.

c. Before any portfolio examination may be submitted to the board, the applicant shall remit to the board the required portfolio examination fee as specified in 650—Chapter 15 and a letter of good standing signed by the dean of the College of Dentistry stating that the applicant has graduated or will graduate with no pending ethical issues.

12.3(3) *Scoring requirements.*

a. Final clinical competencies performed by the applicant must be evaluated by two examiners who have participated in standardization, calibration and training. The examiners shall be approved by the board and may include faculty, board members or board member designees. Board members or board member designees shall have priority as examiners at all times. The College of Dentistry shall submit to the board the names of the portfolio examiners for consideration by January 1 of each calendar year.

b. The College of Dentistry shall provide a minimum of a seven-day notice for all final competencies. In the event that a seven-day notice cannot be provided, the College of Dentistry must notify the board immediately. In the event that no board members or designees are available to participate in an evaluation, the College of Dentistry may use two board-approved portfolio examiners.

c. Successful completion of each competency shall result in a score that meets minimum competence-level performance. Scoring criteria for each competency is outlined in the 2014/2015 California Examiner Training Manual.

d. The board shall monitor and audit the standardization and calibration of examiners at least biennially to ensure standardization and an acceptable level of calibration in the grading of the examination. The College of Dentistry's competency examinations with regard to the portfolio examination shall be audited annually by the board.

12.3(4) *Compliance with clinical operation requirements.*

a. The board shall require and verify the successful completion of a minimum number of clinical experiences for the portfolio examination.

b. The board shall require and verify the successful completion of a set number of competency examinations performed on a patient of record. The clinical experiences include, but are not limited to, the following:

(1) Comprehensive oral diagnosis and treatment planning;
(2) Periodontics;
(3) Direct restorations;
(4) Indirect restorations;
(5) Removable prosthodontics; and
(6) Endodontics.

[**ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—12.4(147,153) Clinical examination procedure for dental hygiene.

12.4(1) *Compliance with regional clinical examination testing requirements and procedures.* Examinees shall meet the requirements for testing and follow the procedures established by each respective testing agency. Examinees must take all parts offered by the respective testing agency.

12.4(2) *Scoring requirements.* The examinee must attain a grade of not less than 75 percent on each clinical portion of the examination and on the written portion of the examination.

12.4(3) *Practical demonstrations.* Each examinee shall be required to perform such practical demonstrations as may be required by each respective testing agency for the purpose of sufficiently

evaluating and testing the fitness of the examinee to practice dental hygiene.

[**ARC 7790B**, IAB 5/20/09, effective 6/24/09; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2871C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—12.5(147,153) System of retaking dental hygiene examinations.

12.5(1) *Method of counting failures.*

a. For the purposes of counting examination failures, the board shall utilize the policies adopted by each respective testing agency.

b. A dental hygiene examinee who has two examination failures will be required to complete the remedial education requirements set forth in subrule 12.5(2).

12.5(2) *Remedial education required prior to third examination.* Prior to the third examination attempt, a dental hygiene examinee must submit proof of a minimum of 40 hours of additional formal education or a minimum of 40 hours of clinical experience that is approved in advance by the dental hygiene committee.

12.5(3) *Remedial education required prior to fourth examination.* Prior to the fourth examination attempt, a dental hygiene examinee must submit proof of satisfactory completion of the equivalent of an additional semester of dental hygiene at a university or school approved by the dental hygiene committee.

12.5(4) *Subsequent failures.* For purposes of additional study prior to retakes, the fifth examination will be considered the same as the third.

12.5(5) *Failures of other examinations.* If a dental hygiene examinee applies for an examination after having failed any other state or regional examinations, the failure shall be counted for the purposes of retakes.

[**ARC 7790B**, IAB 5/20/09, effective 6/24/09; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 2871C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

This chapter is intended to implement Iowa Code section 147.36.

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JCNDE JOINT COMMISSION ON NATIONAL DENTAL EXAMINATIONS

To: US Dental Boards, the Dental Education Community, Dental Licensure Candidates

From: Dr. Cataldo Leone, Chair of the Joint Commission on National Dental Examinations (JCNDE)

Date: April 2, 2020

Subject: Official Release of the JCNDE's Dental Licensure Objective Structured Clinical Examination (DLOSCE)

The Joint Commission on National Dental Examinations (JCNDE) has a long and distinguished track record of providing valid and reliable high-stakes examinations for licensure purposes, to protect the public health. We continue to innovate in our efforts to serve the needs of those who use our examinations to inform their decisions. This innovation and drive for excellence is more important than ever given these uncertain times, the challenges that face all of us, and the implications of JCNDE examinations for stakeholders, communities of interest, and the public.

In light of the preceding, **I am pleased to announce that on March 31, 2020 the JCNDE approved a resolution to make its newest examination—the Dental Licensure Objective Structured Clinical Examination (DLOSCE)—available for use in 2020 by dental boards in the US**. The DLOSCE is a content-valid examination built specifically for clinical licensure purposes that assesses candidates' clinical judgment and skills using sophisticated 3-D models, without the need to involve patients. **The JCNDE is targeting Monday, June 15, 2020 as the official date of release, pending test center availability**.

The DLOSCE is comprehensive in its assessment of clinical judgment, including content in the following areas: Restorative Dentistry; Prosthodontics; Oral Pathology, Pain Management and TMD; Periodontics; Oral Surgery; Endodontics; Orthodontics; Medical Emergencies; and Prescriptions. Diagnosis, Treatment Planning, and Occlusion are assessed across the aforementioned topic areas. DLOSCE content has been developed by teams of highly qualified subject matter experts, working together to build examination questions that are capable of accurately and reliably identifying those who possess the clinical skills necessary to safely practice dentistry. Use of the DLOSCE is supported by content validity arguments, the same type of validity evidence that is used to support the JCNDE's other examination programs–the National Board Dental Examinations Parts I and II, the National Board Dental Hygiene Examination, and the Integrated National Board Dental Examination. The DLOSCE complements these other examination programs, advancing the work of the JCNDE as it pursues its vision to serve as the nation's leading resource for supporting standards of oral healthcare professionals through valid, reliable and fair assessments for licensure and certification.

The JCNDE understands that stakeholders and communities of interest will have many questions concerning the DLOSCE. With this in mind, the JCNDE will be conducting webinars in coming weeks, to share additional information in preparation for the release of this important new examination program. Each webinar will focus on a particular stakeholder group or community of interest (dental boards, dental educators, and students), answering questions and providing each group with information that is directly relevant to their specific needs. In the

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meantime, updates on the DLOSCE will continue to be shared through the JCNDE's DLOSCE webpage (ada.org/dlosce).

In closing, the JCNDE would like to take this opportunity to thank dental boards for their continued reliance on the examinations of the JCNDE. The JCNDE is confident that the DLOSCE is a strong examination that is well-suited for use in addressing the clinical examination licensure requirements of each board, and is particularly responsive to their pressing needs in these challenging times. The JCNDE looks forward to working closely with all boards interested in accepting the DLOSCE for licensure purposes in 2020 and beyond.

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Overview and Discussion on Dental Licensure Objective Structured Clinical Examination (DLOSCE)

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Iowa Dental Board
January 24, 2020
Des Moines, IA

JCNDE JOINT COMMISSION ON NATIONAL DENTAL EXAMINATIONS

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What is the DLOSCE?

- The DLOSCE is a new clinical examination being developed by the Joint Commission on National Dental Examinations (JCNDE)
- The DLOSCE is envisioned as an alternative to existing single-encounter, patient-based clinical examinations
- The purpose of the DLOSCE is to provide information to state dental boards
  - Does a licensure candidate have the minimum level of clinical skills and judgment required to safely practice entry-level dentistry?

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Why develop the DLOSCE?

- The DLOSCE will:
  - provide dental boards with a highly standardized, reliable, and validated tool they can use to assess clinical competence
  - eliminate undesirable situations and complications that can arise from the use of patients in the examination process
  - create potential for increased licensure portability, if the examination is widely accepted
- ADA possesses the in-house expertise to develop the examination through its Department of Testing Services (DTS)

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Who oversees DLOSCE development?

- DLOSCE development is overseen by the DLOSCE Steering Committee
  - The Steering Committee is a committee of the Joint Commission on National Dental Examinations (JCNDE)

DLOSCE Steering Committee

ADA Board of Trustees members	**Dr. Roy Thompson, Chair** (TN) **Dr. Craig Armstrong** (TX)
General dentist members, formerly on the ADA's Council on Dental Education and Licensure (CDEL)	**Dr. Edward J. Hebert** (LA) **Dr. Prabu Raman** (MO)
Educators with experience teaching comprehensive clinical dentistry	**Dr. Michael Kanellis** (IA) **Dr. Frank Licari** (UT)
State dental board members	**Dr. David Carsten** (WA) **Dr. Mark R. Stetzel** (IN)
Joint Commission on National Dental Examinations (JCNDE) members	**Dr. Cataldo Leone** (MA) **Dr. William Robinson** (FL)

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What will the DLOSCE cover?

- The DLOSCE will focus exclusively on the clinical tasks a dentist performs while providing direct, chair-side treatment to patients
- The following topic areas will be included:
  - Restorative Dentistry
  - Prosthodontics
  - Oral Pathology, Pain, and Temporomandibular Dysfunction
  - Periodontics
  - Oral Surgery
  - Endodontics
  - Orthodontics
  - Prescriptions
  - Medical Emergencies

The examination will include questions involving pediatric, geriatric, special needs, and medically complex patients. Diagnosis, Treatment Planning, and Occlusion will be covered within the topic areas listed above.

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What is the DLOSCE format?

- The DLOSCE will
  - be a computer-based, “Virtual OSCE”
  - include rich, clinically relevant cases
  - include three-dimensional dental models that candidates can manipulate and view from multiple angles
  - be administered at highly secure, professional-level testing centers

- The DLOSCE will <u>not</u> include “traditional manikin” hand skill assessment

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Example Question Format

Select **ONE OR MORE** correct answers.

Which describes the MO composite restoration on tooth 19?

Acceptable
Unacceptable interproximal contact
Over-contoured proximal surface
Under-contoured proximal surface
Overhang present
Cavosurface void present
Hyperocclusion
Exposed dentin present

3D Model

The candidate would be presented with a 3D model showing a MO composite restoration on tooth 19.

The candidate could manipulate the model (e.g., rotate, zoom) in order to view the restoration from multiple angles

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Who develops DLOSCE questions?

- DLOSCE questions are developed by subject matter experts (SMEs) selected by the Steering Committee
  - SMEs include general dentists and specialists
- Each exam question is reviewed by a separate panel of general dentists, to help ensure clinical relevance
- Once administered to candidates, questions will be further evaluated based on their statistical performance

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How will the DLOSCE and INBDE differ?

- The Integrated National Board Dental Examination (INBDE) will become available on August 1, 2020.

- The DLOSCE and INBDE both assess clinical skills. However, key differences also exist:
  - The INBDE:
    - includes a broader range of topics (e.g., patient management, ethics, evidence-based dentistry, epidemiology)
    - includes the biomedical underpinnings of clinical decisions, (e.g., “Why things are done”)

  - The DLOSCE is focused exclusively on the clinical tasks a dentist performs while providing direct, chair-side treatment to patients

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How will the DLOSCE and INBDE differ?

INBDE Example	Corresponding DLOSCE Example
Understand basic principles of pharmacokinetics and pharmacodynamics for major classes of drugs and over-the-counter products to guide safe and effective treatment.	Review patient information and formulate an appropriate prescription.
Understand dental material properties, biocompatibility, and performance, and the interaction among these in working with oral structures in health and disease.	Identify one or more flaws present in a metal-ceramic restoration.
Understand the principles and logic of epidemiology and the analysis of statistical data in the evaluation of oral disease risk, etiology, and prognosis.	*No corresponding DLOSCE example. Epidemiology and statistics are not covered on the DLOSCE.*

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DLOSCE Field Testing Program

- The Steering Committee will conduct a comprehensive field testing program in support of the DLOSCE

- The field testing program will involve two phases:
  - Preliminary field test
  - Nationwide field test

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Preliminary Field Test

- **Preliminary DLOSCE Field Test**
  - April 2020
  - Students from two dental schools will be invited to participate
  - Participating students will take a pilot version of the DLOSCE at their local professional testing centers
    - » 120 questions
    - » 5 hours, 30 minutes
  - ADA staff will conduct focus groups with participating students to collect feedback

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Nationwide Field Test

- **Nationwide DLOSCE Field Test**
  - November 2020 through January 2021
  - A sample of students from all U.S. dental schools will be invited to participate
    - At least 1,000 students, up to a maximum of 2,400
  - Participating students will take a pilot version of the DLOSCE at their local professional testing centers
    - 120 questions
    - 5 hours, 30 minutes

- DLOSCE Steering Committee will seek to identify a small number of dental schools that would like to have ALL of their eligible students participate. These schools would be asked to provide dental school grade information that the Steering Committee could use to study the relationship between performance on the DLOSCE and performance in dental school.

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Official Release

- Pending successful completion of the field testing program, the DLOSCE Steering Committee anticipates that the examination will be made available to state dental boards in the **second quarter of 2021**

- In the coming year, the Steering Committee will provide progress updates to communities of interest

- Updates are made available through the DLOSCE website, ada.org/dlosce

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Thank You!

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Questions?

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Notes from ADA DLOSC Board Member Presentation 4/22/2020

Presented by Dr. Waldschmidt PhD- director of JCNDE
Contributions during Q and A by Dr. Robinson and Dr. Leone

Review of:

Why DLOSCE?

-helps identify those who lack clinical skills for safe practice
-backed by strong validity evidence
-eliminates complications from live patients, for ex. Delaying more pressing needs and treating the "perfect lesion"
-helps dental boards protect the public

Why JCNDE?

-in 2017 Board of Trustees of ADA asked agencies for nonpatient exam, they declined so ADA decided to use own Dept. of Testing Services
-licensure needs to be consistent, free from bias and conflict of interest
-JCNDE has a long test record in this

1/2020 Steering committee formed now a committee of JCNDE to develop structure, content, test specification, vendors for testing and technology

OSCE:

-measures clinical skils, communication, clinical exam, knowledge of procedures, prescription
-REQUIRES CRITICAL THINKING NEEDED TO BE SUCCESSFUL
-Are still evolving

Why an OSCE?

-broad range of skills
-standardized
-strong validity
-fair
-test candidates generally like since considered fair

Standard for Education and Psychological Testing:

- testing standards use to ensure primary focus of validity, surveyed candidates in first year of practice, what skills were needed in certain subject areas, they have confidence the exam works
-they use the same content validity evidence, same approach as for the JCNDE, THEY EMPHASIZE THIS IS A RELIABLE EXAM AND THEREFORE ELIMINATES THE NEED FOR FIELD TESTING THAT WAS TO BE DONE THIS SPRING, lots of discussion was focused on this test development and validity

Where else can OSCE's be found? NDEB of Canada

-has done for many years, 3 times a year in Detroit, Boston, MN
-annual meetings to review
-50 stations with rest stations, 5 minutes per station
-virtual in the near future, this is desirable as typodonts could be altered during exam
-they have evidence to show there is a high correlation between the written exams and final year of school with the OSCE score

US DLOSC version:

-tasks DDS performs while providing direct, chairside tx to patients
-it is a virtual OSCE to assess CLINICAL JUDGEMENT
-traditional manikin HANDSKILL ASSESSMENT NOT INCLUDED AS COVERED IN SCHOOL
-reflective of clinical dentistry done today in the US
-reviews topic areas such as diagnosis and tx planning, occlusion etc.
-3D sophisticated models where candidates can zoom, rotate, look closely at model to dx

How will JCNDE present the exam?

-situational judgement tests
-assess depth and breadth of clinical judgement
-"does the candidate think like a Dr or not?"
-reviewed scoring, may be 1 or more correct answers, if incorrect receive no credit

Costs and Availability:

-IN LIGHT OF COVID DECREASED THE FEE FOR 2020 TO $800 WILL INCREASE IN 2021 TO $ 1650
-four testing windows for test administration first is 6/15-7/17
-candidates take once per window
-results received in 4 weeks from close of window
-administered by Prometric testing centers
-candidate guide available in next 2 weeks
-150 questions and allowed 6 hours and 45 minutes

IMPORTANT DETAILS FROM Q&A:

ARE ANY BOARDS ACCEPTING THIS FOR INITIAL LICENSURE?

-he mentioned IA will be accepting the manikin and OSCE, OR and WA are considering in the next week

WHEN CAN A CANDIDATE REGISTER FOR IT?

-candidate guide, registration, and practice questions to be available in next couple of weeks

HOW DO SCHOOLS AND STUDENTS FEEL ABOUT THIS TEST?

-lots of interest as students and schools want any way to help with obtaining licensure at this time

WHAT ABOUT BOTTLENECKS IN SCHEDULING AT PROMETRIC?

-they have a strong relationship with them and believe they are efficient
-have been told by Prometric they will block sites for students in states that need the availability, REQUESTED THAT STATES THAT WANT TO ACCEPT DLOSCE TO LET THEM KNOW SO THEY CAN WORK WITH PROMETRIC
-first priority to those going to residency programs
-they do of course test other professions, have said will add hours to get tests done

JUST AS MANY STATE BOARDS HAVE MADE MODIFICATIONS, THEY HAVE MADE FIELD TESTING MODIFICATIONS DUE TO COVID-19 BUT ARE CONFIDENT IN THE EXAM AS USING PROVEN, PROFESSIONAL TRAINED AND TESTED PROCEDURES FOR THE EXAM

CAN STATE BOARD MEMBERS TAKE THE EXAM?

-Not done in the past by JCNDE, joint commission would have to approve

Dr Leone says, "exam is ready to go", "new, up to date with technology and diagnostics", "what is needed for safe practice"

WHAT ABOUT LACK OF HAND SKILLS?

-there is a reliance on hand skills as certified with CODA training in dental schools
-up to dental boards to decide if manikin test also
-they believe "content is comprehensive enough to cover those skills"

WHAT HAPPENS IF A STUDENT FAILS IN THE FIRST WINDOW? WHEN DO THEY RETEST?

-In next testing window which is early November

ELIGIBILITY FOR DLOSCE?

-mirrors board for part 2 national boards with Dean approval of candidates

PASS/FAIL RATE?

-"difficult exam", some will have a tough time with it
-critical exam with sound judgement needed

Final thoughts delivered- "attentive to the needs at this time", "done due diligence with the test development"

LKH 4/22/2020

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For Immediate Release

Non-Patient-Based Dental Restorative Exam Option Using New Manikin Tooth Technology Approved by ADEX

(*Linthicum Heights, MD*| ***April 3, 2020***) The American Board of Dental Examiners (ADEX) will allow candidates for dental licensure to choose a non-patient-based restorative examination option to demonstrate readiness for practice. This format utilizes the CompeDont™ DTX, a new manikin tooth technology developed by the CDCA and Acadental, Inc.

The CompeDont™ DTX is a first of its kind manufactured tooth that presents a high-fidelity opportunity for licensure candidates to diagnose and treat Class II and Class III caries. The CompeDont™ is patent pending with product development initiated by the CDCA in 2017 and was first made public last fall as part of pilot testing at 6 dental schools; University of Mississippi Medical Center School of Dentistry, University of Buffalo (SUNY), Indiana University School of Dentistry, University of Detroit Mercy School of Dentistry, Midwestern University College of Dental Medicine – Illinois, and Midwestern University College of Dental Medicine – Arizona. These schools hosted high stakes pilot examinations using the Class III lesions between September and December 2019.

When compared to that of ADEX patient-based exams, independent psychometrician analyzed pilot data showed the simulated tooth identified the same critical deficiencies in skill typically revealed by the treatment of natural teeth. "Candidates encountered realistic and variable caries unlike other simulated teeth currently available," says Dr. Guy Shampaine, CompeDont™ Development Team Leader.

CDCA Director of Examinations Dr. Ellis Hall says it is the CompeDont™'s ability to accurately represent infected, affected and sclerotic dentin that is unique. "Both examiners and students reported that the tooth mimics decay, stickiness and tug-back and can be restored as if it were a natural tooth in this way."

The dental board representatives to ADEX voted 29-1 to approve the use of the CompeDont™ for both Class II and Class III restorative procedures at a special, virtual meeting on April 2, 2020. The CompeDont™ will be permitted in place of the patient portion of the restorative examinations in the same framework and processes of the existing psychometrically valid examination as soon as possible.

The acceptance of a non-patient-based examination for licensure falls to each jurisdiction. "The CompeDont™'s new technology provides an option to many state dental boards seeking to address public health concerns in the face of the COVID-19 outbreak without reducing important existing licensure standards," says Dr. Harvey Weingarten, CDCA Chair. Based on this immediate ADEX approval, the new non-patient-based administration option will be incorporated into CDCA licensure exams for the Class of 2020 candidates. "We recognize each state will determine independently whether

they will accept this new non-patient option for restorative procedures. To help address these differences, the ADEX licensure examination reporting system will clearly identify if a Class II or Class III restoration are manikin or patient-based," reports Dr. Bill Pappas, ADEX President.

ADEX dental licensure is a five-part examination. It includes a computerized written Objective Structured Clinical Examination (OSCE) measuring clinical judgments and treatment planning decision making, and four clinical portions including an anterior restorative, a posterior restorative, endodontic and prosthodontic sections. An optional periodontal scaling examination is also available. Since 2015, two administrative pathways have existed using the identical ADEX content and criteria, traditional patient-based and Patient-Centered Curriculum Integrated Format (PC-CIF, available at participating schools).

The CDCA partnered with Acadental, Inc. for the development and production of the CompeDont™ DTX. The tooth will be made available for all ADEX examinations but will remain the intellectual, protected property of the CDCA. Based in the Kansas City metropolitan area, Acadental, Inc. currently holds at least 5 patents and distributes dental educational products worldwide. The Commission on Dental Competency Assessments, founded in 1969, is the largest nonprofit, third-party administrator of dental and dental hygiene assessments in the US. For more information about the CDCA CompeDont™, contact Stephanie Beeler, Multimedia, Communications, and Strategic Projects Leader at sbeeler@cdcaexams.org.

CDCA Typodont Evaluation Report for the ADEX Dental Hygiene Examination

May 29, 2020

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Introduction

In April 2020, the Commission on Dental Competency Assessments (CDCA) conducted a product evaluation of a simulated patient (i.e., typodont). The evaluation was designed to determine the suitability of the typodont for use in a clinical skills (i.e., psychomotor skills) assessment for dental hygiene candidates. The results of the evaluation include the summary judgements of 30 subject matter experts (SMEs) who were each provided a typodont and a web based survey for data collection on their experience and perceptions. The CDCA identified ACS Ventures, LLC (ACS) to assist with the design of the product evaluation study and then independently analyze the results. This report summarizes the methodology, results, and conclusions of the study.

Study Method

To determine the feasibility of using a typodont in the assessment of prospective dental hygienists, multiple sources of validity evidence were collected and analyzed. This evidence consisted of a review of the content and response processes, reliability, and fairness. Content and responses processes were specifically aimed at the degree to which the typodont represents actual practice and the degree to which tasks and scoring criteria remain consistent between modes. It is both pragmatic and a matter of industry expectations (AERA, APA, & NCME 2014) to evaluate the effect of adding or transitioning to a new administration mode. The use of a typodont in the assessment represents a potential, additional mode option if jurisdictions are not able to administer the current examination.

The pursuit of the validity evidence is in service to two evaluation questions: Does the proposed mode result in technical characteristics that are comparable to the current mode? Does the proposed mode yield comparable evidence to support conclusions about entry level competency?

The study consisted of 30 SMEs who served as field test participants. They completed periodontal probing before and after treatment (i.e., instrumentation), calculus detection, and calculus removal skills on the typodont. These field testers included students, dental hygiene faculty, and practitioners.

Quantitative Data Analyses and Summary

The quantitative data collected were with respect to the amount of agreement among SMEs regarding the pocket depth determined both pre- and post-treatment, and the presence and size of calculus deposits prior to scaling. These data were evaluated for the percent of interrater agreement on each of these skills and were observed to be relatively high (from 82% to 95%). This source of reliability informs readers as to the consistency of the SME judgements for each skill evaluated in this study. In addition, historical reliability data regarding probing, detection, and removal were used to check the reasonableness of the new findings. These data are presented in the following table.

Table 1 – Periodontal probing, calculus detection, and calculus removal agreement results

	Field Test	2018	2016
Perio probing – Pre-treatment (+/- 1 mm)	93%	96%	95%
Perio probing – Post-treatment (+/- 1 mm)	95%	N/A	N/A
Calculus detection – Presence and absence (S/M/L)	82%	85%-91%	86%-90%
Calculus detection – Presence and absence (M/L only)	85%	N/A	N/A
Calculus detection – Presence and absence (L only)	92%	N/A	N/A
Calculus removal	92%	91%	N/A

As shown in the table, the calculus detection analysis was performed for different combinations of deposit sizes. Small, medium, and large deposits are represented by the letters S, M, and L, respectively. The least amount of agreement was found in the calculus detection activity when all three sizes of deposits were included in the rate. This rate represents a relatively high rate of agreement and is within 4% of the historical rates of comparison. When deposits were limited to just the medium and large, or just large, the level of agreement increases. Additional discussion of deposit size is included in the next section of this report.

The periodontal probing analysis was performed as a strict interrater agreement rate using the most prevalent examiner rating (i.e., mode) as the reference criterion. For this analysis, SMEs were determined to have agreed when they agreed with each other to a tolerance of plus or minus one millimeter. This metric was chosen as an alternative to a measure of agreement with the intended pocket depth suggested by the typodont manufacturer given. In approaching the analysis in this way, we were able to replicate the current practice on the patient-based examination.

Qualitative Data Analysis and Summary

Field testers were also asked to complete a qualitative survey regarding their experience with and perceptions of the typodont. This survey consisted of three question types: dichotomous questions for which a yes or no choice must be made; a 5-response option Likert rating from strongly disagree to strongly agree; and open ended comment questions, some of which were prompted by a “No” response from questions of the first type.

The survey aimed to collect data in six categories: Calculus Detection; Calculus Removal; Tissue; Periodontal Probing; Typodont Teeth; Ultrasonic Usage. The data were analyzed by category, response type, and SME type (non-student and student). The yes or no questions were with respect to the operational aspects of the typodont and were generally answered favorably across all categories. The Likert items were designed to measure the degree to which the SMEs believed the experience was realistic. The most prevalent responses to these survey questions were “Agree” and “Not ideal, but sufficient.” Finally, the open-ended comments were coded and counted. The recurrent comments were split between favorable and unfavorable across categories expressing a neutral disposition toward the typodont.

The following highlights the qualitative survey results:

Calculus Detection

- Realistic feel of calculus deposits? – Yes (73%), No (27%)
- Realistic placement? – Yes (87%), No (13%)
- Detection similar to that of a patient? Agree (30%), Sufficient (37%), Disagree (33%)
- Respondent Comments:
    - Calculus is too smooth
    - Stiffness of the tissue limited accuracy
    - Calculus deposits difficult to detect
    - Burnished/small deposits were difficult to detect

Calculus Removal

- Deposits come off in layers? – Yes (80%), No (20%)
- Realistic using hand instruments? – Yes (77%), No (23%)

- Removal similar to that of a patient? Agree (57%), Sufficient (23%), Disagree (20%)
- Respondent Comments:
    - Tooth material came off with hand scaling
    - Calculus behaved realistically
    - Teeth became loose/fell out
    - Teeth were soft

Tissue

- Did the sulcus remain intact after scaling? – Yes (90%), No (10%)
- Could you damage the tissue while hand scaling? – Yes (60%), No (40%)
- Tissue simulates the gingiva found with a patient? Agree (33%), Sufficient (33%), Disagree (33%)
- Respondent Comments:
    - Impressed with tissue
    - Tough/rubbery tissue
    - Not realistic
    - Realistic tissue

Periodontal Probing

- Distinguish between enamel and cementum? – Yes (53%), No (47%)
- Mobility during scaling? – Yes (37%), No (63%)
- Teeth similar to that of a patient? Agree (37%), Sufficient (27%), Disagree (36%)
- Respondent Comments:
    - Tooth/teeth came out
    - Teeth are soft
    - Teeth did not move when scaled
    - Did not have gloss or sheen as expected

Typodont Teeth

- Distinguish between enamel and cementum? – Yes (53%), No (47%)
- Mobility during scaling? – Yes (37%), No (63%)
- Teeth similar to that of a patient? Agree (37%), Sufficient (27%), Disagree (36%)
- Respondent Comments:
    - Tooth/teeth came out
    - Teeth are soft
    - Teeth did not move when scaled
    - Did not have gloss or sheen as expected

Ultrasonic Usage

- Eleven SMEs in the study an ultrasonic scaler.
- Was there any negative effect on the tissue with the ultrasonic? Yes (0%), No (100%)
- Was there any damage to the tooth surface by the ultrasonic? Yes (36%), No (64%)
- Calculus removal experience was similar to a patient? Agree (55%), Sufficient (37%), Disagree (9%)
- Respondent Comments:
    - Teeth are soft
    - Realistic

Conclusions

Regarding the technical characteristics of the current mode, examiner agreement for probing, calculus detection, and calculus removal was comparable with historical rates. Regarding the degree to which the mode yields comparable evidence to support conclusions about entry level competency, the study found that small and some medium deposits were more difficult to detect and may not represent entry-level skills.

The qualitative data indicated that, with some caveats noted in ratings and comments, the typodont was realistic. Field tester responses to the survey questions were a mixture of favorable and unfavorable ratings which were significantly skewed towards favorability. Therefore, the collection of evidence supports use of this typodont in ADEX examination exercises for jurisdictions that may want to offer both a psychomotor performance examination and a fully non-patient licensure pathway. Notwithstanding this conclusion, the data also suggests that a patient-based demonstration of clinical skills remains a superior comparative option.

References

American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME) (2014). *Standards for educational and psychological testing*. Washington, D.C.: American Educational Research Association.

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DENTAL CANDIDATES:

CompeDont™ DTX RESTORATIVE EXAMINATION INFORMATION

The CompeDont™ DTX tooth, developed jointly by the CDCA and Acadental, is a typodont tooth with simulated caries that closely replicates the clinical presentation of caries, and has simulated enamel and dentin nearly identical in appearance, hardness and feel to natural tooth structure. This tooth offers the closest approximation ever seen to natural dental structures. The ADEX Restorative Examinations utilizing CompeDont™ DTX adheres to the same criteria, time allotments, and grading procedures as the ADEX Restorative Examinations as explained in the Restorative and Periodontal Procedures 2020 Manual available on our website (www.cdcaexams.org). The chart below details the protocols:

Non-Patient Utilizing CompeDont™ DTX	Patient-Based
the testing agency will provide a typodont that has simulated caries in designated areas that meet examination standards	Candidates provide a patient that meets the published examination criteria
The lesion assignments for this exam are: #8M and #30M	Candidates select the lesions they wish to treat
Radiographs of the carious lesions will be provided the day of the examination	Candidates provide radiographs. They must be diagnostic.
There will be no need for review of the health history or other patient related documentation	Candidates must submit a Patient Medical History for approval on exam day
There will be no need for the initial approval of the lesion(s) on the typodont. Once the initial paperwork (Restorative Progress Form) is approved by the CFE the candidate may begin preparation of the tooth	If the Patient Medical History is approved by a CFE, candidates must submit their lesions for approval
The time for the examination is 7 hours if the candidate is attempting 2 procedures or 4 hours if the candidate is attempting only one procedure	The time for the examination is 7 hours if the candidate is attempting 2 procedures or 4 hours if the candidate is attempting only one procedure

Candidates must follow all standard exam procedures, as found in the Candidate Manual (Perio/Restorative Candidate Manual) concerning prepping to the published "acceptable level" and requesting modifications if further treatment is indicated	Candidates must follow all standard exam procedures, as found in the Candidate Manual (Perio/Restorative Candidate Manual) concerning prepping to the published "acceptable level" and requesting modifications if further treatment is indicated
The use of a rubber dam is not required	The use of a rubber dam is required
If a modification is requested, as with the standard examination, a CFE is notified, all required papers are provided and the manikin head with the treatment typodont attached is carried by an Examiner Assistant to the desk and ultimately to the Evaluation Area. If, at a site, it is not possible to transport the manikin head, the typodont arches will be transported and mounted in a manikin head in the examination area. Modification requests are accepted or not accepted by the examiners as is normally done, and the manikin head is returned and remounted for the candidate to continue treatment	Modification requests require candidates to first notify a CFE, and then the CFE will alert an Examiner Assistant to transport the patient to the Evaluation Area. Modification Requests are either accepted or not accepted, and then the patient is returned to the candidate by an Examiner Assistant.
If the first of the two restorative procedures results in a failure, the candidate may challenge the second restorative procedure	If the first of two restorative procedures results in a failure, the candidate may NOT challenge the second restorative procedure

The forms that will be used for the Simulated Patient Restorative Exam are attached and can also be found on our website (Dental Forms): Anterior Progress Form, Posterior Progress Form, Modification Request Form, and Chairside Assistant Form (as necessary).

Developed by:

The American Board of Dental Examiners

Administered by:

The Commission on Dental Competency Assessments

ADEX DENTAL EXAM SERIES: Fixed Prosthodontics and Endodontics

2020 CANDIDATE MANUAL

Please read all pertinent manuals in detail prior to attending the examination

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See the *Registration and DSE OSCE Manual* for:

- Candidate profile creation and registration
- Online exam application process
- DSE OSCE registration process and examination information / Prometric scheduling processes
- ADEX Dental Examination Rules, Scoring, and Re-test processes

EXAMINATION AND MANUAL OVERVIEW

The CDCA administers the ADEX dental licensure examination. This manual has been designed to assist candidates with the manikin-based examination procedures and other related administrative guidelines. The examination is based on specific performance criteria as developed by the ADEX for the purpose of evaluating the candidate's clinical competency. Currently there are two testing agencies that administer the ADEX examination series. Although the content, scoring systems, and basic exam flow are uniform, each agency may have some unique administrative elements. Therefore, candidates should obtain and thoroughly read the manual published by the agency administering the examination on the date and at the site the candidate plans to attend. This manual is published by The Commission on Dental Competency Assessments (CDCA) and is specific to its administration of the ADEX examination. For information about available examination dates, examination sites, and fees, visit the CDCA website at www.cdcaexams.org.

Failing to review and master the guidelines provided by the CDCA, to the point that such failure has significant adverse impact upon a candidate's ability to efficiently and effectively take the ADEX dental examination, may result in dismissal from and subsequent failure of the examination.

Every effort has been made to ensure that this manual is accurate, comprehensive, clear, and current. In the rare instances when examination related instructions need to be updated or clarified during the examination year those changes will be communicated to the candidates either via the website, manual updates, or email. There may also be other test related material sent to candidates which will be made available through their online candidate profiles and/or at registration on the day of the exam.

All candidates who take any parts of the ADEX dental examination through the CDCA between January 1, 2020 and December 31, 2020 are responsible for reading and understanding the 2020 examination manual(s) published by the CDCA, any documented changes to the 2020 manual(s), and for reviewing and understanding all other material provided by the CDCA regarding the exams administered between January 1, 2020 and December 31, 2020. If, while reviewing any exam related materials, questions regarding administrative procedures arise, it is the candidate's responsibility to resolve those questions by contacting the CDCA office (see contact information below). Questions MUST be submitted in writing.

Prior to taking an examination through the CDCA, each candidate must review the manuals published by the CDCA as well as other material provided by the CDCA.

Please see the *Registration and DSE OSCE Manual* for step-by-step instructions on how to register for the ADEX clinical dental exam through the CDCA as well as relevant information regarding the Diagnostic Skills Examination OSCE (DSE OSCE), the computer-based portion of the ADEX Dental Examination Series.

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The ADEX Dental Examination Series:

Manikin Procedures

I. Examination Overview

- Manikin Exam Available Formats
- Manikin Exam Parts
- Endodontics and Prosthodontics Typodonts and Instruments
- Examination Schedule Guidelines
- General Manikin-based Exam Administration Flow
- Scoring Overview and Scoring Content
- Penalties

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A. Manikin Exam Available Formats

There are three basic exam formats: The Curriculum Integrated Format (CIF) is the pre-graduation format of the ADEX Dental Examination Series for dental students of record. The Curriculum Integrated Format, the Patient-Centered Curriculum Integrated Format (PC-CIF), and the Traditional Format examinations are identical in content, criteria, and scoring. The major difference between the two formats is in the sequencing of examination sections.

a. Curriculum Integrated Format (CIF): examination parts are administered over the course of an eligible dental student's D3 or D4 (or final) year. Typically, the manikin procedures are administered separately, usually months or weeks apart from the patient-based procedures.

b. Patient-Centered CIF (PC-CIF): Similar to the CIF format described above, but the PC-CIF format is more individually tailored to each student's readiness and is integrated within the framework of a student's faculty-approved, treatment-planned school clinic caseload. In this format, patients leave with a definitive restoration provided by or under the supervision of the faculty, if treatment is not completed during the examination. Candidates participating in the PC-CIF format challenge all manikin and patient procedures in their home school clinic. Candidates register for all exam parts at the same time prior to challenging the manikin procedures.

c. Traditional Format: the manikin-based and patient-based examination sections are administered in their entirety at each site over the course of two consecutive days. The Traditional Format is available several times each year. D4 (or final year) dental students as well as candidates who have already graduated from dental school are eligible for the Traditional Format.

B. Manikin Exam Parts

The Endodontics and Prosthodontics parts are performed on a manikin with a typodont in a patient treatment clinic or simulation laboratory, and they are offered on the same day, Endodontics procedures first, followed by the Prosthodontics procedures. Initially, candidates challenge both parts together, but individual parts may be re-challenged as needed.

Endodontics (administered first): Candidates have **three hours total** to complete both of the following:

- Anterior tooth: access, canal preparation, and obturation
- Posterior tooth: access preparation and canal identification

Prosthodontics (administered second): Candidates have **four hours total** to complete all of the following:

- Ceramic Crown: preparation of a maxillary incisor for an all ceramic crown
- Cast Metal Crown: preparation of a molar for a cast metal bridge abutment crown
- Porcelain-Fused-to-Metal Crown: preparation of a premolar for a porcelain-fused-to-metal bridge abutment crown

C. Endodontics and Prosthodontics Typodonts and Instruments

The CDCA provides typodonts for candidates at each testing site. Currently, the CDCA uses Acadental typodonts.

The endodontics and prosthodontics examination parts will be administered at various testing sites. Candidates may attempt the endodontics and/or prosthodontics procedures up to three (3) times. For further guidance on the timeline and failure rules, see the three (3) time-failure rule as well as the 18-month rule in the *Registration and DSE OSCE Manual*.

THE CDCA PROVIDES TYPODONTS FOR THE EXAM BUT YOU MAY PURCHASE ONE FROM THE MANUFACTURER FOR PRACTICE PRIOR TO YOUR EXAM

Specified testing sites require candidates to use the Acadental typodont model. Setup and mounting procedures of Acadental typodonts will be covered on site during registration. To order Acadental typodonts, visit http://acadental.com/magento/licensure-candidates/cdca

The **assigned teeth** for the **Endodontics** Examination at sites using **Acadental** Typodonts are:

Tooth # 8 for access, canal preparation, and obturation
Tooth # 14 for location and direct access to three canals

Note: When shaping the canal for an Acadental tooth # 8, the canal should be prepared to a size 35 to 40 file. The size and shape of the access opening should be consistent with the size and anatomy of the pulp chamber of a 21-year old patient. When obturating the canal on tooth # 8 this must be done with pink or colored gutta-percha since white or light-colored obturation material is difficult to distinguish from sealer.

Only pink or colored gutta-percha may be used for this examination.
The use of white gutta-percha is prohibited.

While warm gutta-percha or carrier-based, thermos-plasticized gutta-percha techniques are acceptable, it is highly recommended that they not be used, since they may cause damage to the plastic endodontic tooth.

The **assigned teeth** for the **Prosthodontics** Examination at sites using the **Acadental Typodonts are:**

Tooth # 9 for preparation for an all-ceramic crown
Tooth # 3 for preparation for a cast metal bridge abutment crown
Tooth # 5 for preparation for a porcelain fused to metal bridge abutment crown

Parallel Preparations and Line of Draw:
The two bridge abutment preparations must be parallel and allow a line of draw.

D. Examination Schedule Guidelines

1. Dates and Sites

Specific examination dates for a participating dental school can be found on the CDCA website. Please refer to the *Registration and General Administration Supplement* manual for the CDCA's specific policies and administrative guidelines.

The CDCA administers the endodontic and prosthodontic manikin-based examination parts at various dental schools on specified dates as determined by the dean or other official representative of the dental school and agreed upon by the CDCA.

In the event there are extenuating circumstances such as weather, acts of God, or other unforeseen circumstances which may impact or alter the schedule and administration of the examination(s), CDCA will make every attempt to contact candidates with updated information.

2. Timely Arrival

Candidates are responsible for determining their travel and time schedules to ensure they can meet all of the CDCA's time requirements. All candidates are expected to arrive at the examination site at their designated time. Failure to follow this guideline may result in failure of the examination.

Candidates will be informed in their online candidate profiles as to the date on which they are to challenge each part of the examination. Candidates should note that the manikin-based examination procedures have specific time restraints, and all procedures for each examination must be completed within the allotted time for that part. Examination schedules are not finalized until after the examination application deadline.

E. General Manikin-Based Exam Administration Flow

1. *Before the Exam: Candidate Orientation Session*

Typically held in the evening on the day preceding the first examination day at each site, a candidate orientation session is led by some of the Clinic Floor Examiners (CFEs) and/or the Chief of the exam. The time and location of the orientation session will be communicated to you by email or the site's ADEX exam coordinator (typically a faculty member at that school). The orientation session is designed to give the candidates any site-specific information that is relative to the administration of the exam, answer general administrative questions candidates may have, as well as distribute the candidate packets to each of the candidates. The candidate packets contain a variety of required materials each candidate will use during the exam-day process, including a **candidate ID badge**, **required forms**, and **ID labels** that are required for use on a variety of materials candidates submit during the examination.

In order to be granted entrance to the candidate orientation session, you must bring the following:

a. **Two** forms of identification: one ID must be a photo ID, and both IDs must have the candidate's signature. Acceptable forms include such documents as current, valid driver's license, passport, military ID, official school ID. A voter registration card (signed) or a credit card (signed) may be used as a second ID.

b. Proof of your candidate sequential number by bringing with you your registration confirmation (available in your online candidate profile). The photo **candidate ID badge** you receive at the candidate orientation session is your admission badge to the examination day. **The candidate ID badge must be worn at all times on your outermost garment during the course of the examination.**

2. *Exam Day: Sample Schedule (If taking both parts)*

Time	*Task*
6:30 am	Candidates may enter the clinic and begin initial cubicle set-up
7:15 am	Typodonts are distributed to candidates (ID badge, *Progress Form*, and candidate ID labels required to receive typodont)
7:30 am – 8:30 am	Set-up period (make putty matrices, measure Endo tooth, mount typodont/manikin head, place shroud)
8:30 am – 11:30 am	Endodontics Examination (3 Hours)
	Candidates may transition from Endo to Pros if Endo procedures are completed earlier than 11:30 am
11:30 am	Endodontics Examination ends / Candidates must transition to the Prosthodontics procedures / Prosthodontics-only candidates may enter clinic
11:30 am – 3:30 pm	Prosthodontics Examination (4 hours)
3:30 pm	Prosthodontics Examination ends
3:45 pm	All candidates must be in line to turn-in all required materials

Sample

3. *Exam Day: Candidate Flow*

Auxiliary personnel and/or laboratory technicians are not permitted to assist a candidate during the Endodontics or Prosthodontics clinical examination procedures. Violation may result in failure of these examination parts.

Prior to candidate arrival, Clinic Floor Examiners (CFEs) will arrive to the simulation laboratory no later than 6:00 am on the day of the endodontic procedure to assist in setting up. *Candidates may enter the clinic or simulation lab used for the examination at 6:30am*. Cubicle/work station assignments will be posted in a prominent location in the clinic or simulation lab being used for the exam. Upon arrival at 6:30am, candidates should locate their assigned cubicle/work station and proceed to begin set-up:

a. Arrival to Cubicle/Workstation

Remove the following materials from the white envelope you received at orientation:

- **Cubicle card**: you will only need ONE card for this examination. Either separate them or fold the cubicle card sheet in half. Write your cubicle number in the appropriate space on the cubicle card, and then tape it in a prominent place in your cubicle to identify your location
- **Candidate ID badge and plastic badge holder**: Cut the paper candidate ID badge to a size that fits the plastic badge holder. Place the ID badge in the badge holder and pin the badge on your clinic gown or the outermost garment you are wearing for the examination. Candidate ID badges MUST be clearly visible at all times during the course of the examination
- **Candidate ID labels**: full sheet of candidate ID labels
- **Progress Form**: This form will be used for both the Endodontic and Prosthodontic parts. CFEs will use it to track and document your progress. CFEs must verify at specific steps in the exam process that you received their permission to proceed to the next step. You will use the Progress Form to record the length of your anterior endodontic tooth, and you may also use the "comments" section of the Progress Form to communicate any information to the examiners that you believe may affect the evaluation of your performance. For example, if your typodont has pre-existing defects on teeth or simulated gingival tissues, you should document the nature, size, and location of the defect(s) in the "comments" section and *request that a CFE verify that you made the comments as well as the time at which you made the comments (Note: Examiners will only consider candidate comments that have been verified by a CFE on the Progress Form).* Complete the following initial tasks in order:

  i. **Fill in the cubicle number box on the upper right side of the form with YOUR cubicle number (also write on your cubicle card)**

  ii. **Fill in the typodont number box on the upper right side of the form with YOUR typodont number**

  iii. **Place one candidate ID label in the space provided (top right of the form)**

b. Mounting Manikins

Instructions will be provided regarding any necessary adjustments and mechanisms specific to the test site to affect those adjustments to create a best fit occlusion.

An examiner will check each mounting to verify that it is correct. Should an examiner encounter an issue with fashioning a proper occlusal scheme, he/she should contact the Chief immediately.

c. Set-up Period

- CFEs will circulate to loosen Endo tooth #8 retention screw (Candidates may NOT loosen screw)
- Candidates measure length of Endo tooth (incisal edge to apex) with CFE present and then **record that measurement on the *Progress Form***
- CFE re-tightens tooth in typodont and then annotates the Progress Form
- Candidates make putty matrices/reduction guides (Candidates are NOT authorized to bring pre- made reduction guides, pre-made putty matrices, pre-made impressions, overlays, clear plastic shells, models, or pre-preparations; use of gloves is not required)

ci. 8:30 am: Endodontics Treatment of Simulated Patient Begins

The Chief or a CFE will announce the beginning of the examination at 8:30am, and the candidate may perform the endodontic procedures in any order (separate isolation dam required for each procedure). CFEs will monitor the progress of all candidates and should confirm that all candidates have their manikin heads mounted, properly articulated, shrouds are properly placed, and the manikin heads are ready to undergo treatment. Once the examination has begun, the manikin will-*from that point forward*-be considered a "live" patient and candidates must observe and maintain all infection control guidelines and barrier controls. Failure to do so is a violation of examination protocol and will result in a penalty being assessed to the candidate. Repeated failure to observe appropriate infection/barrier control protocols will result in failure of the examination.

A CFE must be notified immediately in case of equipment failure; he/she will contact school maintenance personnel. The malfunction must be corrected or the candidate relocated

Candidates may NOT remove the typodont from the manikin head, loosen it, or re-tighten it after 8:30 am without a CFE present

Isolation dam clamps on the tooth undergoing treatment may loosen or damage the tooth. Clamp adjacent teeth, or use alternate methods—such as ligation—to secure the isolation dam

Only assigned teeth may be treated. If a candidate begins a procedure on the wrong tooth, he/she must notify a CFE immediately and the Endodontics exam will be stopped. Please note that the Endodontics and Prosthodontics procedures are scored independently.

If you have completed both Endodontics procedures to your satisfaction prior to the end time (11:30 am), you may request a CFE to help you either transition to the Prosthodontics procedures or grant you permission to clean up your cubicle/workstation and turn in the required materials and paperwork prior to exiting. Once you transition to the Prosthodontics procedures, you may not return to any endodontic procedure. The CFE will record your finish time for the Prosthodontics procedures on your Progress Form, which will be four (4) hours from the time you have officially started the Prosthodontics exam. The CFEs also keep a log of all finish times during the course of the exam.

If you wish to take a break after the Endodontics section and prior to beginning the Prosthodontics procedures, do so *before* requesting a CFE to officially start the Prosthodontic procedures. Otherwise, you will lose valuable time.

e. 11:30 am: All candidates must transition to Prosthodontics Procedures

- The Chief or CFE will announce the end of the Endodontics treatment, and all candidates who have not yet transitioned to the Prosthodontics exam must stop immediately, request a CFE to help them, and ask the CFE to record the appropriate entries on their Progress Form. Once the CFE has granted the candidate permission to proceed, the candidate may begin the Prosthodontics procedures in any order, as well as alternate between procedures without permission
- **Impressions**: Candidates may make impressions and pour models for the purpose of verifying preparations (ie: parallelism for the bridge preps or for an undercut on any prep). Models and impressions MUST be submitted to a CFE at the completion of the exam. All model pouring must be performed in the designated location. Candidates may not remove any examination materials from the Clinic Floor, except impressions to be poured in the laboratory, and they do not need permission to go to the laboratory

f. 3:30 pm: End of Prosthodontics Treatment Examination

- At 3:30pm, all candidates must stop working immediately and step away from their manikins
- Candidates should request a CFE to grant them permission to dismount the typodont (no more alterations of teeth may be performed)
- Once dismounted, typodonts should be cleaned with water, soap, and a brush/cotton. Rinse all soap off and then dry the typodont thoroughly with towels and an air syringe.
- Candidates *must* be in line to turn in all required materials (see list below) no later than 3:45 pm.

g. Exam Check-out

CFEs will be checking and collecting all required materials at a central location on the clinic floor. Candidates must bring the following to the check-out station:

- White envelope (received at Candidate Orientation)
- Remaining Candidate ID labels
- Two (2) cubicle cards
- Progress Form
- Candidate ID badge (NOT the badge holder; candidates should discard the badge holder)
- Any models, impressions, or reduction guides made during the examination
- Typodont and Typodont box containing: saved wing nut and bolt; tan-colored tag; bubble wrap pouch

1) The CFE at the check-out station will inspect the typodont and ask you for your sheet of candidate ID labels

2) Acadental typodonts:
   a. CFE will attach a candidate ID label to the tan-colored tag, and then attach it to the typodont
   b. CFE will attach wing nut and bolt as well, to prevent damage during shipment
   c. CFE will place the typodont in the bubble wrap pouch and put it in the typodont box along with the Progress Form.

3) Candidate will clean cubicle/workstation and exit the clinic.

F. Scoring Overview and Scoring Content

Dental Boards throughout the U.S. have worked together through ADEX to draft and refine the performance criteria for each procedure in this examination. For the majority of those criteria, gradations of competence are described across a 3-level rating scale. Those criteria appear in the manual and are the basis for the evaluation system. The three rating levels as follows:

Adheres to Criteria: The treatment is of acceptable quality, demonstrating competence in clinical judgment, knowledge and skill.

Marginally Substandard: The treatment is of marginal quality, demonstrating less than expected clinical judgment, knowledge or skill.

Critically Deficient: The treatment is of unacceptable quality, demonstrating critical areas of incompetence in clinical judgment, knowledge or skill.

*3-SUB rule: If examiners confirm 3 marginally substandard over-preparation criteria on the same procedure, then the procedure will be determined to be critically deficient and the candidate will fail that procedure. SUB criteria that are part of this rule have been highlighted in yellow on the criteria sheets beginning on page 23.

To pass the ADEX Dental Examination, you must score 75 or higher on all procedures. State statutes have set 75 as the minimum passing score and the CDCA is not permitted to round up or accept any score less than 75.

1. Section II: Endodontics Content

Endodontics Examination – 100 points

CONTENT	FORMAT
1. Access opening on a first molar 2. Access opening, canal instrumentation, obturation (tooth #8)	Performed on a manikin Time: 3 hours

Endodontics Examination Content – 100 Points

The Endodontics Examination is a manikin-based examination consisting of three procedures:

1. Access opening and identification of canals on a posterior typodont tooth (6 criteria)
2. Access opening canal instrumentation, and obturation of an anterior typodont tooth (10 criteria)

2. Section III: Fixed Prosthodontics Content

Fixed Prosthodontics Examination – 100 points

CONTENT	FORMAT
1. Preparation – PFM crown as one 3-unit bridge abutment on a bicuspid 2. Preparation – Full cast metal crown on a first molar as the other abutment for the same 3-unit bridge 3. Preparation – Ceramic crown (tooth #9)	Performed on a manikin Time: 4 hours

Fixed Prosthodontics Content – 100 Points

The Prosthodontics Examination is a manikin-based examination consisting of three procedures completed on artificial teeth:

1. Cast metal crown preparation as a posterior abutment for a 3-unit bridge (12 criteria)
2. Porcelain-fused-to-metal crown preparation as an anterior abutment for the same 3-unit bridge, plus an evaluation of the line of draw for the bridge abutment preparations (12 criteria)
3. All-ceramic crown preparation on an anterior central incisor (12 criteria)

G. Penalties

The integrity of the examination process depends on fairness, accuracy, and consistency. Penalties are assessed proportionally for violations of examination standards for certain procedural errors as described below:

- Any of the following may result in a deduction of points from the score of the entire examination procedure or dismissal from the examination:
  - Improper/incomplete record keeping
  - Improper treatment selection
  - Improper/inadequate isolation
  - Improper retraction of simulated facial tissue
  - Removing or dismantling the teeth, typodont, or manikin without authorization from a CFE
  - Violation of universal precautions, infection control or disease barrier technique or failure to dispose of potentially infectious materials and clean the operatory after individual examination sections
  - Poor patient management and/or disregard for simulated patient welfare or comfort
  - Improper operator/patient/manikin position (The manikin must be mounted and maintained in a physiologically acceptable operating position while performing the Fixed Endodontics and Prosthodontics Clinical Examination procedures. The facial shroud must be maintained in the same position as the normal facial tissue)
  - Unprofessional demeanor: unkempt, unclean or unprofessional appearance; inconsiderate or uncooperative behavior with other candidates, examiners, or any member of the exam team
- The following will result in the loss of all points for an individual examination:
  - Performing treatment procedures other than those assigned
  - Performing procedures outside the authorized examination clinic area
  - Failure to complete a finished preparation.
  - Violation of examination standards, rules or guidelines (treatment may not be initiated prior to the established starting time, and treatment *must* be completed within the allotted time for each procedure)
  - Use of prohibited electronic devices in the designated examination area during the exam (ie: cell phones, pagers, computers, cameras, smart watches, recording devices, etc.)
  - Treatment of teeth other than those approved or assigned by examiners (once a procedure has been started, the procedure must be carried to completion on the assigned tooth/teeth with no substitutions permitted; if a candidate discovers that the wrong tooth has been prepared, he/she must immediately contact the CFE, and whichever procedure is in progress will be stopped)
  - Critical lack of clinical judgement
  - Non-compliance with anonymity requirements

This listing is not exhaustive, and penalties may be applied for errors not specifically listed, since some procedures will be classified as unsatisfactory for other reasons or for a ***combination*** of several deficiencies.

The ADEX Dental Examination Series:

Manikin Procedures

II. Standards of Conduct and Infection Control

- Standards of Conduct
- Infection Control

CDCA
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ASSESSMENTS

A. Standards of Conduct

The ADEX examination strives to evaluate the candidate's clinical judgment and skills in a fair manner. In addition, conduct, decorum, and professional demeanor are evaluated. Professional misconduct is a most serious violation of examination guidelines. Substantiated evidence of professional misconduct during the course of the examination will result in automatic failure of the entire examination series. In addition, there will be no refund of examination fees and the candidate may not be allowed to re-apply for the ADEX exam for a period of one year from the time of the infraction.

All candidates are required to adhere to the rules, regulations and standards of conduct for the ADEX Dental Examination Series. Only the candidate manual, or portions thereof, are permitted in the clinic area. No other reference material is allowed. Candidate notes written in the manual are acceptable. Penalties may be assessed for violation of examination standards and/or for certain procedural errors, as defined and further described below:

1. **Unethical personal/professional conduct:** Falsification or intentional misrepresentation of registration requirements, dishonesty, collusion, receiving unauthorized assistance, misappropriation of equipment (theft), alteration of examination records, or a candidate's failure to follow the instructions of the chief examiner or CFEs will automatically result in failure of all five examination sections. All candidates are expected to behave in an ethical and proper manner. Manikins (acting as substitute patients) shall be treated with proper concern for their safety and comfort. Improper behavior is cause for dismissal from the examination at the discretion of the chief examiner and will result in failure of the examination. Additionally, the candidate shall be denied re-examination through any testing agency who administers the ADEX dental licensure exam for one full year from the time of the infraction.
2. **Termination of the examinations:** The CDCA reserves the right to delay or terminate the exam at any time if the candidate or examiners are threatened in any manner or other interfering events occur that are beyond the CDCA's control.
3. **Completion of the examinations:** Examination procedures performed outside the assigned time will be considered incomplete, and the candidate will fail the examination part.
4. **Misappropriation (theft) and/or damage of equipment:** No equipment, instruments, or materials shall be removed from the examination site without written permission of the owner. Willful or careless damage of dental equipment, typodonts, manikins or shrouds may result in failure. All resulting repair or replacement costs will be charged to the candidate and must be paid to the host site before the candidate's examination results will be released.
5. **Assigned procedures:** Only the treatment and/or procedures assigned may be performed. Performing other treatment or procedures may result in failure of the examination.
6. **Electronic equipment:** The use of any electronic equipment is prohibited on the clinic floor by candidates, auxiliaries, or patients during the examination. Any such use will be considered unprofessional conduct and may result in dismissal from the examination. The use of electronic recording devices or cameras by the candidate, an auxiliary, or a patient during any part of the examination is a violation of examination guidelines and may result in failure of the entire ADEX Dental Examination Series. However, intra-oral photographs may be taken by authorized examiners or school personnel during the course of the examination for the purpose of future examiner standardization and calibration.

B. Infection Control Requirements

Although this is a simulated patient examination, all candidates must comply with and follow the current recommended infection control procedures as published by the Centers for Disease Control and Prevention once the examination treatment time officially begins (8:30 am). Infection control procedure compliance begins with the initial set-up of the unit, continues throughout the Endodontics and Fixed Prosthodontics clinical examination procedures, and includes the final clean-up of the operatory. It is the candidate's responsibility to fully comply with these procedures, as failure to do so will result in a loss of points, and any violation that could lead to direct patient harm will result in failure of the examination.

ONE EXCEPTION: candidates are not required to maintain protective eyewear on the manikin during manikin procedures. Infection control will be monitored by the CFEs. The Endodontics and Prosthodontics procedures are considered to be on the same patient, so it is not necessary to re-sanitize the operatory or re-sterilize instruments between these procedures.

As much as is possible, dental professionals must help prevent the spread of infectious diseases. Because many infectious patients are asymptomatic, all patients must be treated as if they are, in fact, contagious. The use of barrier techniques, disposables whenever possible, and proper disinfection and sterilization procedures are essential. Candidates must adhere to the following infection control guidelines:

1. Barrier protection

- Gloves must be worn while setting up or performing any intra-oral procedures and when cleaning up after any treatment; if rips or tears occur, don new gloves; do not wear gloves outside the operatory
- Wash and dry hands between procedures and whenever gloves are changed; do not wear hand jewelry that can tear or puncture gloves
- Wear clean, long-sleeved, closed neck uniforms, gowns, or laboratory coats, and change them if they become visibly soiled; remove gowns or laboratory coats before leaving the clinic area at any point; wear facemasks and protective eyewear during all procedures in which splashing of any body fluids could occur during actual patient care; discard masks after each patient (or sooner if the masks become damp or soiled)
- Do not wear sandals or open-toed shoes
- Cover surfaces that may become contaminated with impervious-backed paper, aluminum foil or plastic wrap; remove these coverings (while gloved), discard them, and replace them between procedures (after removing gloves)

2. Sterilization and Disinfection

- **Instruments that become contaminated must be placed in an appropriate receptacle and identified as contaminated.**
- Instruments do not need to be sterilized for this simulated examination but could be provided in an equivalent sterilization bag. However, once the examination has begun, all CDC infection control guidelines must be followed.
- If not barrier wrapped, surfaces and counter tops must be pre-cleaned and disinfected with a site-approved tuberculocidal hospital-level disinfectant

- Handpieces, prophy angles, and air/water syringes must be sterilized before and after use or properly disposed of after use
- Used sharps are to be placed in a spill-proof, puncture- resistant container; needles are to be recapped with a one- handed method or with special devices designed to prevent needle-stick injuries and disposed of properly
- All waste and disposable items must be considered potentially infectious and shall be disposed of in accordance with federal, state, and local regulations

The ADEX Dental Examination Series:
Manikin Procedures

III. Examination Content

- Endodontics Examination Procedures
- Prosthodontics Examination Procedures
- Anterior Endodontic Preparation
- Posterior Endodontic Preparation
- Porcelain Fused to Metal Crown Preparation (PFM Crown)
- Cast Metal Crown
- Ceramic Crown

CDCA
THE COMMISSION ON
DENTAL COMPETENCY
ASSESSMENTS

A. Endodontics Examination Procedures

During the Endodontics Examination, each candidate will perform:

- An access opening on a posterior tooth (#14). Candidates must achieve direct access to all three canals.

- An access opening, canal instrumentation and obturation on an anterior tooth (#8). Tooth #8 is considered to have a normal size pulp chamber for a 21-year old. The size, shape, and extent of the prepared access opening should reflect such anatomy and will be graded accordingly. Canal instrumentation to a minimum size equivalent with a 35-40 file on tooth #8 will be required prior to obturation.

1. Important Notes About the Endodontics Examination

Radiographs: Since the tooth length is directly measured prior to the procedure, no radiographs are utilized before or after treatment.

Isolation dam: A separate isolation dam is required for each endodontic procedure, and the dam must be placed prior to beginning access preparation. Using separate isolation dams most closely simulates the approved clinical protocols in that it would reduce the potential of cross contamination between the two teeth and ease the radiographs taking process on an actual patient. **An isolation dam clamp should not be placed on the teeth on which the endodontic procedures are performed, as doing so may cause the crown to separate from the** root. Clamping of adjacent teeth or ligation is acceptable. All treatment must be done with the dam in place.

Instruments: Other than the instruments and materials provided by the testing site, the candidates are responsible for providing the instruments, files, and materials of their choice. Rotary instruments are acceptable.

Crown Fractures: If the anterior endodontic tooth crown fractures during filling, contact a CFE immediately.

Reference point: The cemento-enamel junction (CEJ) on the facial surface should be used as the reference point to determine the fill depth in the pulp chamber.

Filling material: No temporary filling material, cotton pellet or restorative material should be placed in the pulp chamber.

Marking Teeth: Teeth may be marked on the typodonts prior to treatment as a precaution against preparing the wrong tooth. However, they may only be marked *after* the typodont has been mounted, then approved by a CFE, and the treatment-time portion of the examination has begun. The marking must be done intra-orally and must follow CDC guidelines (barrier-wrapped writing instrument). Teeth may be marked prior to placing the isolation dam.

Gutta-Percha: Only pink or colored gutta-percha should be used for the examination. The use of white gutta-percha is strongly discouraged. While warm gutta-percha or carrier-based, thermo-plasticized gutta-percha techniques are acceptable, it is highly recommended they not be used since they may cause damage to the plastic endodontic tooth.

2. Summary of Endodontics Start:

Between 7:30 – 8:30 am, CFEs will oversee the setup of typodonts and manikin heads. By 8:30 am candidates must have in their possession all necessary instruments and materials to begin the Endodontics examination. Candidates should ensure that:

a. The tooth for the endodontic fill has been measured and secured in the typodont
b. The manikin head is properly assembled; and
c. Any defective equipment or materials have been identified and corrected or replaced. Candidates may NOT begin the endodontics examination until instructed by the CFEs.

Upon completing the endodontics procedures, candidates should request a Clinic Floor Examiner (CFE) who will confirm the above by entering the appropriate information on the Progress Form and, if you are ready to begin, will provide a start time for the Prosthodontic Examination.

B. Prosthodontics Examination Procedures

During the Prosthodontics Examination, each candidate will perform:

- Preparation for a PFM crown as one 3-unit bridge abutment (#5)
- Preparation for a full cast crown (#3) as the other abutment for the same 3-unit bridge – both preps must be parallel
- Preparation for a ceramic crown (#9)

1. Important Notes about the Prosthodontics Examination

Air/Water spray: Water spray is not recommended. However, if water spray is utilized, a mechanism to collect and remove the water must be in place.

Parallel preparation and line of draw: The two bridge abutment preparations must be parallel and allow a line of draw.

Patient simulation: The correct patient/operator position must be maintained while operating. Throughout the manikin procedures, the treatment process will be observed by CFEs and evaluated as if the manikin were a patient. Manikins are not required to wear protective eyewear but are subject to the same treatment standards as a patient. The facial shroud may not be displaced other than with those retracting methods that would be reasonable for a patient's facial tissue.

Security requirements: No written materials may be in the operating area other than a copy of the candidate manual or parts thereof, notes written on these copies, and pertinent examination forms.

Prohibited materials: Impressions, registration, overlays, pre-made putty matrices, clear plastic shells, models, extra teeth, or pre-preparations are not permitted to be brought to the examination site**. Failure to follow these requirements will result in confiscation of the materials as well as dismissal from and failure of the examination.**

Isolation dam: No isolation dam is required for the crown preparations.

Fractures: If the crown fractures any time before treatment is complete, contact a CFE immediately.

Margins: If the simulated gingival margin is recessed below the CEJ, prepare the margins to within 0.5 mm of the supra-gingival CEJ. The lingual margin for the porcelain-fused-to-metal crown should be prepared for a metal margin, 0.5 mm.

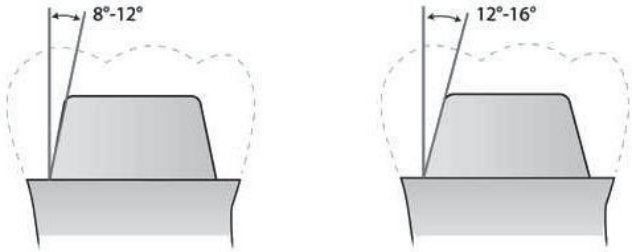
The lingual margin on the porcelain-fused-to-metal crown preparation should be prepared to receive a metal margin. The transition from the facial shoulder to the lingual margin should begin to occur at the interproximal-buccal line angles.

Occlusal reduction: The tooth for the PFM crown should be prepared for a porcelain occlusal surface with an optimal occlusal reduction of 2 mm. For the full cast metal crown preparation, the occlusal reduction is optimally 1.5 mm.

Equilibration prohibited: No equilibration is permitted on the typodont.

Crown Preparation Reduction Guide (putty matrix): putty matrices or reduction guides must be fabricated during the setup time or (using full infection control procedures) once the Prosthodontic Exam has begun. Two putty matrices are to be fabricated for the ceramic crown and two for the combination of the cast metal crown and PFM preps. One of each of the sets of putty matrices is to be sectioned mesio-distally and one facio-lingually over each tooth to be prepared. This may be done without the use of gloves prior to typodont mounting. Other impressions may be taken during the exam using the CDC infection control procedures. The reduction guides or putty matrices must be placed into the typodont box with the typodont at the end of the examination. All other impressions, casts, or models must also be turned in.

Taper: To taper is defined as to gradually become narrower in one direction. For the purposes of this examination the requirements for tapering are illustrated below:



Adheres to Criteria Marginally Substandard

Taper greater than 16 Degrees is considered Critically Deficient

2. Prosthodontics exam flow

Before the start of the examination, candidates must have in their possession all necessary instruments and materials to begin the prosthodontics examination.

At 11:30 am, the fixed-prosthodontics treatment begins for candidates who are challenging both the Endodontics and Prosthodontics parts during the exam day. There is no extension of time due to starting treatment after 11:30 am for these candidates and they **MUST** complete the prosthodontics examination by 3:30 pm. Candidates taking only the Prosthodontic examination may start as early as 8:30 am but will still have just 4 hours to complete the examination.

When the candidate has finished the prosthodontic portion of the examination, the candidate must first obtain permission from the Clinic Floor Examiner (CFE) to dismantle the typodont. A CFE will come to the candidate's clinic area, oversee the dismantling of the typodont, and assist the candidate in submitting the typodonts at the designated check-out station.

When the candidate has finished all procedures, the candidate should request a Clinic Floor Examiner (CFE) who will oversee the dismantling of the typodont and assist the candidate in submitting the carrier trays and typodonts at the check-out station.

ANTERIOR ENDODONTIC PROCEDURE

ADEX 2020

CRITICAL ERRORS		
Wrong tooth/surface treated	No	Yes
The crown of the tooth has been reduced	No	Yes
Any part of the tooth is fractured during instrumentation or obturation	No	Yes
Any part of the tooth is perforated	No	Yes
Procedure not challenged	No	Yes

ACC = Adheres to Criteria SUB = Marginally Substandard DEF = Critical Deficiency

ACCESS OPENING	
Placement	
ACC	Placement of the access opening is on the lingual surface directly over the pulp chamber and allows for pulp horns to be fully removed and complete debridement of the pulp chamber and straight-line access to the root canal system.
DEF	Placement of the access opening is NOT over the pulp chamber and/or does NOT allow complete debridement of the pulp chamber or access to the root canal system.
Size	
ACC	A. The incisal aspect of the access opening is ≥ 2.0 mm from the incisal edge which provides for a fully supported incisal edge. B. The cervical aspect of the access opening is ≥ 3.0 mm from the lingual CEJ which provides for a fully supported cingulum. C. The widest portion of the preparation mesio-distally is ≤ ½ of the lingual surface which provides for fully supported marginal ridges (approximately 1.0 mm). D. Size of the access opening allows for complete removal of pulp horns.
DEF	A. The incisal aspect of the access opening is < 2.0 mm from the incisal edge which compromises the incisal edge. B. The cervical aspect of the opening is < 3.0 mm from the lingual CEJ which compromises the cingulum. C. The preparation compromises the mesial and/or distal marginal ridge(s) (≤ 1.0 mm). D. The size of the access opening does NOT allow for removal of pulp horns.
Internal Form	
ACC	From the lingual surface to the cervical portion, the internal form tapers to the canal opening with slight ledges.
DEF	Internal form exhibits excessive gouges, which compromise the integrity of the tooth.
CANAL INSTRUMENTATION	
Cervical Portion	
ACC	Canal is shaped to a continuous taper to allow adequate debridement and obturation and the cervical portion of the canal is of appropriate location and size to allow access to the apical root canal system.
DEF	Cervical portion of the canal is grossly over-prepared affecting the integrity of the tooth structure.
Mid-Root Portion	
ACC	Mid-root portion of the canal blends smoothly with the cervical portion without ledges or shoulders.
DEF	Mid-root portion of the canal has significant instrumentation irregularities that will compromise obturation.
Apical Portion	
ACC	Apical portion of the canal is prepared to the anatomical apex of the tooth or ≤ 3.0 mm short of the anatomical apex.
DEF	A. Apical portion of the canal is over-prepared beyond the anatomical apex. B. Apical portion of the canal is transported to the extent that the apical portion of the canal is not instrumented. C. Apical portion is under-prepared > 3.0 mm short of the anatomical apex.

ROOT CANAL OBTURATION	
Overfill/Underfill	
ACC	Root canal is obturated with gutta percha at the anatomical apex or ≤ 2.0 mm short of the root apex.
DEF	Root canal is obturated with gutta percha > 2.0 mm short of the anatomical apex or beyond the anatomical apex.
Voids in Gutta Percha	
ACC	Apical third of the obturation in the root canal is dense and without voids.
DEF	A. There are significant voids throughout the obturation of the root canal. B. There is no gutta percha present in the root canal. C. A material other than gutta percha was used to obturate the canal.
Filled above/below CEJ	
ACC	A. Gutta percha in the root canal is ≤ 3.0 mm apical to the CEJ when measured from the facial or gutta percha B. Gutta percha and/or sealer is/are evident in the pulp chamber extending ≤ 2.0 mm coronal to the CEJ when measured from the facial.
DEF	A. Gutta percha in the root canal is > 3.0 mm apical to the CEJ when measured from the facial. B. Gutta percha and/or sealer is/are evident in the pulp chamber extending > 2.0 mm coronal to the CEJ when measured from the facial. C. There is restorative material present in the pulp chamber.
Separated File	
ACC	File is not separated; or, file is separated in the root canal but does not affect obturation of the root canal.
DEF	A file is separated in the root canal and either prevents the obturation or allows obturation at a critically deficient level.

POSTERIOR ENDODONTIC PROCEDURE

ADEX 2020

CRITICAL ERRORS		
Wrong Tooth/surface treated	No	Yes
The crown of the tooth has been reduced	No	Yes
Any part of the tooth is fractured during instrumentation or obturation	No	Yes
Any part of the tooth is perforated	No	Yes
Procedure not challenged	No	Yes

ACC = Adheres to Criteria SUB = Marginally Substandard DEF = Critical Deficiency

ACCESS OPENING	
Placement	
ACC	Placement of the access opening is over the pulp chamber allowing for debridement of the pulp chamber and straight-line access to the three root canals located in the tooth.
DEF	Placement of the access opening is not over the pulp chamber and/or does not allow complete debridement of the pulp chamber or access to the 3 root canals.
Size	
ACC	Access opening is in the mesial triangular pit and central fossa of the tooth and the following are true: A. The mesial extent of the access preparation is ≥ 2.0 mm from the mesial marginal ridge. B. The buccal extent of the access preparation is ≥ 1.0 mm from the line bisecting the mesio-buccal and disto-buccal cusp tips. C. The distal extent of the access opening is ≥ 1.0 mm mesial to the distal oblique groove. D. The palatal extent of the access preparation is ≥ 1.0 mm from the mesiolingual cusp tip.
DEF	A. The mesial extent of the access preparation is < 2.0 mm distal to the mesial marginal ridge. B. The buccal extent of the access preparation is < 1.0 mm from the line bisecting the mesio-buccal and disto-buccal cusp tips. C. The distal extent of the access preparation is < 1.0 mm mesial to the distal oblique groove. D. The palatal extent of the access preparation is < 1.0 mm from the mesio-lingual cusp tip access opening. E. The access size is too small: <2.5 mm at its widest mesio-distally and/or < 2.5 mm at its widest bucco-lingually.
Depth	
ACC	The depth of the access preparation removes the entire roof of the pulp chamber.
DEF	A. The pulpal floor at the center of the floor is > 10.0 mm deep when measured from the buccal cavosurface margin of the access preparation. B. The depth of the access preparation does not remove the roof of the pulp chamber to the extent that all pulp tissue can be removed.
Internal Form	
ACC	The internal form of the access preparation leaves ≥ 1.0 mm of supported lateral tooth structure at any point of the preparation and tapers to the canal orifices with no or slight gouges.
DEF	The internal form of the access preparation leaves < 1.0 mm of lateral supported tooth structure at any point of the preparation and/or tapers to the canal orifices with gross ledges that will inhibit access to the root canal orifices.

TREATMENT MANAGEMENT	
Condition of Adjacent Tooth/Teeth	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
DEF	There is gross damage to adjacent tooth/teeth, requiring a restoration.
Condition of Surrounding Tissue	
ACC	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

Note: those SUBs that are highlighted are part of the 3-SUB rule

PFM CROWN PREPARATION

ADEX 2020

CRITICAL ERRORS		
Wrong tooth/surface treated	No	Yes
Procedure not challenged	No	Yes

ACC = Adheres to Criteria SUB = Marginally Substandard DEF = Critical Deficiency

CERVICAL MARGIN AND DRAW	
Margin/Extension	
ACC	The cervical margin is ≤ 0.5 mm below to ≤ 1.5 mm above the simulated free gingival margin.
SUB	A. The cervical margin is over-extended > 0.5 mm below the simulated free gingival margin.
DEF	A. The cervical margin is over-extended by > 0.5 mm below the simulated free gingival margin, causing visual damage to the typodont. B. The cervical margin is under-extended by > 1.5 mm above the simulated free gingival margin.
Margin/Definition	
ACC	The cervical margin is continuous but may be slightly rough and may lack some definition. The cervical bevel, when used, is ≤ 1.5 mm, and/or may lack some definition.
SUB	A. The cervical bevel, when used, is > 1.5 mm but ≤ 2.0 mm.
DEF	A. The cervical bevel, when used, is > 2.0 mm. B. The cervical margin has no continuity or definition. C. The cervical margin is cupped or J-shaped.
Margin/Facial Width	
ACC	The facial shoulder is > 0.5 mm but ≤ 2.0 mm in width.
SUB	A. The facial shoulder is reduced > 2.0 mm but ≤ 2.5 mm.
DEF	A. The facial shoulder is > 2.5 mm in width. B. The facial shoulder is < 0.5 mm in width.
Margin/Lingual Width	
ACC	The margin width varies slightly from visually & explorer detectable to ≤ 1.0 mm.
SUB	A. The lingual margin is > 1.0 mm but ≤ 2.0 mm.
DEF	A. The lingual margin is > 2.0 mm. B. The lingual margin is feathered and/or is not explorer detectable.
Line of Draw	
ACC	The path of insertion/line of draw deviates < 20° from the long axis of the tooth.
SUB	The path of insertion/line of draw deviates 20° to < 30° from the long axis of the tooth.
DEF	The path of insertion/line of draw deviates ≥ 30° from the long axis of the tooth.

WALLS, TAPER, AND SHOULDER	
Axial Tissue Removal	
ACC	The axial tissue removal is ≥ 0.5 mm but ≤ 2.0 mm.
SUB	A. The axial tissue removal is > 2.0 mm but ≤ 2.5 mm.
DEF	A. The axial tissue removal is > 2.5 mm. B. The axial tissue removal is < 0.5 mm.
Axial Walls Smoothness/Undercut	
ACC	The walls may be slightly rough and may lack some definition.
DEF	There is an undercut, which, when blocked out, would compromise margin width criteria and/or is > 0.5 mm deep.
Taper	
ACC	Taper is present, from nearly parallel to ≤ 12° per wall.
SUB	There is excessive taper that is > 12° and ≤ 16° per wall.
DEF	Taper is grossly over-reduced > 16° per wall.
Occlusal Reduction	
ACC	Occlusal reduction is ≥ 1.0 mm but ≤ 2.5 mm.
SUB	A. Occlusal reduction is > 2.5 mm but ≤ 3.0 mm.
DEF	A. Occlusal reduction is > 3.0 mm. B. Occlusal reduction is < 1.0 mm.
Internal Line Angles	
ACC	Internal line angles and cusp tip areas may not be completely rounded and may show a slight tendency of being sharp.
DEF	The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.
TREATMENT MANAGEMENT	
Condition of Adjacent/Opposing Teeth	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	A. Damage to adjacent tooth/teeth requires recontouring that changes the shape and/or position of the contact. B. Opposing hard tissue shows minimal evidence of damage and/or alteration inconsistent with the procedure.
DEF	A. There is gross damage to adjacent tooth/teeth requiring a restoration. B. There is evidence of gross damage and/or alteration to opposing hard tissue inconsistent with the procedure.
Condition of Surrounding Tissue	
ACC	There may be slight damage to simulated gingiva and/or typodont consistent with the procedure.
SUB	There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

Note: those SUBs that are highlighted are part of the 3-SUB rule

CAST METAL CROWN PREPARATION

ADEX 2020

CRITICAL ERRORS		
Wrong tooth/surface treated	No	Yes
Procedure not challenged	No	Yes

ACC = Adheres to Criteria SUB = Marginally Substandard DEF = Critical Deficiency

CERVICAL MARGIN AND DRAW	
Margin/Extension	
ACC	The cervical margin is at the level of or ≤ 1.5 mm occlusal to the simulated free gingival margin.
SUB	A. The cervical margin is over-extended > 0.5 mm below crest of the simulated free gingival margin.
DEF	A. The cervical margin is over-extended > 0.5 mm below the crest of the simulated free gingival margin and causes visual damage to the typodont. B. The cervical margin is under-extended > 1.5 mm above the simulated free gingival margin.
Margin/Definition/Bevel	
ACC	The cervical margin is continuous but may be slightly rough and/or may lack some definition. The cervical bevel, when used, is ≤ 1.5 mm and/or may lack some definition.
SUB	A. The cervical bevel, when used, is > 1.5 mm but ≤ 2.0 mm. B. The cervical bevel, when used, has very poor definition.
DEF	A. The cervical bevel, when used, is > 2.0 mm in length. B. The cervical margin has no continuity and/or definition. C. The cervical margin is cupped or J-shaped.
Margin/Width	
ACC	The margin varies slightly in width from visually and explorer detectable to ≤ 1.0 mm.
SUB	The margin width is > 1.0 mm but ≤ 2.0 mm.
DEF	A. The margin width is > 2.0 mm. B. The margin is not detectable and/or is feathered.
Line of Draw	
ACC	The path of insertion/line of draw deviates < 20° from the long axis of the tooth.
SUB	The path of insertion/line of draw deviates 20° to < 30° from the long axis of the tooth.
DEF	The path of insertion/line of draw deviates ≥ 30° from the long axis of the tooth.
WALLS, TAPER, AND MARGIN	
Axial Tissue Removal	
ACC	The axial tissue removal is > 0.5 mm but ≤ 2.0 mm.
SUB	A. The axial tissue removal is > 2.0 mm but ≤ 2.5 mm.
DEF	A. The axial tissue removal is > 2.5 mm. B. The axial tissue removal is < 0.5 mm.
Axial Walls Smoothness/Undercut	
ACC	The walls may be slightly rough and may lack some definition.
DEF	There is an undercut, which, when blocked out, would compromise margin width criteria and/or is > 0.5 mm deep.

CAST METAL CROWN PREPARATION (CONTINUED)

Taper	
ACC	Taper is present, from nearly parallel to ≤ 12°.
SUB	There is excessive taper that is > 12° or ≤ 16°.
DEF	The taper is grossly over-reduced > 16° per wall.
Occlusal Reduction	
ACC	Occlusal reduction is ≥ 1.0 mm but ≤ 2.0 mm.
SUB	A. Occlusal reduction is > 2.0 mm but ≤ 2.5 mm.
DEF	A. Occlusal reduction is > 2.5 mm. B. Occlusal reduction is < 1.0 mm.
Internal Line Angles	
ACC	Internal line angles and cusp tip areas may not be completely rounded and may show a slight tendency of being sharp.
DEF	Internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.
BRIDGE FACTOR	
Path of Insertion/Line of Draw	
ACC	The line of draw or path of insertion is direct or may require altering the path of insertion from a direct vertical axis to allow full seating.
DEF	No line of draw or path of insertion exists through any plane of rotation without the removal of additional tooth structure in the apical ⅔ of either/both of the preparations.
TREATMENT MANAGEMENT	
Condition of Adjacent/Opposing Teeth	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	A. Damage to adjacent tooth/teeth requires recontouring that changes the shape and/or position of the contact. B. Opposing hard tissue shows minimal evidence of damage and/or alteration inconsistent with the procedure.
DEF	A. There is gross damage to adjacent tooth/teeth, requiring a restoration. B. There is evidence of gross damage and/or alteration to opposing hard tissue inconsistent with the procedure.
Condition of Surrounding Tissue	
ACC	There may be slight damage to simulated gingiva and/or typodont consistent with the procedure.
SUB	There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

CERAMIC CROWN PREPARATION

ADEX 2020

CRITICAL ERRORS		
Wrong tooth/surface treated	No	Yes
Procedure not challenged	No	Yes

ACC = Adheres to Criteria SUB = Marginally Substandard DEF = Critical Deficiency

CERVICAL MARGIN AND DRAW	
Margin/Extension	
ACC	The cervical margin is ≤ 0.5 mm below the simulated free gingival margin to ≤ 1.5 mm incisal to the simulated free gingival margin.
SUB	A. The cervical margin is over-extended > 0.5 mm below the crest of the simulated free gingival margin.
DEF	A. The cervical margin is over-extended > 0.5 mm below the simulated free gingival margin, causing visual damage to the typodont. B. The cervical margin is under-extended by > 1.5 mm above the simulated free gingival margin.
Margin/Definition/Unbeveled	
ACC	The cervical margin is continuous but may be slightly rough and may lack some definition.
DEF	A. The cervical margin has no continuity and/or definition. B. The margin is beveled. C. The margin is cupped or J-shaped.
Margin/Cervical Width	
ACC	The cervical margin width is ≥ 0.5 mm but ≤ 1.5 mm in width.
SUB	A. The cervical margin width is > 1.5 mm but ≤ 2.0 mm.
DEF	A. The cervical margin width is > 2.0 mm in width. B. The cervical margin width is < 0.5 mm.
Line of Draw	
ACC	The path of insertion/line of draw deviates < 20° from the long axis of the tooth.
SUB	The path of insertion/line of draw deviates 20° to < 30° from the long axis of the tooth.
DEF	The path of insertion/line of draw deviates ≥ 30° from the long axis of the tooth.
WALLS, TAPER, AND MARGIN	
Axial/Lingual Tissue Reduction	
ACC	The axial/lingual tissue reduction is ≥ 1.0 mm but ≤ 2.0 mm.
SUB	A. The axial/lingual tissue reduction is > 2.0 mm but ≤ 2.5 mm.
DEF	A. The axial/lingual tissue reduction is > 2.5 mm. B. The axial/lingual tissue reduction is < 1.0 mm.
Axial Walls Smoothness/Undercut	
ACC	The walls may be slightly rough and may lack some definition.
DEF	There is an undercut, which, when blocked out, would compromise margin width criteria and/or is > 0.5 mm deep.

Taper	
ACC	Taper is present, from nearly parallel to ≤ 12° per wall.
SUB	There is excessive taper that is > 12° but ≤ 16° per wall.
DEF	The taper is grossly over-reduced > 16° per wall.
Incisal Reduction	
ACC	The incisal reduction is ≥ 1.0 mm but ≤ 3.0 mm.
SUB	The incisal reduction is > 3.0 mm but ≤ 3.5 mm.
DEF	A. The incisal reduction is > 3.5 mm. B. The incisal reduction is < 1.0 mm.
External/Internal Line Angles	
ACC	External and/or internal line angles may be rounded but irregular.
DEF	The external and/or internal line angles are excessively sharp with no evidence of rounding.
Lingual Wall Height	
ACC	The lingual wall height is ≥ 1.0 mm.
DEF	The lingual wall height is < 1.0 mm.
TREATMENT MANAGEMENT	
Condition of Adjacent/Opposing Teeth	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	A. Damage to adjacent tooth/teeth requires recontouring that changes the shape and/or position of the contact. B. Opposing hard tissue shows minimal evidence of damage and/or alteration inconsistent with the procedure.
DEF	A. There is gross damage to adjacent tooth/teeth, requiring a restoration. B. There is evidence of gross damage and/or alteration to opposing hard tissue inconsistent with the procedure.
Condition of Surrounding Tissue	
ACC	There may be slight damage to the simulated gingiva and/or typodont consistent with the procedure.
SUB	There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

The ADEX Dental Examination Series:
Manikin Procedures

IV. Examination Forms

- Progress Form

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A. Progress Form

Progress Forms are utilized to track the candidate's progress through each procedure, document treatment provided, collect examiner signatures for all completed portions of the examination, and provide appropriate progress notes from the candidate to examiners during the course of treatment.

Candidates will be provided with identification labels to place on each procedure's Progress Form, as indicated on the form.

The Endodontic and Prosthodontic Examination Progress Form will be collected by the Clinic Floor Examiners once the candidate has completed all procedures for which he/she was registered.

General exam registration forms and registration procedures may be found in the *Registration and DSE OSCE Manual*.

ADEX MANIKIN EXAM PROGRESS FORM

*ENTIRE FORM MUST BE COMPLETED IN INK

Candidate Sequential:_____
PLACE ID LABEL HERE
Test Site:_____

Cubicle #: ☐

Typodont #: ☐☐☐

ENDODONTICS CLINICAL EXAMINATION

CFE or Examiner #

☐☐☐☐☐ Anterior Endodontic tooth #8 measured/recorded — LENGTH: _____

☐☐☐☐☐ Typodont mounting approved

☐☐☐☐☐ Anterior and Posterior Endodontic teeth completed

CANDIDATE'S NOTES & COMMENTS TO EXAMINERS:
Candidate: number each comment
CFE: place your examiner number, initials, and time after each comment

PROSTHODONTICS CLINICAL EXAMINATION

CFE or Examiner #

☐☐☐☐☐ Typodont mounting approved — Start Time: _____

☐☐☐☐☐ All Fixed Prosthodontic procedures are complete — Finish time: _____

☐☐☐☐☐ Permission to dismount typodont

☐☐☐☐☐ Typodont packed and received by CFE

CANDIDATE'S NOTES & COMMENTS TO EXAMINERS:
Candidate: number each comment
CFE: place your examiner number, initials, and time after each comment

THE COMMISSION ON DENTAL COMPETENCY ASSESSMENTS
1304 CONCOURSE DRIVE, SUITE 100 | LINTHICUM, MD 21090
TEL: 301-563-3300 | FAX: 301-563-3307
cdcaexams.org

DENTAL CANDIDATES:

EXAMINATION MODIFICATIONS FOR PATIENT-BASED EXAMS DURING THE COVID-19 PANDEMIC

The criteria, exam process and grading will be the same as explained in the 2020 Candidate Manual for the ADEX Restorative and Periodontal Examinations with the following exceptions:

1. Infection control protocols set by the host school must be followed. All candidates must check the facility information sheet to see what PPE is required and what will be provided by the host school. It is the responsibility of the candidate to assure they have PPE that fit those protocols. In addition, per school requirements, a COVID-19 health questionnaire and temperature measurement may be required for candidates, assistants, patients and examiners prior to entry into the school or exam area.
2. Candidates and assistants must always wear appropriate PPE in the clinic area, changing gloves with each patient and changing mask, gown or other PPE when they become soiled or wet.
3. All candidates will follow CDC Guidelines regarding donning and doffing PPE (CDC Donning and Doffing), maintaining maximum distance between chairs where treatment is being provided, per school and state policy and washing hands and any exposed skin surfaces if possibly contaminated.
4. Candidates keep all exam paperwork well away from the treatment chair and covered when not in use. Candidates will avoid touching pens or common paperwork with contaminated gloves.
5. Aerosols must be kept to a minimum. High speed evacuation is required. Rubber dam use is required for all restorative procedures and the use of air spray for the purposes of drying the operating field is discouraged. (CDC Dental Settings, ADA Interim Guidance).
6. The use of an ultrasonic (Cavitron or Piezo) scaler is not permitted. Hand scaling only is permitted (see links listed above). This restriction is in place through September 1,2020 at which time it will be reevaluated.
7. CDC guidelines must be followed for the removal of PPE and disposable of such materials. School protocols must be followed for the cleaning/disinfecting of all equipment and chairs.
8. All exposed skin surfaces must be washed before leaving the exam site. On return home separate and thoroughly wash all clothing worn during the examination and encourage your patients to do the same.

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DENTAL CANDIDATES:

CompeDont™ DTX RESTORATIVE EXAMINATION INFORMATION

The CompeDont™ DTX tooth, developed jointly by the CDCA and Acadental, is a typodont tooth with simulated caries that closely replicates the clinical presentation of caries, and has simulated enamel and dentin nearly identical in appearance, hardness and feel to natural tooth structure. This tooth offers the closest approximation ever seen to natural dental structures. The ADEX Restorative Examinations utilizing CompeDont™ DTX adheres to the same criteria, time allotments, and grading procedures as the ADEX Restorative Examinations as explained in the Restorative and Periodontal Procedures 2020 Manual available on our website (www.cdcaexams.org). The chart below details the protocols:

Non-Patient Utilizing CompeDont™ DTX	Patient-Based
the testing agency will provide a typodont that has simulated caries in designated areas that meet examination standards	Candidates provide a patient that meets the published examination criteria
The lesion assignments for this exam are: #8M and #30M	Candidates select the lesions they wish to treat
Radiographs of the carious lesions will be provided the day of the examination	Candidates provide radiographs. They must be diagnostic.
There will be no need for review of the health history or other patient related documentation	Candidates must submit a Patient Medical History for approval on exam day
There will be no need for the initial approval of the lesion(s) on the typodont. Once the initial paperwork (Restorative Progress Form) is approved by the CFE the candidate may begin preparation of the tooth	If the Patient Medical History is approved by a CFE, candidates must submit their lesions for approval
The time for the examination is 7 hours if the candidate is attempting 2 procedures or 4 hours if the candidate is attempting only one procedure	The time for the examination is 7 hours if the candidate is attempting 2 procedures or 4 hours if the candidate is attempting only one procedure

Candidates must follow all standard exam procedures, as found in the Candidate Manual (Perio/Restorative Candidate Manual) concerning prepping to the published "acceptable level" and requesting modifications if further treatment is indicated	Candidates must follow all standard exam procedures, as found in the Candidate Manual (Perio/Restorative Candidate Manual) concerning prepping to the published "acceptable level" and requesting modifications if further treatment is indicated
The use of a rubber dam is not required	The use of a rubber dam is required
If a modification is requested, as with the standard examination, a CFE is notified, all required papers are provided and the manikin head with the treatment typodont attached is carried by an Examiner Assistant to the desk and ultimately to the Evaluation Area. If, at a site, it is not possible to transport the manikin head, the typodont arches will be transported and mounted in a manikin head in the examination area. Modification requests are accepted or not accepted by the examiners as is normally done, and the manikin head is returned and remounted for the candidate to continue treatment	Modification requests require candidates to first notify a CFE, and then the CFE will alert an Examiner Assistant to transport the patient to the Evaluation Area. Modification Requests are either accepted or not accepted, and then the patient is returned to the candidate by an Examiner Assistant.
If the first of the two restorative procedures results in a failure, the candidate may challenge the second restorative procedure	If the first of two restorative procedures results in a failure, the candidate may NOT challenge the second restorative procedure

The forms that will be used for the Simulated Patient Restorative Exam are attached and can also be found on our website (Dental Forms): Anterior Progress Form, Posterior Progress Form, Modification Request Form, and Chairside Assistant Form (as necessary).

Developed by:

The American Board of Dental Examiners

Administered by:

The Commission on Dental Competency Assessments

ADEX DENTAL EXAM SERIES: Restorative and Periodontal Procedures

2020 CANDIDATE MANUAL

Please read all pertinent manuals in detail prior to attending the examination

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2020 v1.2 Exam Cycle

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EXAMINATION AND MANUAL OVERVIEW

The CDCA administers the ADEX clinical dental licensure examination. This manual has been designed to assist candidates who are challenging the patient-based procedures of the exam, the Restorative procedures and the optional periodontal procedure.

All candidates who take any parts of the ADEX dental examination series administered by the CDCA between January 1, 2020 and December 31, 2020 are responsible for reading and understanding the 2020 examination manual(s) published by the CDCA, any documented changes to the 2020 manual(s), and for reviewing and understanding all other material provided by the CDCA regarding the exams administered between January 1, 2020 and December 31, 2020. If any questions arise during the registration process, candidates are responsible for communicating their questions to the CDCA staff via email (see contact information below). Questions MUST be submitted in writing.

In order to be successful, candidates must review and master the guidelines provided by this manual and the CDCA. Otherwise, the candidate's ability to efficiently and effectively take the ADEX dental examination may be affected and may subsequently result in dismissal from and/or failure of one or more examination procedures.

During the online registration process, candidates are required to create a unique profile that contains all relevant contact information. It is extremely important that candidates maintain a current email and physical mailing address in their online candidate profiles. This is the only way to ensure that there will be a timely receipt of important materials from the CDCA. See the *Registration and DSE OSCE Manual* for details on how to complete the registration process.

The CDCA has a blanket Malpractice Insurance policy that covers all dental candidates and their assistants for all ADEX examinations. Therefore, candidates and/or their assistants are not required to obtain additional limited liability insurance.

The CDCA reserves the right to cancel or reschedule any examination in the event of an emergency or other unforeseen circumstance that is beyond the CDCA's control. The CDCA would either refund those candidates' application fees or reassign candidates to the next available examination site or reschedule the examination at the earliest possible date.

Every effort has been made to ensure that this manual is accurate, comprehensive, clear, and up-to-date. In the rare instances when examination related instructions need to be updated or clarified during the examination year those changes will be communicated to the candidates by the CDCA. There may also be other test related material sent to candidates. These materials will be available through their online candidate profiles and/or at registration on the day of the exam.

Please see the *Registration and DSE OSCE Manual* for step-by-step instructions on how to register for the ADEX clinical dental exam through the CDCA, as well as guidance regarding the DSE OSCE registration and content. See the *2020 ADEX Dental Exam Series: Fixed Prosthodontics and Endodontics Manual* for details regarding the manikin-based procedures.

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The ADEX Dental Examination Series:

Patient-Based Procedures

I. EXAMINATION OVERVIEW

- Patient-based Exam Available Formats
- Patient-based Exam Parts
- Patient Selection Guidelines
- Examination Schedule Guidelines
- Scoring System Overview

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A. Patient-based Exam Available Formats

There are three basic exam formats: The Curriculum Integrated Format (CIF) is the pre- graduation format of the ADEX Dental Examination Series for dental students of record. The Curriculum Integrated Format, the Patient-Centered Curriculum Integrated Format (PC-CIF), and the Traditional Format examinations are identical in content, criteria, and scoring. The major difference between the two formats is in the sequencing of examination sections.

1. Curriculum Integrated Format (CIF): examination parts are administered over the course of an eligible dental student's D3 or D4 (or final) year. Typically, the manikin procedures are administered separately, usually months or weeks apart from the patient-based procedures.

2. Patient-Centered CIF (PC-CIF): Similar to the CIF format described above, but the PC-CIF format is more individually tailored to each student's readiness and is integrated within the framework of a student's faculty-approved, treatment-planned school clinic caseload. In this format, patients leave with a definitive restoration provided by or under the supervision of the faculty, if treatment is not completed during the examination. Candidates participating in the PC-CIF format challenge all manikin and patient procedures in their home school clinic. Candidates register for all exam parts at the same time prior to challenging the manikin procedures.

3. Traditional Format: the manikin-based and patient-based examination sections are administered in their entirety at each site over the course of two consecutive days. The Traditional Format is available several times each year. D4 (or final year) dental students as well as candidates who have already graduated from dental school are eligible for the Traditional Format.

B. Patient-based Exam Parts

The Restorative Dentistry and the Periodontal Scaling Examinations are the two patient-based parts of the ADEX Examination Series. They are conducted in a dental school clinical setting and are offered on the same day.

1. The **Restorative Dentistry** Examination includes two procedures that are evaluated independently of each other: Anterior Restoration and Posterior Restoration. Evaluations are made, in each case, for acceptability of the case for the examination, preparation of the lesion, restoration of the prepared tooth and treatment management.

   - The Anterior Restoration consists of preparation and restoration of a class III proximal surface carious lesion on an anterior tooth
   - The Posterior Restoration consists of preparation and restoration of a class II proximal surface carious lesion on a posterior tooth
   - Candidate performance is evaluated separately for each type of restoration

   Candidates must have each lesion approved for treatment by the Evaluation Station Examiners prior to beginning treatment. If the procedures are performed on the same patient, the procedures may be approved for treatment at the same time, but the two procedures are scored individually and the first procedure, once begun, must be completed and evaluated prior to beginning the second procedure.

For each of the two restorative procedures, there are three main procedural steps, and examiners evaluate the candidate performance after each step:

- Step 1: Case acceptance (patient acceptability for the examination and approval of the candidate's lesion)
- Step 2: Cavity preparation and evaluation of the preparation
- Step 3: Restoration of the tooth and evaluation of the restoration

2. The **Periodontal Scaling Examination** is an optional examination in the ADEX series, as there are some ADEX member jurisdictions which do not require it for dental licensure. Dental licensure candidates who take the periodontal scaling examination, do so either because they are applying for licensure in a jurisdiction where it is required, or in order to have a wide choice of jurisdictions to apply to in the present or future. Candidates should contact the appropriate state or other jurisdiction's board of dentistry directly to determine state-specific requirements. However, there is still a periodontal section in the computer-based Diagnostic Skills Examination OSCE. Candidate performance is evaluated for acceptability of the case for the examination, for subgingival calculus detection, for subgingival calculus removal, for plaque and stain removal and for treatment management.

C. Patient Selection Guidelines

1. PATIENT REQUIREMENTS:

Patients must be informed that limited treatment is provided under examination conditions and that additional treatment may be required

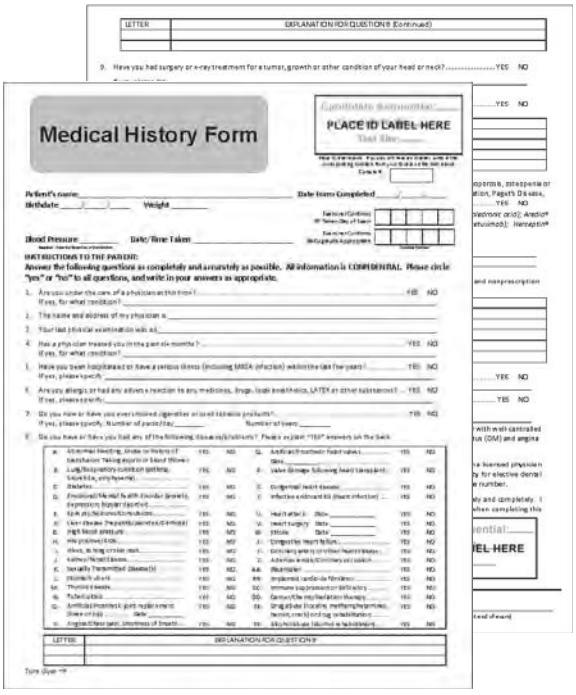
Patients who require antibiotic prophylaxis premedication are not eligible to be treated on subsequent days.

PATIENT MUST BE:
18 years of age or older
Patient Blood Pressure: • 159/94 or below is acceptable without a medical clearance • 160-179/95-109 is acceptable with a medical clearance only

PATIENT CANNOT BE:
Dentists, dental students in their fourth (or final) year
Patient Blood Pressure: • 180/110 or above is not acceptable, even with a medical clearance
Patient with general health contra-indications for treatment
A woman in her first trimester of pregnancy
Patient with a history of IV bisphosphonate usage (A history of oral bisphosphonate usage is permissible for the restorative examination only)
Patient with latex allergy (unless the clinic has been verified as latex-free)
Patient with active tuberculosis (A patient who has either tested positive for tuberculosis or is being treated for tuberculosis but does not have the clinical symptoms is acceptable)
Patient with a history of chemotherapy for neoplasm within the last six months
Patient with a history of heart attack (myocardial infarction), stroke, or cardiac surgery within the last six months

2. *PATIENT MEDICAL HISTORY:*

A *Medical History Form* must be completed (except for the candidate's signature) and reviewed by a CFE before any treatment can begin. Candidates may complete the form with their patient(s) prior to the examination. However, on the day of the examination, prior to requesting a CFE to begin case acceptance procedures, candidates must review the patient's medical history with the patient and the patient's blood pressure must be taken and recorded on the form.


Medical History Form

PLACE ID LABEL HERE

Prior to presenting the patient for case acceptance, the patient must sign and date the *Medical History Form* where indicated on the second page, and the candidate must place his/ her initials and the date. To ensure anonymity of the candidate during the examination, the candidate must not sign the form until all examination procedures have been completed and evaluated.

Remember to place your candidate ID labels in the appropriate places on the form, and *DO NOT* sign the form until you have completed ALL attempted procedures and have received authorization from a CFE to sign it

All "yes" answers need to be explored, and any needed explanatory remarks must be written on the *Medical History Form*.

3. PATIENT MEDICAL CLEARANCE:

If a medical clearance is indicated, it must accompany the *Medical History Form* at all times during the examination. The patient's medical clearance must:

- Be a clearly legible statement from a licensed physician
- Be written within 30 days prior to the examination on official letterhead and with a physician's legible name, address, and phone number
- Contain a positive statement of how the patient should be medically managed
- Contain a telephone number where the physician may be reached on the day of the examination if a question arises regarding the patient's health
- NOT contain the candidate's name anywhere in the document

NOTE: If the patient sits for more than one candidate, a separate *Medical History Form* and *Patient Consent Disclosure Form* must be completed by <u>each</u> candidate individually with the patient

Additional Medical Clearance requirements:

- Candidates must follow the current American Heart Association antibiotic pre-medication recommendations when treating patients at potential risk of infective endocarditis following dental treatment; a medical clearance may be indicated to determine the patient's potential risk of infective endocarditis; a medical clearance is required if the finding could affect the patient's suitability for elective dental treatment during the examination

- Candidates must obtain written medical clearance for patients reporting a disease, condition, or problem not listed on the *Medical History Form* that would pose a significant risk to their own health or safety or others during the performance of dental procedures; if this clearance and/or verification of premedication is not available, the patient will not be accepted for treatment; furthermore, the medical clearance **MUST NOT** contain the candidate's name anywhere in the document

4. LOCAL ANESTHESIA

Injectable local anesthetics may be administered to patients for the Periodontal Scaling and Restorative Dentistry Examinations. Candidates must request and receive approval for the administration of local anesthetics prior to each separate administration. Inhalation or intravenous analgesia or anesthetics are not permitted for the examination. Violation of this standard will result in failure of the examination section.

D. Examination Schedule Guidelines

1. Dates and Sites

Specific examination dates for a participating dental school can be found on the CDCA website. Please refer to the *Registration and DSE OSCE Manual* for the CDCA's specific policies and administrative guidelines.

The CDCA administers the Restorative and Periodontal examination parts at various dental schools on specified dates as determined by the dean or other official representative of the dental school and agreed upon by the CDCA.

In the event there are extenuating circumstances such as weather, acts of God, or other unforeseen circumstances which may impact or alter the schedule and administration of the examination(s), the CDCA will make every attempt to contact candidates with updated information.

2. Time Allotment on Exam Day:

NINE HOURS:
Three procedures (anterior restorative, posterior restorative, and periodontal scaling)

SEVEN HOURS:
Two procedures (either both restorative procedures or one restorative procedure + periodontal scaling)

FOUR HOURS:
One procedure (anterior restorative procedure, posterior restorative procedure, or the periodontal scaling*)
*90 minutes of treatment time

Please note: If you are attempting either two or three procedures, please refer to the Examination Timelines charts on page 22 for timeline requirements. If you do not meet the timeline requirements, you may be penalized due to a violation of exam standards.

3. Timely Arrival

Candidates are responsible for determining their travel and time schedules to ensure they can meet all of the CDCA's time requirements. All candidates are expected to arrive at the examination site at their designated time, which will be communicated to them via their online candidate profiles (under the "Registration" tab of the candidate profile). Failure to follow this guideline may result in not being permitted to start the examination.

Candidates will be informed in their online candidate profiles as to the date on which they are to challenge each part of the examination. Examination schedules are not finalized until after the examination application deadline. Candidates should note the specific time restraints of the live patient-based examination procedures listed above. All procedures for each examination must be completed within the allotted time.

E. Scoring System Overview

Evaluations and scoring of candidate performance in the patient-based examinations are always done on-site. Evaluations are made in a "triple blind" manner at specified steps as a candidate progresses through each exam procedure. Three examiners must independently evaluate each presentation of candidate performance and enter their evaluations electronically. Each examiner is unable to see the evaluations of the other two examiners for any procedure presentation, and examiners are prohibited from discussing their evaluations during the examination. Examiners are randomly assigned by the electronic system, so that the same three examiners do not repeatedly examine the same preparations or restorations.

Evaluations are made according to defined criteria. The candidate's performance level is electronically computed for each item evaluated, based on the entries of the three examiners, and by this method, the candidate's overall score is computed for each procedure. The three category levels may be generally described as:

Adheres to Criteria: The treatment is of acceptable quality, demonstrating competence in clinical judgment, knowledge and skill.

Marginally Substandard: The treatment is of marginal quality, demonstrating less than expected clinical judgment, knowledge or skill.*

Critically Deficient: The treatment is of unacceptable quality, demonstrating critical areas of incompetence in clinical judgment, knowledge or skill.

*3-SUB rule: If examiners confirm 3 marginally substandard over-preparation criteria on the same procedure, then the procedure will be determined to be critically deficient and the candidate will fail that procedure. SUB criteria that are part of this rule have been highlighted in yellow on the criteria sheets beginning on page 39.

To pass the ADEX Dental Examination, you must score 75 or higher on all procedures. State statutes have set 75 as the minimum passing score and the CDCA is not permitted to round up or accept any score less than 75.

Based on the level at which a criterion is rated by at least two of the three examiners, points will be awarded to the candidate. If none of the three examiners' ratings are in agreement, the median score is assigned. However, if a criterion is assigned a rating of critically deficient by two or more examiners, no points are awarded for that procedure, and the candidate will fail that procedure.

1. Restorative Examination Content

Anterior Restoration

Anterior (Class III) Composite Preparation	12 Criteria
Anterior (Class III) Composite Restoration	10 Criteria

Posterior Restoration

Posterior (Class II) Amalgam Preparation	15 Criteria
Posterior (Class II) Amalgam Finished Restoration	9 Criteria
Posterior (Class II) Composite Preparation	15 Criteria
Posterior (Class II) Composite Finished Restoration	11 Criteria

Restorative Clinical Examination – 100 points per procedure

RESTORATIVE CONTENT	EXAMINATION FORMAT
Anterior restoration (100 points) Class III composite - cavity preparation and restoration are graded separately Posterior restoration (100 points) candidate's choice of either: ▪ Class II amalgam - cavity preparation and restoration ▪ Class II composite - cavity preparation and restoration	Performed on a patient Preparation and Restoration are each graded by 3 examiners independently

2. Periodontal Scaling Examination Content

The Periodontal Scaling Examination is a patient-based examination consisting of four parts:

a. **Treatment Selection** – Penalties are assessed for those areas that do not meet the described criteria for case acceptance.
b. **Calculus Detection and Removal** – 90 points total with 7.5 points for each surface of subgingival calculus correctly detected and removed. (*If there are four (4) or more confirmed calculus detection errors, the candidate will not be allowed to proceed with the exam.)
c. **Supragingival Deposit Removal** – 6 points total with one point for each one of the first 6 teeth selected in ascending order.
d. **Tissue & Treatment Management** – 4 points total for pain control and tissue management that meets the written criteria.

Periodontal Scaling Clinical Examination – 100 points

(Optional for ADEX Status, but may be required for licensure depending on state licensing requirements)

PERIODONTAL SCALING CONTENT	EXAMINATION FORMAT
Treatment Selection & Pre-Treatment 1. Case acceptance 2. Subgingival calculus detection *Treatment & Post-Treatment* 3. Subgingival calculus removal 4. Supragingival plaque/stain removal 5. Tissue and treatment management	Performed on a patient Treatment Time: 90 minutes (after case acceptance)

3. Penalties & Point Deductions

Throughout the examination, the conduct and clinical performance of candidates are observed and evaluated, and a number of considerations are weighed in determining the final scores. Penalties are assessed for violation of the examination standards or for certain procedural errors.

EXAMINATION FAILURE: Examples of violations of examination guidelines which may result in failure of any one examination include:

- Performing treatment procedures other than those assigned
- Performing procedures outside authorized examination clinic spaces.
- Failure to follow the published time limits (deadlines) and/or complete the examination within the allotted time
- Non-compliance with anonymity requirements
- Use of prohibited electronic devices in the designated examination spaces, during the examination, by the candidate, assistant, or patients (i.e.: cell phones, smart watches, pagers, computers, cameras, recording devices) *Patients may use their cell phones in the waiting room area only
- Use of unauthorized equipment
- Violations of infection control guidelines recommended by the CDC, during a clinic-based examination (including when setting up and when cleaning up after the examination has ended)
- Critical lack of clinical judgement

Other penalties may be incurred during the course of the examination. The following page displays a full list of penalty points that candidates may incur.

PENALTY	VALUE
PATIENT MANAGEMENT	
Disregard for patient comfort or welfare	10
PROFESSIONAL DEMEANOR	
Appearance unprofessional, unkempt, or unclean	10
Attitude rude, inconsiderate/uncooperative with examiners	1
INFECTION CONTROL	
Violation of universal precautions (candidate): mask, eyewear, gloves, other	1
Violation of universal precautions (assistant): mask, eyewear, gloves, other	1
Gross infection control violation: operation field grossly unclean, unsanitary, offensive in appearance; failure to dispose of potentially infectious materials and clean the operatory after individual examinations	10
TREATMENT MANAGEMENT	
Improper management of significant history or pathology	10
Improper/incomplete record keeping	1
Improper operation/patient/position	1
Inadequate isolation	1
Improper liner placement	10
Non-diagnostic radiograph(s): 2nd time	10
Non-diagnostic radiograph(s): 3rd time	100
Request to remove caries or decalcification without clinical justification	15
Repeated requests to modify/extend approved treatment plan without clinical justification	10
Unsatisfactory completion of modifications required by examiners	10
Critical lack of judgment/diagnostic skills	100
Violation of examination standards, rules, guidelines, or time schedule	100
Temporization or failure to complete an examination procedure	100
Treatment of teeth/surfaces not approved or assigned by examiners	100
Initial preparation is not to at least ACC dimensions	10
PULPAL EXPOSURES	
Inappropriate request for indirect pulp cap	15
Pulp cap is inappropriately placed	15
Inappropriately managed pulpal exposure (mechanical or pathologic)	100
Unrecognized exposure	100
Unjustified mechanical exposure	100

The ADEX Dental Examination Series:

Patient-Based Procedures

II. ADMINISTRATIVE PROTOCOLS

- Infection Control Guidelines
- Pre-Exam Preparation
- Exam Flow and Exam Timelines
- Candidate Professional Conduct

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A. Infection Control Guidelines

All candidates must comply with and follow the current recommended infection control procedures as published by the Centers for Disease Control and Prevention once the examination treatment time officially begins. Infection control procedure compliance begins with the initial set-up of the unit, continues throughout the clinical examination procedures, and includes the final clean-up of the operatory. It is the candidate's responsibility to fully comply with these procedures, as failure to do so will result in a loss of points, and any violation that could lead to direct patient harm will result in failure of the examination.

As much as is possible, dental professionals must help prevent the spread of infectious diseases. Because many infectious patients are asymptomatic, all patients must be treated as if they are, in fact, contagious. The use of barrier techniques, disposables whenever possible, and proper disinfection and sterilization procedures are essential. Candidates must adhere to the following infection control guidelines:

1. Barrier protection

- Gloves must be worn while setting up or performing any intra-oral procedures and when cleaning up after any treatment; if rips or tears occur, don new gloves; do not wear gloves outside the operatory
- Wash and dry hands between procedures and whenever gloves are changed; do not wear hand jewelry that can tear or puncture gloves
- Wear clean, long-sleeved, closed neck uniforms, gowns, or laboratory coats, and change them if they become visibly soiled; remove gowns or laboratory coats before leaving the clinic area at any point; wear facemasks and protective eyewear during all procedures in which splashing of any body fluids that could occur during actual patient care; discard masks after each patient (or sooner if the masks become damp or soiled)
- Do not wear sandals or open-toed shoes
- Cover surfaces that may become contaminated with impervious-backed paper, aluminum foil or plastic wrap; remove these coverings (while gloved), discard them, and replace them between procedures (after removing gloves)

2. Sterilization and Disinfection

- **Instruments that become contaminated must be placed in an appropriate receptacle and identified as contaminated**
- Any instrument that penetrates soft or hard tissue must be disposed of or sterilized before and after each use; instruments that do not penetrate hard or soft tissues but do come in contact with oral tissues should be single-use disposable items and must be properly discarded
- If not barrier wrapped, surfaces and counter tops must be pre-cleaned and disinfected with a site-approved tuberculocidal hospital-level disinfectant
- Handpieces, prophy angles, and air/water syringes must be sterilized before and after use or properly disposed of after use
- Used sharps are to be placed in a spill-proof, puncture- resistant container; needles are to be recapped with a one- handed method or with special devices designed to prevent needle-stick injuries and disposed of properly
- All waste and disposable items must be considered potentially infectious and shall be disposed of in accordance with federal, state, and local regulations

3. Exposure to blood borne pathogens

An exposure incident is defined as contact with blood or other potentially infectious materials (PIMS) through

- Needle stick, sharp, or other percutaneous exposure
- Non-intact skin exposure, such as an open cut, burn, or abrasion
- Contact with a mucous membrane (e.g., inside nose, eye, or mouth)

Since maximum benefit of therapy is most likely to occur with prompt treatment, the following policy has been established:

- Immediately following the exposure incident, puncture wounds or other percutaneous exposures should be cleaned with soap and water; mucous membrane exposed to blood or other PIMS should be extensively rinsed with water or sterile saline
- All percutaneous exposures and other exposures to blood and PIMS should be reported immediately to the Chief Examiner so that appropriate measures can be initiated and the exposure incident documented
- Post-exposure prophylactic treatment should be initiated at the examination site in accordance with the testing site's policies on potentially infective exposures
- At the completion of all clinical examinations performed in operatories, it is the responsibility of candidates to clean the operatory thoroughly utilizing accepted infection control procedures

B. <u>Pre-Exam Preparation</u>

1. Before the Exam: Candidate Orientation Session

Typically held in the afternoon or evening on the day preceding the first examination day at each site, a candidate orientation session is conducted to help candidates prepare for their examination. The orientation session is only for candidates, not for candidate assistants or candidate interpreters. The time and location of the orientation session will be communicated to you by email or the site's ADEX exam coordinator (typically a faculty member at that school). The orientation session is designed to give the candidates any site-specific information that is relative to the administration of the exam, answer general administrative questions candidates may have, as well as distribute the candidate packets to each of the candidates. The candidates' white envelopes contain a variety of required materials each candidate will use during the exam-day process, including a **candidate ID badge**, **required forms**, and **ID labels** that are required for use on a variety of forms and materials candidates submit during the examination.

In order to be granted entrance to the Candidate Orientation Session, you must bring the following:

a. **Two** forms of identification: one ID must be a photo ID, and both IDs must have the candidate's signature. Acceptable forms of photo identification include such documents as current, valid driver's license, passport, military ID, or official school ID. A voter registration card (signed) or a credit card (signed) may be used as a second ID. If your name has recently changed, bring a copy of the marriage certificate or court document to the examination.

b. Your candidate sequential number which can be found on your registration confirmation (available in your online candidate profile). *You may either bring a print out of the registration confirmation or an electronic device that can display your identification information in your secure online profile.

The photo **candidate ID badge** you receive at the candidate orientation session is your admission badge to the examination day. **The candidate ID badge must be worn at all times on your outermost garment during the course of the examination.**

Your candidate ID number (5-digits) and your candidate sequential number (3-digits) will be used throughout the examination process to identify you, your patients, your work space, your forms, radiographs, instrument packs (if using your own instruments), all electronic data entry pertaining to you or your patient(s), to track your progress through the examination, when scoring evaluations of your performance, and when reporting your score

2. Exam Day: Candidate Assistants and Interpreters

a. Candidate assistants are permitted for the patient-based exam. However, candidate assistants may **NOT** be:

- A licensed or unlicensed dentist/dental hygienist
- A fourth-year (or final year) dental student
- A final year dental hygiene student
- A dental technician
- Serving as an interpreter for a candidate during the exam
- A dental assistant employing expanded duty functions (providing services normally done by a dentist)

Candidates with candidate assistants must complete the *Chairside Assistant Form* (see sample of form on 63), which is made available to candidates at the examination site during the candidate orientation. Assistants are required to supply two (2) passport-size photographs (2x2 photos), as well as two forms of identification, one must have a photograph of the individual and both forms of identification must have the individual's signature. Candidates will tape or glue their assistant's photos in the two designated boxes on the form. Candidates must complete the form entirely before submitting it to the designated CDCA representative on the clinic floor.

Once the assistant has been approved the assistant's ID badge will be cut from the form and the assistant must place it in the plastic badge holder provided to them and wear it at all times while working on the clinic floor. The designated CDCA representative will keep the registration form.

Assistants are required to wear their ID badge at all times, on their outer-most clothing, while in the examination area.

The assistant's ID badge must be turned in with all other required examination forms and materials at the end of the examination.

b. Candidates may employ the services of an interpreter when they or their patient(s) do not speak English or if they or their patient(s) have a hearing impairment (this is particularly important when the patient or candidate has a history of medical problems and/or is on medications).

However, an interpreter may **NOT** be:

- Younger than eighteen (18) years old
- A faculty member
- A licensed or unlicensed dentist or dental hygienist
- A fourth year (or final year) dental
- A final year dental hygiene student
- Simultaneously serving as the candidate's chairside assistant

The *Interpreter Disclosure Statement and Interpreter ID Form* will be made available to candidates during the candidate orientation session that takes place the day before the exam. Candidates must complete the form entirely and must affix two (2) passport-size photographs (2x2 photos) in the appropriate places on the form. Once the interpreter is approved and registered, he/she will be given an ID badge, which must be worn at all times on the outermost garment while in the examination area, and the badge must be turned in by the candidate at the conclusion of the examination along with all other required forms and materials.

Candidates are responsible for the conduct of their interpreter during the examination. While there is no strict dress code for interpreters, candidates must be mindful of the fact that the examination site is a professional setting and all personnel should be appropriately dressed.

Interpreters are required to wear their ID badge at all times on their outer-most clothing while in the examination area.

3. Exam Day: Professional Conduct

Integrity of the examination process depends on fairness, accuracy and consistency. Standards are required to ensure that these principles are adhered to by examiners and candidates. Penalties are imposed for violations of such examination guidelines and the penalties are proportional to the seriousness of the violation. Minor violations may result in a warning or reminder or may result in a deduction of points from the candidate's final score. Repeated minor violations result in greater point deductions. Serious violations may result in failure of an examination, or in the most serious cases, failure of the entire examination series. Candidates are required to adhere to these standards of conduct while participating in all sections of the ADEX Dental Examination Series.

a. **Submission of examination records**: All required records and radiographs (film, hard copies, and/or digital records) must be turned in before the examination is considered complete. If all required documentation and materials are not turned in at the end of the examination, the examination will be considered incomplete.

b. **Registered/assigned procedures:** Only the treatment and/or procedures for which a candidate has registered, paid for, and been assigned to on the specified examination date may be performed (in the Periodontal Scaling Clinical Examination procedure, all surfaces of the selected teeth may be scaled and polished at the discretion of the candidate, but only

the selected surfaces will be evaluated). Performing other treatment or procedures may result in termination of the examination.

c. **Professional Misconduct:** Professional misconduct is a most serious violation of examination guidelines. Substantiated evidence of professional misconduct (see examples below) during the course of the examination will result in automatic failure of the entire examination series. In addition, there will be no refund of examination fees and the candidate may not be allowed to reapply for re-examination for one year from the time of the infraction.

Professional misconduct includes, but is not limited to:

- Falsification or intentional misrepresentation of registration requirements
- Cheating of any kind
- Demonstrating complete disregard for the oral structures or welfare of the patient
- Misappropriation of equipment (theft)
- Receiving unauthorized assistance
- Alteration of examination records and/or radiographs
- Failure to follow instructions from examiners
- Rude, abusive, uncooperative or disruptive behavior toward patients, examiners, or other candidates
- Use of electronic equipment, to include recording devices and/or cameras

C. Exam Flow & Exam Timelines

Candidates are responsible for time management.

1. SET-UP PERIOD

In accordance with the Examination Timeline chart (item #5 in this section), you will be authorized to enter the clinic—with your candidate assistant and patient—at a designated time, and you should immediately proceed to your assigned cubicle (cubicle assignments are usually posted in the clinic floor area, or you may see a CFE for help). Once you arrive to your cubicle, place your ID badge on the right shoulder of your outermost garment (if applicable, remind your assistant to pin on his/her badge as well). Tape one of your two cubicle cards in a prominent location in your cubicle.

2. CFE

During the set-up period and throughout the course of the exam day CFEs will be available on the clinic floor to help candidates navigate through the examination process. CFEs are the first point of contact for candidates when they have questions, and they will complete both the medical history approval process for the restorative examination as well as the PCA process for the periodontal scaling examination. CFEs are, however, also responsible for monitoring the examination. They will impose penalties for violations of examination guidelines (i.e.: infection control violations, improper patient management, use of prohibited electronic devices, etc.)

a. *Restorative Medical History/Case Selection Approval*: Once you are ready to submit your patient for lesion approval, request a CFE to help you begin. The CFE will review all forms for proper completion, the patient's blood pressure reading, and the Patient *Medical History Form* for acceptability for treatment. The CFE will also review the *Progress Form* to ensure that proper entries for treatment selection and anesthetic record have been made, as well as review the radiographs for compliance with examination guidelines. If all of those items are acceptable, a CFE will notify a runner who will come to your cubicle to escort your patient to the Evaluation Station for lesion approval. All required paperwork, instruments, and materials must accompany the patient. When your patient returns from the Evaluation Station, a CFE will inform you whether or not your treatment selection has been approved.

b. *Periodontal PCA*: In addition to all materials reviewed by the CFE for a Restorative Medical History/Case Selection Approval, the CFE will ask you whether your periodontal scaling treatment selection has been electronically submitted and whether you have confirmation that the treatment selection has been accepted electronically. If appropriate, the CFE will give approval for local anesthesia (up to two cartridges for the first request), and then a runner will come to your cubicle and escort your patient to the Evaluation Station. All required paperwork, instruments, and materials must accompany the patient to the Evaluation Station.

3. MODIFICATION OF PERIODONTAL TREATMENT SELECTION

Before calling a CFE to begin the PCA process, if modifications to your periodontal treatment selection need to be made, or if you did not submit your treatment selection online prior to arriving to the exam site, you must visit the check-in desk and ask for the administrative representative there to help you with initial entry/making any adjustments to your treatment selection. Once a CFE begins the PCA process, NO CHANGES to the treatment selection may be made.

4. HOW LONG WILL MY PATIENT BE IN THE EVALUATION STATION?

Patients will be in the Evaluation Station for an ***average* of 30 minutes** for each visit. (Restorative Examination = minimum of 3 visits; Periodontal Scaling Examination = minimum of 2 visits), so candidates should consider this time with regard to their individual time management during the examination.

5. COMMUNICATION FROM EXAMINERS

Sometimes, when patients return from the Evaluation Station with a CFE, an *Instructions to Candidate Form* will accompany them. This form is a means of communication between the examiners and the candidates, and it does not necessarily indicate that a penalty has been applied. Before proceeding to the next step of treatment, the candidate must review the *Instructions to Candidate Form* with a CFE, sign the form as an indication of understanding the instructions, and, prior to continuing, the candidate must make the necessary corrections in accordance with the instructions on the form. Upon completion, the candidate

should then request a CFE to verify that the instructions are completed and will then allow the candidate to proceed with the treatment process.

6. *EXAMINATION TIMELINES*

3 PROCEDURES (9 HOURS)		
TIME	**Restorative Last**	**Perio Last**
6:00 am	School doors will be unlocked, and candidates may enter the building	School doors will be unlocked, and candidates may enter the building
6:30 am	SET-UP PERIOD/LESION APPROVAL PROCESS: candidates may enter clinic, set-up their cubicles, re-check patient, and document any pre-treatment notes in the "comments" section of the *Progress Form* (all notations must be verified by a CFE prior to beginning any procedure)	SET-UP PERIOD/LESION APPROVAL PROCESS: candidates may enter clinic, set-up their cubicles, re-check patient, and document any pre-treatment notes in the "comments" section of the *Progress Form* (all notations must be verified by a CFE prior to beginning any procedure)
6:40 am	Candidate assistant and interpreter registration opens (CFEs will be available to help with and process registrations)	
8:00 am	TREATMENT TIME BEGINS *All Periodontal Declaration Forms must have been turned in by 8:00 am*	
	2ND Lesion Approval must be completed by 3:15 pm	Any Perio Pre-Check after 3:30 pm will not have the full 90 minutes for treatment
3:45 pm		Perio Case Acceptance (Guideline) --**must have a minimum of 45 minutes treatment time
1 hr prior to finish time	Patient must be in line for Prep Check for final restorative procedure	
4:15 pm		No treatment started after 4:15 pm
5:00 pm	EXAM OVER (Restoration Checked-In for Evaluation)	EXAM OVER (Post-Treatment Checked-In for Evaluation)

2 PROCEDURES (7 HOURS)		
TIME	**Restorative Last**	**Perio Last**
	SET-UP PERIOD/LESION APPROVAL PROCESS: candidates may enter clinic, set-up their cubicles, re-check patient, and document any pre-treatment notes in the "comments" section of the *Progress Form* (all notations must be verified by a CFE prior to beginning any procedure)	SET-UP PERIOD/LESION APPROVAL PROCESS: candidates may enter clinic, set-up their cubicles, re-check patient, and document any pre-treatment notes in the "comments" section of the *Progress Form* (all notations must be verified by a CFE prior to beginning any procedure)
Clock Begins	TREATMENT TIME BEGINS	
1 hr 45 minutes prior to finish time	Lesion Approval for final lesion must be completed	
		Any Perio Pre-Check after 5 ½ hours will not have the full 90 minutes for treatment
1 hr 15 minutes prior to finish time		Perio Case Acceptance (Guideline) **Must have a minimum of 45 minutes to complete treatment time
1 hour prior to finish time	Patient must be in line for Preparation Check-in	
Finish Time	EXAM OVER (Restoration Checked-In for Evaluation)	EXAM OVER (Post-Treatment Checked-In for Evaluation)

1 PROCEDURE (4 HOURS)		
TIME	**Restorative**	**Perio**
	SET-UP PERIOD/LESION APPROVAL PROCESS: candidates may enter clinic, set-up their cubicles, re-check patient, and document any pre-treatment notes in the "comments" section of the *Progress Form* (all notations must be verified by a CFE prior to beginning any procedure)	SET-UP PERIOD/LESION APPROVAL PROCESS: candidates may enter clinic, set-up their cubicles, re-check patient, and document any pre-treatment notes in the "comments" section of the *Progress Form* (all notations must be verified by a CFE prior to beginning any procedure)
Clock Begins	TREATMENT TIME BEGINS	
1 hr 45 minutes prior to finish time	Lesion Approval must be completed	
		Any Perio Pre-Check after 2 ½ hours will not have the full 90 minutes for treatment
1 hr 15 minutes prior to finish time		Perio Case Acceptance (Guideline) **Must have a minimum of 45 minutes to complete treatment time
1 hour prior to finish time	Patient must be in line for Preparation Check-in	
Finish Time	EXAM OVER (Restoration Checked-In for Evaluation)	EXAM OVER (Post-Treatment Checked-In for Evaluation)

The ADEX Dental Examination Series:

Patient-Based Procedures

III. RESTORATIVE PROCEDURES

- Procedures Overview
- Case Acceptance: Treatment Selection
- Lesion Acceptance: Administrative Flow
- Cavity Preparation Procedures (Modification Requests & Pulpal Exposures)
- Cavity Preparation and Evaluation of Preparation
- Final Restoration & Evaluation of Restoration
- Check-out Procedures

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A. Restorative Procedures Overview

Note: If you're attempting both Anterior and Posterior procedures, the second restorative preparation may not be started until the first restorative patient is dismissed (that is, after the completed restoration has been evaluated and any required modifications have been completed by the candidate and approved by a CFE).

1. Required Instruments and Materials

Each time a candidate sends his/her patient to the Evaluation Station, the patient must wear a clean patient napkin with a candidate ID label affixed in the upper right-hand corner (near candidate's right shoulder), must have eye protection available, and the following instruments and accompanying materials **must** travel with the patient in a closed, sealed, puncture-resistant container:

- Cubicle card
- Medical History Form
- Patient Consent Form
- Progress Form
- Radiographs (unless displayed on monitors in the Evaluation Station)
- Instruments (unless supplied directly by the host site to the Evaluation Station)
    - o Clean unscratched # 4 or # 5 front surface mirror
    - o Explorer
    - o Periodontal Probe with mm or Williams markings
    - o Cotton pliers
    - o Three-way syringe tip
    - o 2X2 gauze sponges

Reminder: A closed, sealed, puncture-resistant container to transport instruments to the Evaluation Station (if instruments do not need to be transported to the Evaluation Station, no container is required; when in doubt, bring a container)

Container Suggestion: Rubbermaid Tagalong 7"W x 4"H x 10"L, oversized containers will not be accepted)

2. Local Anesthesia

Permission to administer local anesthetics for the Restorative Dentistry Examination will not be given until a treatment selection has been accepted for treatment (see Treatment Selection guidelines on the following page). **A maximum of 2 cartridges may be approved by a CFE for the initial administration.** If additional anesthetic is needed, at any point in the examination, candidates must receive permission from a CFE prior to administering it. Whenever additional anesthetic is administered, the candidate must update the anesthetic record on the *Progress Form*. Also, the candidate must record the total amount of anesthetic used during the examination on the *Progress Form* before sending the patient to the Evaluation Station for evaluation of the completed restoration. All anesthesia used must be within the "expiration date" marked on the anesthetic cartridge. If the patient has previously been given an anesthetic on the same day, the candidate must note that on the *Progress Form*.

The following anesthetic information must be indicated on the *Progress Form*:

- Type(s) of Injection (specific block or infiltration to be administered)
- Anesthetic(s) (generic or brand name and concentration, i.e. percent)
- Vasoconstrictor (If the anesthetic contains a vasoconstrictor, record the type and concentration, i.e. percent)
- Quantity (volume)

3. Radiographs

a. Radiograph Purpose: radiographs must be taken for diagnostic purposes only. Radiographs that have errors, such as minor cone cutting or not showing the entirety of a tooth not being treated will not result in point deduction. Radiographic technique is not graded. (Exception: re- takes of non-diagnostic radiographs are requested only if it is not possible to determine that a treatment selection meets examination criteria. If a retake of a non-diagnostic radiograph must be made, there is no point deduction for the first attempted retake. If the re-taken radiograph is also non-diagnostic, a second re-take radiograph may be made with a point deduction. If the second retake radiograph is also non-diagnostic the examination is terminated.

b. Radiographs for the Restorative Examination must meet the following requirements:

- Interproximal caries must be interpreted radiographically to penetrate at least to the dento-enamel junction, or have equivalent depth clinically
  - For digital radiographs, caries should appear to progress greater than one-half the thickness of the enamel to have clinically progressed to the DEJ
  - For film radiographs, caries should appear to progress greater than ¾ (three-fourths) the thickness of the enamel, to have clinically progressed to the DEJ
- *Posterior tooth*: Original periapical and bitewing radiographs or single digital periapical and bitewing images
- *Anterior tooth*: Original periapical radiograph or single digital periapical image
- Radiographs exposed within one year prior to the examination should depict the current clinical condition of the tooth to be treated; if a restoration or extraction has taken place since the time of the original radiograph, this must be recorded in the notes section on the *Progress Form*; if a patient was treated by another candidate during the same examination series, a new radiograph is not needed unless there is a specific clinical indication
- Films should be mounted according to the ADA format, in a small plastic mount (provided in the candidate's "white envelope") and the mount should be attached with transparent tape to the appropriate Restorative *Progress Form*; Digital printouts should be attached with a paper clip to the *Progress Form*
- Copies are acceptable for the restorative examination
- Digital prints must be printed on high quality paper (preferably photo-grade) or acetate. Radiographs printed on standard copy paper may be rejected if they do not provide sufficient resolution and clarity. All images must include: patient's name, date of exposure, candidate's ID number, and indication of right and left sides
- The school name must be removed or masked
- Digital images may be displayed on monitors if they are available from the school's database. Candidates from outside the school will need to submit digital prints, since the

school will not upload images from an outside facility

c. Other Lesions Present: If a posterior tooth that has other lesions in addition to the primary lesion is selected for treatment, all lesions on the same tooth will use the published criteria to evaluate the treatment selection approval, and all of the preparations will use the published criteria to evaluate the completed preparation. Any confirmed findings for any of the lesions/preparations on the same tooth will apply to the evaluation for the required lesion

d. Class V Carious Lesions: Class V carious lesions may not be treated during the examination. A submitted treatment selection for a tooth with an existing Class V carious lesion will be rejected. However, an existing Class V restoration with sound margins is acceptable

e. Post-Operative Radiographs: Post-operative radiographs are not required, unless requested at the discretion of the examiners to evaluate the clinical condition of the patient. The radiograph should meet the same criteria as specified for pre-op radiographs

B. Case Acceptance: Treatment Selection

SHARING PATIENTS:

- One **anterior tooth may be shared** by two candidates if the tooth has a mesial and distal lesion. Only one lesion needs to be treated. However, all lesions on the same proximal surface must be treated at the same time.
- One **posterior tooth may not be shared** by two candidates for treatment during the examination. If the tooth has a mesial and distal lesion when presented for evaluation, the candidate must treat both lesions by the end of the examination.

1. Treatment Selection Requirements

Candidates must schedule patients for their examination day who are in need of treatment of Class II and Class III carious lesions according to the following guidelines (also see chart on page 29 for more detailed guidelines):

a. The anterior restorative procedure must be a Class III Composite Resin preparation and restoration
b. The posterior restorative procedure may be one of the following:
   - A Class II Amalgam preparation and restoration
   - A Class II Composite resin preparation and restoration

2. Additional Treatment Selection Considerations

a. Careful clinical judgments should be used if planning approximating lesions.
b. Treating all lesions on a posterior tooth selected for treatment:
   - The selected posterior tooth must have all existing lesions treated by the end of the examination day
   - If a treatment selection is submitted for a primary carious lesion on a posterior tooth, and the tooth has other carious lesions that are not included in the treatment selection, then the treatment selection submission will be rejected (if the rejected submission was

the candidate's first attempt to have a lesion approved, a new selection for the same primary lesion, but which includes all other surfaces requiring treatment, may be submitted and will be approved if all other criteria are met).

3. Treatment Selection Exclusions

The following list of exclusions applies to the anterior Class III lesion and the posterior Class II lesion:

- Non-vital teeth, and/or teeth with pulpal pathology or endodontic treatment
- Teeth with facial veneers
- Mobility of Class III or greater

4. Treatment Selection Rejection

If a candidate's treatment selection for one of the restorative procedures is not in compliance with one or more of the criteria for that procedure (see *Restorative Treatment Selection Requirements* chart), the candidate will be informed that the treatment selection was not approved. The candidate may submit a second treatment selection for approval as long as the time authorized for approval has not expired.

ONLY TWO CANDIDATE-SELECTED LESION APPROVAL ATTEMPTS PER PROCEDURE (CLASS II OR CLASS III) MAY BE SUBMITTED. FAILURE TO GAIN APPROVAL WITHIN TWO TREATMENT SELECTION SUBMISSION ATTEMPTS WILL RESULT IN A FAILURE OF THAT INDIVIDUAL PROCEDURE (CLASS II OR CLASS III). CANDIDATES MAY CONTINUE TO THE SECOND PROCEDURE IF THEY HAVE NOT YET ATTEMPTED IT, AND IF TIME ALLOWS. THEY MAY RESCHEDULE THE FAILED PROCEDURE AT A FUTURE EXAM.

Restorative Treatment Selection Requirements

Class III Composite			Class II Amalgam	Class II Composite
MUST be a **permanent anterior tooth** that meets the following requirements:			MUST be a **permanent posterior tooth** that meets the following requirements:	MUST be a **permanent posterior tooth** that meets the following requirements:
A proximal primary carious lesion that shows no signs of previous excavation and appears, radiographically or clinically, to extend to the DEJ	OR	A defective restoration, defined as one that exhibits recurrent caries or a defective cavosurface margin that-even though it may not yet be carious-can be penetrated with an explorer (A mismatched shade is not an acceptable indication)	At least one proximal surface being restored must have a primary carious lesion that shows no signs of being previously excavated and appears, radiographically or clinically, to extend at least to the DEJ	
			The tooth must be in contact with a sound enamel surface or a permanently restored surface of an adjacent tooth	
			There may be a lesion on the proximal surface of the adjacent tooth, provided that there is no breakdown of the contact before or during the preparation that would jeopardize the placement of an ideal proximal contour or contact of the finished restoration	
Proximal contact of the tooth must be visually closed (and have a "Yes" recorded on Progress Form) and meet resistance to dental floss passing through the contact with the adjacent tooth on the proximal surface to be restored, even though the area to be restored may or may not be in contact			When in centric occlusion, the selected tooth must be in cusp/fossa occlusion with an opposing tooth or teeth; Cross-bite is acceptable as long as there is a cusp to fossa relationship when the teeth are in occlusion; Those opposing tooth/teeth may be natural dentition, a fixed bridge, or any permanent artificial replacement including removable partial denture or a full denture; The opposing tooth does not need to occlude on the new restoration	
The approximating contact of the adjacent tooth must be natural tooth structure or a permanent restoration			Other surfaces of the selected tooth may have an existing occlusal or proximal restoration, as long as there is a qualified surface with primary caries; Pre-existing occlusal restorations within the area to be restored, and any liner underlying those restorations, must be entirely removed, and the preparation must demonstrate acceptable principles of cavity preparation; An MOD treatment selection must have at least one proximal contact to be restored; In the event of a defect that would qualify as an acceptable lesion on the proximal surface opposite from the surface with primary caries, the treatment plan must be a MOD unless there is an intact transverse or oblique ridge, in which case the restoration must be treatment planned as a MO–DO	
There may be a lesion on the proximal surface of the adjacent tooth, provided that there is no cavitation of the contact before or during the preparation that would prevent the candidate from restoring an ideal contour or contact of the restoration				
Occlusion may or may not be present				
Lingual dovetails are acceptable			The condensed and carved amalgam surface should not be polished or altered by abrasive rotary instrumentation except for the purpose of adjusting occlusion; Proximal contact is a critical part of the evaluation, and examiners will check the contact with floss; Proximal contacts must be visually closed; Some resistance to the passage of floss is not sufficient for judging a contact to be closed; Contacts must not prevent floss from passing through; Proximal contacts that are not visibly closed or that do not permit the passage of floss are evaluated as Critical Deficiencies	
Class IV lesions are not accepted. Class III lesions that may require modifications resulting in Class IV restorations are acceptable				

C. Case Acceptance: Administrative Flow

Case acceptance for each procedure begins at the candidate's cubicle by a CFE. The CFE will review the candidate's required forms for proper completion (*Patient Medical History Form*, blood pressure reading, *Patient Consent Form* and *Progress Form*), and will check for the presence of the required radiographs, and that they are labeled correctly and exposed within one year. If everything is in compliance with examination guidelines, including the patient's health status, the CFE will instruct the candidate to send the patient to the Evaluation Station for approval of the candidate's treatment selection.

If the patient is acceptable for treatment and if the treatment selection made by the candidate is approved, the patient will be returned to the candidate with an approval. If the patient acceptability is approved but the treatment selection is not approved, the candidate may attempt a second treatment selection, either for the same patient or a different patient. Only two attempts are allowed for approval of a treatment selection for each procedure (two attempts for the anterior restorative procedure or two attempts for the posterior restorative procedure).

Once the lesion has been approved, the case has been accepted and the candidate may prepare the cavity (if the lesion approval is for the first procedure of the day, the cavity preparation may not start until 8:00 AM. Candidates will be informed by a CFE that their lesion has been approved).

Candidates must receive approval of their treatment selections prior to beginning treatment. Evaluations of candidate treatment selections are made by examiners in the Evaluation Station, both through intraoral examination and radiographic evaluation. Three examiners will independently evaluate each treatment selection. At least two of the three examiners must agree to approve the selection.

D. Cavity Preparation and Evaluation of Preparation

1. General Administrative Flow

a. ARRIVAL/SET-UP: Candidates should arrive on the clinic floor in accordance with their designated arrival time (check your online candidate profile). Following check-in with the appropriate CDCA/exam facility representative, candidates will proceed to their assigned operatory and begin set-up procedures. CFEs will be available during the set-up period to answer any questions that candidates may have about the examination process.

b. CFE APPROVAL: Once candidates have completed the correct forms and associated documents, they should request a CFE to come to their operatory and begin the patient, paperwork, and medical history approval process. Candidates may be allowed to correct any process deficiencies or errors (i.e.: incomplete form) that are discovered and then submit their case once again to the CFE. Candidates must have their paperwork and documents approved in order to proceed.

c. LESION APPROVAL: Following the paperwork approval, candidates will then submit their case to the Evaluation Station for lesion approval. To do so, candidates should notify a CFE, who will send a runner to escort the candidate's patient, required paperwork, and required instruments (if necessary) to the check-in desk in order to check the patient into the Evaluation Station. Upon completion of the lesion approval evaluation, a runner will return the patient to the candidate.

d. CAVITY PREPARATION: If the lesion has been approved, candidates may begin cavity preparation when the patient has been returned. If a candidate wishes to submit a modification request, or if a pulpal exposure occurs/is suspected during the cavity preparation process, a CFE should be contacted immediately (also, see Modification Request and Pulpal Exposure procedures below). When cavity preparation has been completed to the candidate's satisfaction, the candidate should check-in at the designated check-in station and then request a runner who will escort his/her patient to the Evaluation Station for evaluation of the prepared cavity. All required instruments and materials must accompany the patient to the Evaluation Station each time. The patient must also be wearing a clean patient napkin with a candidate ID label affixed and must have eye protection available (see pg. 25 for required instruments list details).

2. *Preparation Recommendations*

a. **BITE BLOCKS:** may be used during treatment, but must be removed prior to sending the patient to the Evaluation Station

b. **CARIES DETECTOR:** Caries detector liquid (except red) may be used, but it must be completely removed prior to the submission of the preparation for evaluation.

c. **ISOLATION DAM:** An isolation dam is not generally required for cavity preparation. However, an isolation dam is required for:
- evaluation of modification requests at the express chair
- when there is a potential for pulp exposure during cavity preparation or if a pulp exposure occurs
- examination of the completed preparation at the evaluation station
- placement of restorative material

The isolation dam must be placed by the candidate, not the assistant. (The assistant may assist the candidate in isolation dam placement but may not place it.)

The dam must be intact (not torn or leaking). It must provide an unobstructed, clean and dry view of the entire cavity preparation.

At least one tooth on either side of the prepared tooth must be included under the isolation dam unless it is the most posterior tooth.

The dam must be removed for evaluation of the finished amalgam and composite restorations.

d. **CAVITY LINER:** If you determine that a liner is necessary, you must mark the liner request box on the *Progress Form* prior to sending the patient to the Evaluation Station for evaluation of the completed preparation.

- Liners are required only in deep preparations to cover areas immediately impacting pulpal health and integrity. Failure to request a liner in this circumstance will result in penalties.
- If the liner request is granted, the candidate must ask the CFE to check its placement before continuing with the final restoration.
- If the examiners determine that a liner is necessary but has not been requested by the candidate, an *Instructions to Candidate Form* will be issued requiring the candidate to place a liner. In this case also, the completed liner must be checked by the CFE. If the CFE finds the liner to be defective, the patient will be sent to the Evaluation Station for assessment prior to any alteration and before permission is given to place the restoration.
- **Criteria for liner placement:**
  - Placement only on pulpal and/or axial walls that deviate from the established ideal depth
  - Not placed on enamel or within 1.0 mm of the cavosurface margins

3. Modification Requests

During the course of cavity preparation, a candidate may, if necessary, submit a modification request for permission to extend the preparation further than the guidelines for an Acceptable preparation.

To submit a modification request, candidates should first ask a CFE for a red dot sticker, which they should then place in the appropriate place on the *Progress Form*. Along with the correct paperwork, the patient will be sent to an "express chair" in the Evaluation Station for evaluation of the modification request. Express chairs are reserved for focused evaluations for specific reasons, such as approvals of requests for modification to a cavity preparation, and any evaluations sent to an express chair are always expedited in order to afford the candidate maximum working time.

However, if all previous restorative material has not been removed during the initial preparation, and remaining restorative material is likely to leave unsupported tooth structure, candidates are advised to request a modification so that the outline of the proposed final preparation can be revised appropriately. Candidates should complete a *Modification Request Form*, call a CFE to acknowledge that the candidate has certified the preparation to at least ACC dimensions, and then send their patient to the Express Chair. In the Express Chair, the examiners can re-draw a proposed outline on the candidate's *Progress Form.*

NOTE: Prior to requesting any modifications, candidates must prepare the lesion to ACCEPTABLE dimensions, as determined by the ADEX criteria, regardless of whether all decay, decalcification, and/or pre-existing restorative material has been removed. Failure to do so will result in a penalty.

a. What Modifications Don't Require Sending the Patient to the Evaluation Station?

1) **Requests to smooth an approximating surface.** If an approximating tooth surface needs to be smoothed prior to placing a restoration to assure a good contact, the CFE can approve this only after the preparation has been checked-in to the Evaluation Station.

2) **Request for modification of the preparation because of tooth rotation.** The reason for the modification must be noted by the candidate on the *Progress Form* and the CFE must review and acknowledge the candidate's entry.

b. How do I Submit a Modification Request?

1) *Modification Request Form:* A *Modification Request Form* has numbered sections for up to four individual modification requests. Each request must be for one specific modification. For example, if a carious area involves the pulpal floor and the buccal wall, two separate requests must be made—one for extension of the pulpal floor and one for extension of the buccal wall. For each request, the candidate must indicate:

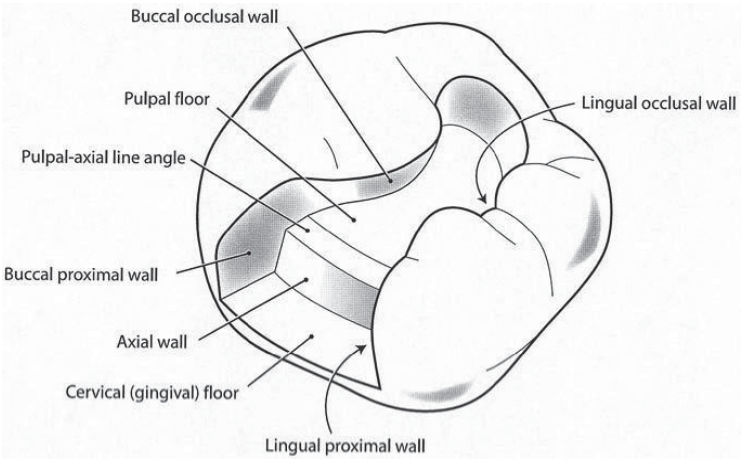
- **What** is the candidate requesting to do? (i.e.: "extend the proximal box" or "extend the axial wall")
- **Where**? (i.e.: "gingival floor" or "buccal proximal wall margin")
- **How Much** is to be removed? (i.e.: "0.5 mm")
- **Why** is the modification needed? (i.e.: "caries" or "decalcification")

If any of the four sections for modification requests are not needed, mark the **"No Request"** bubble for that section.

2) A **red dot sticker** (provided by a CFE) must be placed in the designated circle at the top-left of the *Progress Form* so that the representative at the check-in desk knows that the patient needs to be sent to the "express chair." Along with the patient, the form will be returned to the candidate with a **green dot sticker** to indicate that the request(s) have been assessed, and approval or denial of the request(s) will be indicated. Once all approved modifications are completed, the patient and all required papers and instruments should be submitted to the Evaluation Station for evaluation of the final preparation and all remaining restorative material and caries must have been removed.

It is best to try to anticipate all modifications for a preparation and to request them together when possible so as to minimize the time lost due to multiple visits to the express chair.

c. Terminology to be used when requesting a modification:



d. Denial of Modification Request:

- A request for modification may be denied on the basis of any one of the parts of the request. For example, if a request to "extend the box to the lingual 2 mm to remove caries" is denied, the candidate should not assume that the request was denied because there are no caries. The denial may be because the request to remove 2 mm is excessive.
- I**nappropriate requests for a modification will result in a point deduction**. A larger penalty will be assignedfor:
    - requests for a modification for removal of caries or decalcification when no caries or decalcification exists
    - repeated modification requests for the same unjustified modification

If a candidate extends a preparation beyond the dimensions requested and approved, the completed preparation will be evaluated as over-extended.

4. Pulpal Exposures

Generally speaking, exposure of the dental pulp should not occur during this examination. The lesion approval guidelines prohibit lesions with an obvious potential for pulpal exposure. Lesions that are approved for treatment are those which a prudent dentist with entry level skill should be able to safely excavate without penetrating the pulp space. However, the actual extent of caries, relative to the position and size of the dental pulp chamber can be greater than the extent anticipated from the radiographic images and clinical examination. A candidate should be able to recognize, during the course of cavity excavation, those instances in which a potential for exposure exists. In those cases, the examination requires that a candidate take the following measures.

a. If You Anticipate a Pulpal Exposure:

1) Inform a CFE immediately and be prepared to explain the circumstances and how you propose to proceed.
2) Before any further treatment may occur, A *Modification Request Form* describing the circumstances and documenting how you intend to manage the case must be completed and your plan must be evaluated.
3) Go to the check-in desk, let them know you're submitting a modification, and check your patient in to the Evaluation Station. A runner will come by to escort your patient, required forms, and required instruments to the Evaluation Station express chair. **Your patient must have an isolation dam in place before leaving your operatory.**
4) When the patient returns, if caries remain, you may request an indirect pulp cap through an additional modification request.

b. Indirect Pulp Cap Request

1) The request for an indirect pulp cap may be the first modification request in the event of high pulp horns and a moderate lesion on a young patient. Otherwise, requests for indirect pulp caps should be the final modification request.
2) Candidates should request a CFE to approve the modification request for an Indirect Pulp Cap. The CFE will place a **red dot** on the *Progress Form* and the patient is then sent to the Evaluation Station for approval.
3) If the request is approved, the patient will be returned for placement of the indirect pulp cap. The indirect pulp cap should only be placed on pulpal and/or axial walls in direct proximity to the pulp. If the request for an indirect pulp cap is inappropriate, a penalty will be assessed and an *Instructions to Candidate Form* will be returned with the patient to the candidate with further instructions that must be reviewed with a CFE before proceeding.
4) Once the indirect pulp cap is in place, a CFE must be requested. If the CFE approves the placement of the indirect pulp cap, the CFE will place a **pink dot** on the *Progress Form*, then the candidate may submit the patient for the preparation evaluation. If the CFE does not approve the placement, the patient will be sent to the Express Chair for further evaluation.
5) In Express Chair: If it is determined that the indirect pulp cap is appropriately placed, a **pink dot** will be placed on the *Progress Form*, and the patient will be sent directly to the Evaluation Station for evaluation. If it is determined that the indirect pulp cap is inappropriately placed, the patient will be returned to the candidate with further instructions that must be reviewed with a CFE before proceeding.
6) If the indirect pulp cap has been revised, a CFE must review the placement. If the revision is approved, the candidate may proceed to submit the patient for the preparation evaluation. If it is not approved, the patient will be sent back to the Express Chair for further evaluation.

c. **If a pulpal exposure occurs:**

1) Immediately inform a CFE who will walk you through the correct notations to make on the *Progress Form* (exposure occurrence, location of exposure, treatment plan, etc.). The CFE will document the time of occurrence on the *Progress Form*.

2) A *Modification Request Form* must then be marked "Pulp Exposure," and a candidate ID label must be applied to the form. The patient must be sent to the express chair **with an isolation dam in place**, with all proper paperwork, with the correct required instruments, and any additional required materials.

3) At the express chair, examiners will examine the patient. Based on their findings, examiners will evaluate the following:

   - The pulp exposure was recognized by the candidate, is justified by the clinical findings, and judged to be treatable by direct pulp capping
   - An isolation dam was in place when the exposure occurred
   - A previous *Modification Request Form* indicates that the candidate had approval to extend the preparation
   - The candidate did not exceed the dimensional limits of the approved modification request(s)
   - Damage to the pulp is slight and does not preclude the possibility of successful pulp capping
   - The candidate's proposed treatment is appropriate

   If any of the above are true: a pulp cap must be placed and must be examined and approved by a CFE prior to restoration of the tooth. The tooth must then be restored with a permanent restorative material and the patient returned to the Evaluation Station for evaluation of the completed restoration. A Follow-Up Form must be completed by the Candidate and signed by the CFE and the Chief Examiner prior to dismissal of the patient.

   If any of the above are NOT true: This is an unrecognized pulp exposure.

d. **Unrecognized Pulp Exposure:** If examiners in the Evaluation Station find a pulp exposure either when evaluating a modification request or when evaluating a completed preparation, the procedure is terminated for that candidate and the candidate will receive no points for that procedure. The Chief Examiner and a CFE will inform the candidate and the candidate will receive an *Instructions to Candidate* form instructing the candidate to:

   - place a therapeutic liner over the exposed pulp
   - place a temporary restoration using a permanent restorative material
   - inform the patient of the need for further treatment
   - arrange for follow-up treatment for the patient
   - complete a *Follow-Up Form*

A CFE must check the placement of the therapeutic liner and the temporary restoration prior to dismissal of the patient.

If the other restorative procedure has already been completed, the candidate will receive credit for that procedure, but he/she will have to retake the failed procedure. If the pulp exposure occurred during cavity preparation for the first restorative procedure, the candidate will not be permitted to proceed to the second restorative procedure.

E. Final Restoration and Evaluation of Restoration

1. *Restoration Placement*

When the patient is returned to the candidate after evaluation of the cavity preparation, treatment may continue. If the CFE bringing the patient back from the Evaluation Station gives authorization to continue and no *Instructions to Candidate Form* has been received, the candidate may immediately proceed to placing the restoration. An isolation dam must be in place during placement of restorative materials.

2. *Restoration Evaluation*

After the isolation dam is removed and the restoration has been adjusted for occlusion, the patient may be sent—with all required paperwork, instruments, wearing a fresh patient napkin and candidate ID label affixed to the napkin, as well as protective eye glasses to the Evaluation Station for evaluation of the completed restoration. If the completed restoration is evaluated as acceptable, the patient is returned to the candidate for dismissal procedures or for participation in another examination procedure (if the candidate is performing multiple procedures on the same patient).

The Class II amalgam restoration must be sufficiently set to allow a check of the occlusion.

Composite restorations must be presented without surface glaze or sealer on the restoration.

If the final restoration is evaluated as being critically deficient, according to the criteria, the candidate will receive no points for that restorative procedure. The CFE bringing the patient back to the candidate will also bring an *Instructions to Candidate Form* with additional instructions that the candidate must review with a CFE and subsequently complete. Before this additional treatment is started the patient, candidate, CFE and Chief Examiner will meet to confirm that the responsibility for further treatment is understood. A *Follow-Up Form* will be issued to the candidate. When treatment has been completed, the CFE must be requested to evaluate the patient before the patient is dismissed. Any restoration left in place at the discretion of the Chief Examiner does not indicate an “acceptable” restoration. If temporization occurs on the first restorative procedure, the candidate will be dismissed from the examination before attempting the second restorative procedure and will have to re- attempt both restorative procedures at a future exam.

F. Restorative Examination Check-Out Procedures

1. ***If the periodontal procedure is your final procedure of the exam day***
   Candidates should consolidate all required Restorative Examination paperwork and materials into the provided white envelope and set the envelope aside while completing the periodontal scaling examination.

2. ***If NOT attempting the periodontal scaling procedure***
   Once the CFE has dismissed their patient, candidates who are only attempting one or both restorative procedures should consolidate all required paperwork and materials into the provided white envelope, then proceed to the designated check-out station to complete the check-out process.

   a. Place the following materials inside the white envelope PRIOR TO proceeding to the designated check-out station:
      - Completed *Progress Form(s)* and all paperwork received during the exam (ie: ITC forms, ERF forms, Modification Request Forms, Follow-up Forms, radiographs— if printed, etc.)
      - Photo ID badge for candidate assistant (paper badge only; discard the plastic badge holder)
      - *Patient Consent Form(s)*
      - *Medical History Form(s)*
      - Cubicle cards (2)
      - Radiographs for the Restorative Dentistry Examination (if the testing site requires that radiographs be retained in the patient record, the candidate may submit duplicates. At sites where digital images are displayed on a monitor, an electronic copy of the digital images used must be submitted to the testing agency)

The ADEX Dental Examination Series:

Patient-Based Procedures

IV. 2020 ADEX CRITERIA FOR RESTORATIVE PROCEDURES

- Anterior Composite Preparation
- Anterior Composite Restoration
- Posterior Amalgam Preparation
- Posterior Amalgam Restoration
- Posterior Composite Preparation
- Posterior Composite Restoration

CDCA
THE COMMISSION ON
DENTAL COMPETENCY
ASSESSMENTS

PREPARATION: *ANTERIOR COMPOSITE*

ADEX 2020

Tooth #: _____

M	D	F	L

CRITICAL ERRORS		
Wrong tooth/surface treated	No	Yes
Unrecognized exposure	No	Yes

ACC= Adheres to Criteria SUB= Marginally Substandard DEF= Critically Deficient

EXTERNAL OUTLINE FORM	
Outline Extension	
ACC	The wall opposite the access, if broken, may extend < 1.0 mm beyond the contact area. The outline form may be over-extended mesiodistally 0.5 mm to ≤ 1.0 mm beyond what is necessary for complete removal of caries and/or previous restorative material. The outline form dimension is ≤ 3.0 mm incisal gingivally.
SUB	A. The outline form is over-extended mesiodistally > 1.0 mm but ≤ 1.5 mm beyond what is necessary for complete removal of caries and/or previous restorative material. B. The incisal cavosurface margin is over-extended so that the integrity of the incisal angle is compromised. C. The wall opposite the access opening extends > 1.0 mm but ≤ 2.0 mm beyond the contact area. D. The outline form dimension is > 3.0 mm but ≤ 5.0 mm incisal gingivally.
DEF	A. The outline form is over-extended mesiodistally > 1.5 mm beyond necessary for complete removal of caries and/or previous restorative material. B. The incisal angle is unnecessarily removed or fractured. C. The wall opposite the access opening extends > 2.0 mm beyond the contact area. D. The outline form dimension is > 5.0 mm incisal gingivally.
Gingival Clearance	
ACC	The gingival clearance is ≤ 1.0 mm.
SUB	The gingival clearance is > 1.0 mm but ≤ 2.0 mm.
DEF	The gingival clearance is > 2.0 mm.
Margin Smoothness/Continuity/Bevels	
ACC	The cavosurface margins may be slightly irregular. Enamel cavosurface margin bevels, if present, are ≤ 1.0 mm in width.
SUB	The cavosurface margin is rough and severely irregular. Enamel cavosurface margin bevels, if present, are > 1.0 mm in width, are not uniform, or are inappropriate for the size of the restoration.
Sound Marginal Tooth Structure	
ACC	There may be a small area of unsupported enamel which is not necessary to preserve facial aesthetics. There is no previous restorative material, excluding sealants, at the cavosurface margin.
SUB	A. There are large or multiple areas of unsupported enamel which are not necessary to preserve facial aesthetics. B. The cavosurface margin does not terminate in sound natural tooth structure.
DEF	There is explorer-penetrable decalcification remaining on the cavosurface margin.

Preparation: *Anterior Composite* - continued

INTERNAL FORM	
Axial Walls	
ACC	MAX CENTRALS & MAX/MAND CUSPIDS: The depth of the axial wall extends ≤ 1.5 mm in depth from the DEJ. MAX LATERALS & MAND INCISORS: The depth of the axial wall extends ≤ 1.25 mm in depth from the cavosurface margin.
SUB	MAX CENTRALS & MAX/MAND CUSPIDS: The depth of the axial wall extends > 1.5 mm but ≤ 2.5 mm in depth from the DEJ. MAX LATERALS & MAND INCISORS: The depth of the axial wall extends > 1.25 mm but ≤ 2.0 mm in depth from the cavosurface margin.
DEF	MAX CENTRALS & MAX/MAND CUSPIDS: The depth of the axial wall extends > 2.5 mm in depth from the DEJ. MAX LATERALS & MAND INCISORS: The depth of the axial wall extends > 2.0 mm beyond the cavosurface margin.
Internal Retention	
ACC	If used, rounded internal retention is placed in the dentin of the gingival and incisal walls just axial to the DEJ as dictated by cavity form. Retention is tactilely and visually present.
SUB	When used, retention is excessive and undermines enamel, or jeopardizes the incisal angle, or encroaches on the pulp.
Caries/Remaining Material	
ACC	All carious tooth structure and/or previous restorative material are removed.
DEF	A. Caries has not been accessed and/or remains in the preparation. B. Previous restorative material remains in the preparation.
TREATMENT MANAGEMENT	
Adjacent Tooth Damage	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires re-contouring that changes the shape and/or contour and/or contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.
Soft Tissue Damage	
ACC	The soft tissue is free from damage or there is tissue damage that is consistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and pre-existing condition of the soft tissue.

RESTORATION: *ANTERIOR COMPOSITE*

ADEX 2020

Tooth #: _____

M	D	F	L

CRITICAL ERRORS		
The restoration is debonded and/or movable in the preparation	No	Yes
The restoration is fractured	No	Yes

ACC= Adheres to Criteria SUB= Marginally Substandard DEF= Critically Deficient

MARGIN INTEGRITY AND SURFACE FINISH	
Margin Excess/Deficiency	
ACC	A. No marginal deficiency. B. Marginal excess ≤ 0.5 mm at the restoration-tooth interface, detectable either visually or with the tine of an explorer. There is no evidence of pits and/or voids at the cavosurface margin.
SUB	A. DEFICIENCY: The restoration-tooth interface is detectable visually or with the tine of an explorer, and there is evidence of marginal deficiency ≤ 0.5 mm, which can include pits and/or voids at the cavosurface margin. B. EXCESS: The restoration-tooth interface is detectable visually or with the tine of an explorer, and there is evidence of marginal excess > 0.5 mm but ≤ 1.0 mm, which can include pits and/or voids at the cavosurface margin. There is flash with contamination underneath, but it is not internal to the cavosurface margin and could be removed by polishing or finishing.
DEF	A. There is evidence of marginal deficiency of > 0.5 mm, to include pits and voids at the cavosurface margin, and/or there is an open margin, and/or there is internal contamination at the interface between the restoration and the teeth. B. There is a margin excess (excluding bonding agent or unfilled resin) of > 1.0 mm.
Adjacent Tooth Structure	
ACC	There is no or minimal evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure adjacent to the restoration. (Enameloplasty)
DEF	There is gross enameloplasty resulting in the exposure of dentin.
CONTOUR, CONTACT, AND OCCLUSION	
Interproximal Contact	
ACC	Interproximal contact is visually closed, and the contact is adequate in size, shape, or position but may demonstrate little resistance to dental floss.
DEF	A. The interproximal contact is visually open or concave/irregular, allowing for food impaction. B. The interproximal contact will not allow floss to pass.
Centric/Excursive Contacts	
ACC	When checked with articulating ribbon paper, all centric and excursive contacts on the restoration are consistent in size, shape, and intensity with such contacts on other teeth in that quadrant.
SUB	When checked with articulating paper, the restoration is in hyper-occlusion, making it inconsistent in size, shape, and intensity with the occlusal contacts on surrounding teeth, and it requires adjustment.
DEF	There is gross hyper-occlusion so that the restoration is the only point of occlusion in that quadrant.

TREATMENT MANAGEMENT	
Adjacent Tooth Damage	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
DEF	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure.
Soft Tissue Damage	
ACC	The soft tissue is free from damage, or there is tissue damage that is consistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and pre-existing condition of the soft tissue.

PREPARATION: *POSTERIOR AMALGAM*

ADEX 2020

Tooth #: _____

MO	DO	MOD

CRITICAL ERRORS		
Wrong tooth/surface treated	No	Yes
Unrecognized exposure	No	Yes

ACC= Adheres to Criteria SUB= Marginally Substandard DEF= Critically Deficient

EXTERNAL OUTLINE FORM	
Proximal Clearance	
ACC	Contact is visibly open proximally, and proximal clearance at the height of contour extends ≤ 1.5 mm on either one or both proximal walls.
SUB	A. Proximal clearance at the height of contour is > 1.5 mm but ≤ 3.0 mm on either one or both proximal walls.
DEF	A. Proximal clearance at the height of contour is > 3.0 mm on either one or both proximal walls. B. The walls of the proximal box are not visually open.
Gingival Clearance	
ACC	The gingival clearance is visually open but ≤ 2.0 mm.
SUB	A. The gingival clearance is > 2.0 mm but ≤ 3.0 mm.
DEF	A. The gingival clearance is > 3.0 mm. B. Gingival contact is not visually open.
Outline Shape/Continuity/Extension	
ACC	The outline form includes all carious and non-coalesced fissures, and is smooth, rounded, and flowing.
SUB	The outline form is inappropriately over-extended so that it compromises the remaining marginal ridge and/or cusp(s).
DEF	The outline form is over-extended so that it compromises, undermines, and leaves unsupported the remaining marginal ridge to the extent that the pulpal-occlusal wall is unsupported by dentin, or the width of the marginal ridge is < 1.0 mm.
Isthmus	
ACC	The isthmus may be between 1.0 mm - 2.0 mm in width but is ≤ 1/3 the intercuspal width.
SUB	A. The isthmus is > 1/3 but ≤ 1/2 the intercuspal width.
DEF	A. The isthmus is > 1/2 the intercuspal width. B. The isthmus is < 1.0 mm.
Cavosurface Margin	
ACC	The proximal cavosurface margin deviates from 90° but is unlikely to jeopardize the longevity of the tooth or restoration; this would include small areas of unsupported enamel.
SUB	The proximal cavosurface margin deviates from 90° and is likely to jeopardize the longevity of the tooth or restoration. This would include unsupported enamel and/or excessive bevel(s).
Sound Marginal Tooth Structure	
ACC	The cavosurface margin terminates in sound natural tooth structure. There is no previous restorative material, including sealants, at the cavosurface margin. There is no degree of decalcification on the gingival margin.
SUB	A. There are large or multiple areas of unsupported enamel which are not necessary to preserve facial aesthetics. B. The cavosurface margin does not terminate in sound natural tooth structure.
DEF	A. There is explorer-penetrable decalcification remaining on the cavosurface margin.

INTERNAL FORM	
Axial Walls	
ACC	The depth of the axial wall extends beyond the DEJ ≤ 1.5 mm.
SUB	A. The axial wall extends beyond the DEJ > 1.5 mm but ≤ 2.5 mm.
DEF	A. The axial wall extends beyond the DEJ > 2.5 mm. B. The axial wall is entirely in enamel.
Pulpal Floor	
ACC	The pulpal floor depth extends beyond the DEJ ≤ 1.5 mm.
SUB	A. The pulpal floor extends beyond the DEJ > 1.5 mm but ≤ 2.5 mm.
DEF	A. The pulpal floor extends beyond the DEJ > 2.5 mm. B. The pulpal floor is entirely in enamel.
Caries/Remaining Material	
ACC	All caries and/or previous restorative material are removed.
DEF	A. Caries has not been accessed and/or remains in the preparation. B. Previous restorative material remains in the preparation.
Retention	
ACC	Retention, when used, is well defined, in dentin, and does not undermine enamel.
SUB	Retention, when used, undermines the enamel or may compromise the tooth or restoration.
DEF	Retention, when used, grossly compromises the tooth or restoration.
Proximal Box Walls	
ACC	The walls of the proximal box are parallel, but appropriate internal retention is present.
SUB	The walls of the proximal box diverge occlusally which is likely to jeopardize the longevity of the tooth or restoration.
DEF	The walls of the proximal box diverge occlusally which offers no retention and will jeopardize the longevity of the tooth or restoration.
TREATMENT MANAGEMENT	
Adjacent Tooth Damage	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires re-contouring that changes the shape and/or contour and/or contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.
Soft Tissue Damage	
ACC	The soft tissue is free from damage or there is tissue damage that is consistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and pre-existing condition of the soft tissue.

RESTORATION: *POSTERIOR AMALGAM*

ADEX 2020

Tooth #: _____

MO | DO | MOD

CRITICAL ERRORS		
The restoration is fractured.....	No	Yes

ACC = Adheres to Criteria SUB= Marginally Substandard DEF= Critically Deficient

MARGIN INTEGRITY AND SURFACE FINISH	
Margin Excess/Deficiency	
ACC	A. No marginal deficiency B. Marginal excess ≤ 0.5 mm at the restoration-tooth interface, detectable either visually or with the tine of an explorer. There is no evidence of pits and/or voids at the cavosurface margin.
SUB	A. DEFICIENCY: The restoration-tooth interface is detectable visually or with the tine of an explorer, and there is evidence of marginal deficiency ≤ 0.5 mm, which can include pits and/or voids at the cavosurface margin. B. EXCESS: Any marginal excess is detectable visually or with the tine of an explorer, and the discrepancy is > 0.5 mm but ≤ 1.0 mm, which can include pits and/or voids at the cavosurface margin.
DEF	A. There is evidence of marginal deficiency of > 0.5 mm which includes pits and voids at the cavosurface margin, and/or there is an open margin. B. There is a marginal excess of > 1.0 mm.
Adjacent Tooth Structure	
ACC	There is no or minimal evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure adjacent to the restoration. (Enameloplasty)
DEF	There is gross enameloplasty resulting in the exposure of dentin.
CONTOUR, CONTACT, AND OCCLUSION	
Interproximal Contact	
ACC	Interproximal contact is visually closed, and the contact is adequate in size, shape, or position but demonstrates little resistance to dental floss.
DEF	A. The interproximal contact is visually open or concave/irregular, allowing for food impaction. B. The interproximal contact will not allow floss to pass.
Centric/Excursive Contacts	
ACC	When checked with articulating paper, all centric and excursive contacts on the restoration are consistent in size, shape, and intensity with such contacts on other teeth in that quadrant.
SUB	When checked with articulating paper, the restoration is in hyper-occlusion, making it inconsistent in size, shape, and intensity with the occlusal contacts on surrounding teeth, and it requires adjustment.
DEF	There is gross hyper-occlusion so that the restoration is the only point of occlusion in that quadrant.

Restoration: *Posterior Amalgam* - continued

TREATMENT MANAGEMENT	
Adjacent Tooth Damage	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
DEF	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure.
Soft Tissue Damage	
ACC	The soft tissue is free from damage or there is tissue damage that is consistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and pre-existing condition of the soft tissue.

PREPARATION: *POSTERIOR COMPOSITE*

ADEX 2020

Tooth #: _____

MO	DO	MOD

CRITICAL ERRORS		
Wrong Tooth/Surface Treated	No	Yes
Unrecognized Exposure	No	Yes

ACC = Adheres to Criteria SUB= Marginally Substandard DEF= Critically Deficient

EXTERNAL OUTLINE FORM	
Proximal Clearance	
ACC	Proximal contact is either closed or visibly open, and, at the height of contour, proximal clearance may extend ≤ 1.0 mm beyond either one or both proximal walls.
SUB	Proximal clearance at the height of contour extends > 1.0 mm but ≤ 2.5 mm beyond either one or both proximal walls.
DEF	Proximal clearance at the height of contour extends > 2.5 mm beyond either one or both proximal walls.
Gingival Clearance	
ACC	The gingival clearance is visually open but ≤ 1.0 mm.
SUB	A. The gingival clearance is > 1.0 mm but ≤ 2.0 mm.
DEF	A. The gingival clearance is > 2.0 mm. B. The gingival contact is not visually open.
Outline Shape/Continuity/Extension	
ACC	The outline form may be sharp and irregular.
SUB	A. The outline form is inappropriately over-extended, compromising the remaining marginal ridge and/or cusp(s).
DEF	A. The outline form is grossly over-extended, compromising and undermining the remaining marginal ridge to the extent that the cavosurface margin is unsupported by dentin. B. The width of the marginal ridge is ≤ 0.5 mm.
Isthmus	
ACC	The isthmus may be between 1.0 mm - 2.0 mm in width but ≤ 1/3 the intercuspal width.
SUB	The isthmus is > 1/3 the intercuspal width but ≤ 1/2 the intercuspal width.
DEF	The isthmus is > 1/2 the intercuspal width.
Cavosurface Margin	
ACC	The external cavosurface margin meets the enamel at 90°; The gingival floor is flat, smooth, and perpendicular to the long axis of the tooth.
SUB	The proximal cavosurface margin deviates from 90° and is likely to jeopardize the longevity of the tooth or restoration. This would include unsupported enamel and/or excessive bevel(s).
Sound Marginal Tooth Structure	
ACC	The cavosurface margin terminates in sound tooth structure. There is no previous restorative material, excluding sealants, at the cavosurface margin.
SUB	A. There are large or multiple areas of unsupported enamel which are not necessary to preserve facial aesthetics. B. The cavosurface margin does not terminate in sound natural tooth structure.
DEF	There is explorer-penetrable decalcification remaining on the cavosurface margin.

Preparation: *Posterior Composite* - continued

INTERNAL FORM	
Axial Walls	
ACC	The depth of the axial wall extends beyond the DEJ ≤ 1.5 mm.
SUB	A. The axial wall extends beyond the DEJ > 1.5 mm but ≤ 2.5 mm.
DEF	A. The axial wall extends beyond the DEJ > 2.5 mm. B. The axial wall is entirely in enamel.
Pulpal Floor	
ACC	The pulpal floor depth is ≥ 0.5 mm but ≤ 3.0 mm in all areas; there may be remaining enamel.
SUB	A. The pulpal floor depth is > 3.0 mm but ≤ 4.0 mm from the cavosurface margin.
DEF	A. The pulpal floor is > 4.0 mm from the cavosurface margin. B. The pulpal floor depth is < 0.5 mm.
Caries/Remaining Material	
ACC	All caries and/or previous restorative material are removed.
DEF	A. Caries has not been accessed and/or remains in the preparation. B. Previous restorative material remains in the preparation.
Retention	
ACC	Retention, when used, is well defined, in dentin, and does not undermine enamel.
SUB	Retention, when used, undermines the enamel.
Proximal Box Walls	
ACC	The proximal walls are parallel or convergent occlusally but may be slightly divergent and are not likely to jeopardize the longevity of the tooth or restoration.
SUB	The proximal walls are too divergent.
TREATMENT MANAGEMENT	
Adjacent Tooth Damage	
ACC	Any damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires re-contouring that changes the shape and/or contour and/or contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.
Soft Tissue Damage	
ACC	The soft tissue is free from damage, or there is tissue damage that is consistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and pre-existing condition of the soft tissue.

RESTORATION: *POSTERIOR COMPOSITE*

ADEX 2020

Tooth #: _____

MO | DO | MOD

CRITICAL ERRORS		
The restoration is fractured.....	No	Yes

ACC= Adheres to Criteria SUB= Marginally Substandard DEF= Critically Deficient

MARGIN INTEGRITY AND SURFACE FINISH	
Margin Excess/Deficiency	
ACC	A. No marginal deficiency B. Marginal excess ≤ 0.5 mm at the restoration-tooth interface, detectable either visually or with the tine of an explorer. There is no evidence of pits and/or voids at the cavosurface margin.
SUB	A. DEFICIENCY: The restoration-tooth interface is detectable visually or with the tine of an explorer, and there is evidence of marginal deficiency ≤ 0.5 mm, which can include pits and/or voids at the cavosurface margin. B. EXCESS: The restoration-tooth interface is detectable visually or with the tine of an explorer, and there is evidence of marginal excess > 0.5 mm but ≤ 1.0 mm, which can include pits and/or voids at the cavosurface margin. There is flash with contamination underneath, but it is not internal to the cavosurface margin and could be removed by polishing or finishing.
DEF	A. There is evidence of marginal deficiency of > 0.5 mm, to include pits and voids at the cavosurface margin, and/or there is an open margin, and/or there is internal contamination at the interface between the restoration and the tooth. B. There is a marginal excess (excluding bonding agent or unfilled resin) of > 1.0 mm.
Adjacent Tooth Structure	
ACC	There is no or minimal evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure adjacent to the restoration.
DEF	There is gross enameloplasty resulting in the exposure of dentin.
Bonding	
ACC	The restoration is bonded to the prepared tooth structure.
DEF	The restoration is debonded and/or movable in the preparation.
CONTOUR, CONTACT, AND OCCLUSION	
Interproximal Contact	
ACC	Interproximal contact is visually closed, and the contact appears adequate in size, shape, or position, but may demonstrate little resistance to dental floss.
DEF	A. The interproximal contact is visually open or concave/irregular, allowing for food impaction. B. The interproximal contact will not allow floss to pass.
Centric/Excursive Contacts	
ACC	When checked with articulating paper, all centric and excursive contacts on the restoration are consistent in size, shape, and intensity with such contacts on other teeth in that quadrant.
SUB	When checked with articulating paper, the restoration is in hyper-occlusion, making it inconsistent in size, shape, and intensity with the occlusal contacts on surrounding teeth, and it requires adjustment.
DEF	There is gross hyper-occlusion so that the restoration is the only point of occlusion in that quadrant.

Restoration: *Posterior Composite* - continued

TREATMENT MANAGEMENT	
Adjacent Tooth Damage	
ACC	Any minimal damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
DEF	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure.
Soft Tissue Damage	
ACC	The soft tissue is free from damage, or there is tissue damage that is consistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure.

The ADEX Dental Examination Series:

Patient-Based Procedures

V. PERIODONTAL SCALING EXAMINATION

- Procedure Overview
- Treatment Goals
- Treatment Selection Requirements
- Instruments
- Radiographs & Local Anesthesia
- Pre-Treatment Procedures
- Post-Treatment Evaluation

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ASSESSMENTS

A. Periodontal Scaling Procedure Overview

Within a 90-minute time period, candidates perform basic periodontal scaling procedures for patients who require relatively uncomplicated, non-surgical periodontal scaling treatment, as would be commonly encountered in a general dental practice. Candidates must present a case with subgingival calculus and select twelve tooth surfaces with subgingival calculus from within that case. Next, candidates must remove the subgingival calculus, as well as supragingival calculus and stain from the selected teeth. The evaluation components for the periodontal scaling procedure are:

PRE-TREATMENT EVALUATION:

- **Case Acceptance** (diagnosis and treatment planning) includes treatment selection (teeth and surfaces for treatment), proper completion of all required forms, and the assessment that the patient is healthy enough to undergo the required treatment
- **Calculus detection** includes the ability to accurately detect and record the presence of subgingival calculus

POST-TREATMENT EVALUATION:

- **Calculus removal** includes the ability to remove subgingival calculus, supragingival calculus, plaque, and stain
- **Treatment management** includes the ability to perform the required procedures comfortably and safely without undue damage to teeth and soft tissues

During the course of the exam, if any problems arise, candidates should immediately notify a CFE (Clinic Floor Examiner)

B. Treatment Goals

REMOVE SUBGINGIVAL CALCULUS from all surfaces of the selected teeth. At the conclusion of treatment, subgingival surfaces of the assigned teeth must be smooth with no deposits detectable with an #11/12 explorer.

REMOVE SUPRAGINGIVAL CALCULUS, PLAQUE, AND STAIN from all coronal surfaces of the assigned teeth so that all surfaces are visually clean when air-dried and tactilely smooth upon examination with an #11/12 explorer.

C. Treatment Selection Requirements

1. Treatment Selection Guidelines

The candidate must select teeth and surfaces for treatment in the Periodontal Scaling Examination using the following guidelines:

- **Teeth:** There must be at least six, but not more than eight permanent teeth selected, at least three of which are molars or premolars, including at least one molar. All posterior teeth must have at least one approximating tooth surface within a 2.0 mm distance. Each of the selected teeth must have at least one surface of subgingival calculus selected for removal. The teeth selected for treatment should be entered electronically at least 48 hours prior to the day of the examination by going to their online candidate profile. Candidates may enter their teeth selections onsite if they are unable to do so 48-hours prior to the exam. Note that waiting to enter the teeth selection onsite will use your examination time.

- **Calculus:** There must be **12 surfaces of explorer-detectable subgingival calculus** identified on the selected teeth, and no more than four surfaces may be on the incisors. Three (3) of the 12 identified surfaces of calculus must be on interproximal surfaces of posterior teeth.
    - Explorer detectable subgingival calculus is defined as a distinct deposit of calculus that can be felt with an explorer as it passes over the calculus. Qualified deposits may exhibit such characteristics as:
        - A definite “jump” or “bump” with the rough surface characteristic of calculus felt by the explorer
        - Ledges or ring formations
        - Spiny or nodular formations
    - Qualified deposits must be at least partially apical to the gingival margin and may occur with or without contiguous or associated supra-gingival deposits.

2. Treatment Exclusions

- Retained primary teeth may not be included in the treatment selection
- Teeth with full-banded orthodontics, implants, fixed appliances which are banded, bonded, or splinted—either for orthodontic or periodontal reasons—may not be included in the treatment selection

3. *Treatment Selection Worksheet*

A *Treatment Selection Worksheet* (available in your online candidate profile) should be used to identify and document a selection of teeth that meet the criteria. Proper completion of the *Treatment Selection Worksheet*:

1. Selected teeth must be listed in ascending order.
2. Mark the appropriate letter for the surface in the box next to the number of the tooth selected for treatment.
3. If subgingival calculus is present on the line angles of the tooth, it must be marked on the interproximal surface, (e.g., a deposit on the distofacial line angle would be marked on the distal surface).

Until 48 hours prior to the examination, candidates may enter their treatment selections online through their candidate profiles. The treatment selection may also be entered or changed on the day of the examination.

The *Treatment Selection Worksheet* is for the candidate's use only. It is not sent to the Evaluation Station for patient evaluation. Prior to the start of the examination on exam day, a candidate may, however, take the *Treatment Selection Worksheet* to the check-in desk if a change to his/her treatment selection needs to be made.

D. Instruments

1. *Authorized Instruments*

Instruments as well as procedures and materials used by the candidate are the choice of the candidate, provided that all of the following are true:

a. The instruments are currently accepted and taught by accredited dental schools
b. The candidate has been trained in the use of the instruments
c. Ultrasonic instruments are acceptable, but may or may not be supplied by the exam site
d. The instruments are not otherwise prohibited in this manual

2. *Unauthorized Instruments*

- The use of disclosing solution is prohibited
- Air abrasion polishing devices are prohibited

3. *Required Instruments for Evaluation*

In addition to the required paperwork, each time a patient visits the Evaluation Station (total of two times for this procedure), the following instruments must accompany the patient in a closed, sealed, puncture-resistant container:

- Clean, unscratched, non-disposable # 4 or # 5 front surface mirror
- Periodontal probe with millimeter or Williams markings (1-2-3—5—7-8-10)
- Periodontal #11/12 explorer
- 2X2 gauze sponges
- Air/water syringe tip

The above list applies to candidates taking the examinations at sites where instruments are not provided directly to the Evaluation Station by the host site (school). At some host sites, instruments are provided by the school directly to the Evaluation Station, so candidates do not need to send instruments with their patients. Upon completion of the registration process, candidates should contact the host site to determine whether or not the host school is providing instruments or if they must bring their own. Candidates should also contact the host school to determine their sterilization availability.

Candidate performance will not be evaluated in the Evaluation Station without the proper instruments.

E. Radiographs & Local Anesthesia

1. Required Radiographs

Radiographs for the Periodontal Scaling Examination Section must meet the following criteria:

- A diagnostic panoramic radiograph or full-mouth radiographic series exposed within the last three years
- Indication of the exposure date, patient's name, and right and left side ("R" and "L") must be visible on the radiograph
- If a full-mouth series is presented, films must be mounted according to ADA procedures (convexity up)
- A candidate ID label must be affixed to each x-ray mount or digital print submitted; the label must not obscure any portion of the images, and it may be placed in the form of a folded over tab at the edge of the mount, if necessary.
- Copies are acceptable
- Digital images or prints are permitted; candidates from outside the host school need to submit digital prints since the school will not upload images from outside the facility; Digital prints must be printed on high quality paper (preferably photo-grade) or acetate. Radiographs printed on standard copy paper may be rejected if they do not provide sufficient resolution and clarity. All images must include: patient's name, date of exposure, candidate's ID number, and indication of right and left sides
- Remove or mask the school name from all radiographs (for candidate anonymity)
- Images may be displayed on monitors if they are available from the school's database

Radiographs must be taken for diagnostic purpose only. Radiographs that have errors such as minor cone cutting, not showing all of a third molar, or a slightly off-center panoramic film will not result in point deduction. Radiographic technique is not graded.

2. *Local Anesthesia*

The anesthetic record section of the *Progress Form* must be completed prior to requesting a CFE to begin the Case Acceptance procedure. The following anesthetic information must be indicated on the *Progress Form*:

- Type(s) of Injection (specific block or infiltration to be administered)
- Anesthetic(s) (generic or brand name and percent used)
- Vasoconstrictor (type and concentration)
- Quantity (volume)

If the patient has previously been given an anesthetic on the same day, the candidate must note that on the *Progress Form*. Candidates may provide local anesthesia for periodontal scaling patients prior to sending their patients to the Evaluation Station for the Pre-Treatment Evaluation.

Initially, a maximum of 2 cartridges may be approved by a CFE

If additional anesthetic is needed at any point in the examination, the candidate must receive permission from a CFE prior to administering any anesthetic

Whenever additional anesthetic is administered, the candidate must update the anesthetic record on the *Progress Form*. Also, the candidate must record the total amount of anesthetic used during the examination on the *Progress Form* before sending the patient to the Evaluation Station for the Post-Treatment Evaluation.

F. Pre-Treatment Procedures

1. *PCA (Periodontal Case Acceptance)*

Once the treatment selection has been made, and the candidate is prepared to send his/her patient to the Evaluation Station for pre-treatment evaluation, a CFE should be requested to begin the PCA process. The CFE will check for the proper completion of all required forms, review the patient's blood pressure recording and medical history, and review that the correct radiographs are present and have the proper labeling and exposure date. If a treatment selection has been accepted, and if all of the above requirements are met, the CFE will approve the case.

2. *Pre-Treatment Evaluation*

a. CFE CLEARANCE: When a CFE has determined that the candidate has labeled and properly completed all required forms, that the required radiographs are properly labeled and were exposed within 3 years for the full mouth or panoramic series, and that the patient's blood pressure reading and health history findings are within examination guidelines, the CFE will allow the candidate to send the patient to the Evaluation Station for Pre-Treatment Evaluation.

b. CHECK-IN: A CFE will then request a runner to escort their patient to the check-in desk, where the patient will be checked-in to an operatory in the Evaluation Station (if no operatories are available, patients will be placed in the waiting room and will be escorted in the order in which they were checked-in).

For each visit a patient makes to the Evaluation Station, he/she must be wearing the following:

- **Clean napkin**
- **Patient ID badge**
- **Protective eyewear (patient may carry eyewear instead of wearing it)**

The following items must also be submitted consistent with asepsis protocols and will always be carried by the patient while in transit to and from the Evaluation Station:

- **Cubicle card**
- **Progress Form**
- **Patient Medical History Form**
- **Patient Consent Form**
- **Instruments** (clean, undamaged # 4 or # 5 mouth mirror, 11/12 explorer, periodontal probe with millimeter or Williams markings, air/water syringe tip, 2X2 gauze sponges)

c. PAPERWORK EVALUATION: In the Evaluation Station, the examiners will check for the diagnostic quality of the radiographs submitted, that the patient requirements for the examination are met, and they will check for explorer detectable calculus on the 12 selected surfaces. Three examiners will evaluate the required forms, Medical History and radiographs. If there are correctable paperwork errors the patient may be returned to the candidate and the same case may be re-submitted with the errors corrected.

d. QUALIFYING CALCULUS EVALUATION: Three examiners will then independently evaluate the patient for the presence of subgingival calculus on each of the 12 surfaces selected by the candidate for treatment. Corroborated findings that subgingival calculus is not present on four or more of the selected surfaces constitutes a critically deficient error by the candidate in calculus detection and results in termination of the exam. Back-up patients are NOT authorized for the periodontal scaling examination (the candidate may proceed to a restorative procedure if either of the restorative procedures has not been performed yet and if there is sufficient time remaining in the examination).

Pre-Treatment Evaluation may take 30 minutes or longer, depending on how many patients are being seen at that time in the Evaluation Station

e. PATIENT RETURN: Following the completion of the pre-treatment evaluation, a CFE will bring the patient back to the candidate and notify the candidate that treatment may begin. The candidate will be allowed 90 minutes for treatment, unless there are less than 90 minutes remaining in the examination time. A start and finish time for treatment will be recorded on the candidate's *Progress Form*, and the candidate's patient must be checked-in to the Evaluation Station prior to the recorded finish time. If the candidate finishes the treatment early, the candidate's patient may be submitted to the Evaluation Station for the post-treatment evaluation.

NOTE: A minimum of 45 minutes prior to the end of the examination day must be available in order to proceed with the Periodontal Scaling Examination.

G. Post-Treatment Evaluation

By the stated finish time on the *Progress Form*, the candidate should have completed the subgingival calculus removal on the 12 selected surfaces and should also have removed all subgingival and supragingival calculus, plaque, and stain from the entire crown of each of the teeth on the non-selected surfaces of the 12 teeth chosen. The same patient submission process as the pre-treatment evaluation should be used for the post-treatment evaluation. A CFE should first be requested and notified that the treatment has been completed, then a runner will escort the patient to the check-in desk and the Evaluation Station. Candidates should take note that all required materials and instruments must be submitted to the Evaluation Station or the candidate's patient will be returned and a penalty will be assessed.

If treatment is not completed by the stated finish time, and the patient is not in line to check-in to the Evaluation Station, the examination will be terminated

Once all post-treatment evaluations have been completed, and the patient is returned from the Evaluation Station, the candidate may request a CFE to approve dismissal of his/her patient. Once the patient has been dismissed, the candidate must clean the clinic area in accordance with the CDC infection control procedures.

H. 2020 ADEX Periodontal Scaling Examination Criteria

QUALIFIED PATIENT SUBMISSION GUIDELINES SUMMARY

1. The *Patient Consent Form*, *Medical History Form*, and *Progress Form* are complete, accurate and current.
2. Both systolic and diastolic blood pressure are less than or equal to 159/94, or systolic and diastolic blood pressure are between 160/95 and 179/109 **with** a written medical clearance from a physician authorizing treatment during the examination.
3. Radiographs are of diagnostic quality and reflect the current clinical condition of the mouth. Periapicals have been exposed within the past three years. Radiographs are properly mounted and labeled with exposure date and patient's name.
4. The Tooth and Calculus location portion on the Treatment Selection Worksheet is properly completed indicating:
   - Six to eight teeth selected, each with at least one surface of calculus charted
   - At least three posteriors (molars, premolars), including at least one molar, in the selection. All posterior teeth must have at least one approximating tooth within 2 mm distance.
   - Exactly 12 surfaces of subgingival calculus charted, including at least three surfaces of **interproximal** calculus on molars/premolars
   - At least eight of the surfaces on canines, premolars or molars (no more than four surfaces on incisors)

ADHERES TO CRITERIA

1. The *Patient Consent Form* is correct and is signed by patient.*
2. The *Medical History Form* is complete*, includes candidate initials* and patient signature* or has no inaccuracies that endanger the patient or change the treatment.
3. The *Progress Form* is accurate and is complete.*
4. Blood pressure has not been taken or is not recorded* but, upon correction, meets *Satisfactory* criteria.
5. Radiographs are submitted and are of diagnostic quality.***

*Records and patient will be sent back to the candidate with an *Instructions to Candidate Form* requesting correction. (If the *Periodontal Progress Form* is completed correctly, it will be retained in the Evaluation Station)

** Records and patient will be sent back to the candidate with an *Instructions to Candidate Form* requesting correction.

*** If radiographs are available but were not submitted, the candidate will receive an *Instructions to Candidate Form* requesting radiographs.

MARGINALLY SUBSTANDARD

1. *Medical History Form* has inaccuracies that do not endanger the patient but do change the treatment or require further explanation by candidate. The candidate submits an incomplete or incorrect *Periodontal Progress Form* for the second time.
2. Radiographs are of poor diagnostic quality and/or do not meet all of the criteria to be considered Satisfactory.

* Records and patient are sent back to the candidate with an *Instructions to Candidate Form* requesting corrections. *

CRITICAL DEFICIENCY

1. The *Medical History Form* has inaccuracies or indicates the presence of conditions that **do** endanger the patient, candidate and/or examiners (in this situation, the Periodontal Scaling Examination will be stopped). The candidate submits an incomplete and/or incorrect *Patient Consent Form* or *Medical History Form* for the second time.
2. The patient's systolic and/or diastolic blood pressure is between 160/95 and 179/109 **without** a written medical clearance from a physician authorizing treatment, or blood pressure is 180/110 or greater even with a written medical clearance from a physician authorizing treatment.
3. Radiographs are of unacceptable diagnostic quality and/or are missing and not available on request. (In this situation, the Periodontal Scaling Examination will be stopped).

TREATMENT AND TISSUE MANAGEMENT

1. The patient has adequate anesthesia for pain control, is comfortable and demonstrates no evidence of distress or pain.
2. Instruments, polishing cups or brushes and dental floss are effectively utilized so that no unwarranted soft or hard tissue trauma occurs as a result of the scaling and polishing procedures

ADHERES TO CRITERIA

1. There is slight soft tissue trauma that is consistent with the procedure.

MARGINALLY SUBSTANDARD

1. There is inadequate anesthesia for pain control. (The patient is in obvious distress or pain.)
2. There is minor soft tissue trauma that is inconsistent with the procedure. Soft tissue trauma may include, but is not limited to, abrasions, lacerations or ultrasonic burns.
3. There is minor hard tissue trauma that is inconsistent with the procedure. Hard tissue trauma may include root surface abrasions that do not require additional definitive treatment.

CRITICAL DEFICIENCY

1. There is major damage to the soft and/or hard tissue that is inconsistent with the procedure and pre-existing condition. This damage may include, but is not limited to, such trauma as:
   - -Amputated papillae
   - -Exposure of the alveolar process
   - -A laceration or damage that requires suturing and/or periodontal packing
   - -One or more ultrasonic burns that require follow up treatment
   - -A broken instrument tip in the sulcus or soft tissue
   - -Root surface abrasions that require additional definitive treatment

The ADEX Dental Examination Series:

Patient-Based Procedures

VI. Examination Forms

- Forms to Complete Prior to the Examination Day
  - Patient Consent, Disclosure, and Assumption of Responsibility Form
  - Interpreter Form
  - Candidate Assistant Form
  - Patient Medical History Form
  - Periodontal Treatment Selection Worksheet
  - Electronic Treatment Selection Entry
  - Periodontal Declaration Form
- Forms to Complete/Review During the Examination
  - Progress Forms (Restorative and Periodontal)
  - Modification Request Form
  - Instruction to Candidate Form
  - Check-out Form
- Full Page Form Samples

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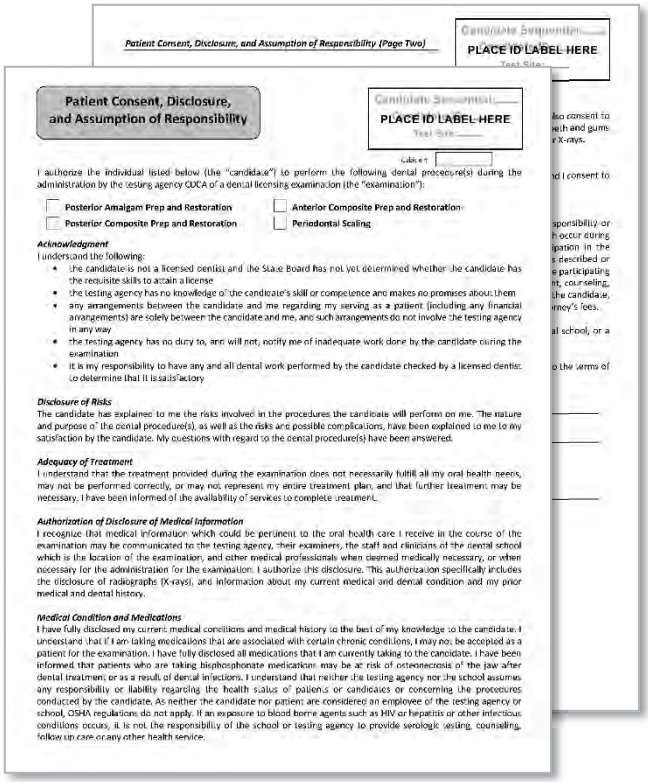
Forms to Complete Prior to the Examination Day

1. *Patient Consent, Disclosure, and Assumption of Responsibility Form*

Every candidate participating in the examination on the exam day must complete this form, and this form must be reviewed with the candidate's patient. Patients must sign and date the form prior to treatment. Candidates must place a candidate ID label in the appropriate place at the top RIGHT of the form's first page, as well as write their assigned cubicle *only* in the top right corner of each of the form's pages. This form is reviewed by a CFE during the case acceptance process for each procedure, and it must also accompany the patient on every visit to the Evaluation Station.

In order to maintain anonymity, candidates may not sign the form until all procedures have been completed and evaluated



Patient Consent, Disclosure, and Assumption of Responsibility

PLACE ID LABEL HERE

I authorize the individual listed below (the "candidate") to perform the following dental procedure(s) during the administration by the testing agency CDCA of a dental licensing examination (the "examination"):

- Posterior Amalgam Prep and Restoration
- Anterior Composite Prep and Restoration
- Posterior Composite Prep and Restoration
- Periodontal Scaling

Acknowledgment

I understand the following:

- the candidate is not a licensed dentist and the State Board has not yet determined whether the candidate has the requisite skills to attain a license
- the testing agency has no knowledge of the candidate's skill or competence and makes no promises about them
- any arrangements between the candidate and me regarding my serving as a patient (including any financial arrangements) are solely between the candidate and me, and such arrangements do not involve the testing agency in any way
- the testing agency has no duty to, and will not, notify me of inadequate work done by the candidate during the examination
- it is my responsibility to have any and all dental work performed by the candidate checked by a licensed dentist to determine that it is satisfactory

Disclosure of Risks

The candidate has explained to me the risks involved in the procedures the candidate will perform on me. The nature and purpose of the dental procedure(s), as well as the risks and possible complications, have been explained to me to my satisfaction by the candidate. My questions with regard to the dental procedure(s) have been answered.

Adequacy of Treatment

I understand that the treatment provided during the examination does not necessarily fulfill all my oral health needs, may not be performed correctly, or may not represent my entire treatment plan, and that further treatment may be necessary. I have been informed of the availability of services to complete treatment.

Authorization of Disclosure of Medical Information

I recognize that medical information which could be pertinent to the oral health care I receive in the course of the examination may be communicated to the testing agency, their examiners, the staff and clinicians of the dental school which is the location of the examination, and other medical professionals when deemed medically necessary, or when necessary for the administration for the examination. I authorize this disclosure. This authorization specifically includes the disclosure of radiographs (X-rays), and information about my current medical and dental condition and my prior medical and dental history.

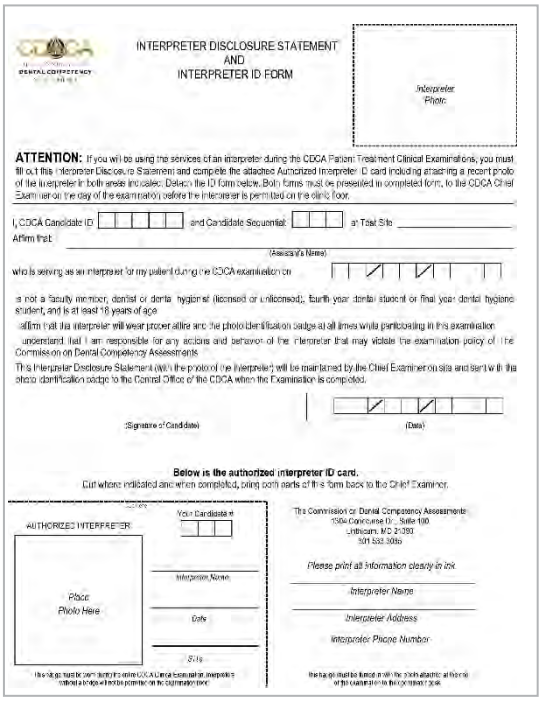
Medical Condition and Medications

I have fully disclosed my current medical conditions and medical history to the best of my knowledge to the candidate. I understand that if I am taking medications that are associated with certain chronic conditions, I may not be accepted as a patient for the examination. I have fully disclosed all medications that I am currently taking to the candidate. I have been informed that patients who are taking bisphosphonate medications may be at risk of osteonecrosis of the jaw after dental treatment; or as a result of dental infections. I understand that neither the testing agency nor the school assumes any responsibility or liability regarding the health status of patients or candidates or concerning the procedures conducted by the candidate. As neither the candidate nor patient are considered an employee of the testing agency or school, OSHA regulations do not apply. If an exposure to blood borne agents such as HIV or hepatitis or other infectious conditions occurs, it is not the responsibility of the school or testing agency to provide serologic testing, counseling, follow up care or any other health service.

2. *Interpreter Form*

If a candidate requires an interpreter to communicate with his/her patient, an *Interpreter Form* must be correctly completed in order to register the interpreter. TWO passport-sized photos must be submitted with the completed form, and the interpreter must bring two forms of ID, one with a photo, for verification of identity (see guidelines in Section I of this manual). Once the interpreter registration process is complete, the interpreter will be given a badge that **must** be worn on his/her outer-most garment at all times while on the clinic floor.

*If an interpreter is not registered, he/she will not be authorized on the clinic floor.



INTERPRETER DISCLOSURE STATEMENT AND INTERPRETER ID FORM

Interpreter Photo

ATTENTION: If you will be using the services of an interpreter during the CDCA Patient Treatment Clinical Examinations, you must fill out this Interpreter Disclosure Statement and complete the attached Authorized Interpreter ID card including attaching a recent photo of the interpreter in both areas provided. Detach the ID form below. Both forms must be presented in completed form, to the CDCA Chief Examiner on the day of the examination(s) before the interpreter is permitted on the clinic floor.

I, CDCA Candidate ID ____ and Candidate Sequential ____ at Test Site ____

Affirm that ____ (Assistant's Name)

who is serving as an interpreter for my patient during the CDCA examination on ____

is not a faculty member, dentist or dental hygienist (licensed or unlicensed), fourth year dental student or final year dental hygiene student, and is at least 18 years of age

affirm that the interpreter will wear proper attire and the photo identification badge at all times while participating in this examination

understand that I am responsible for any actions and behavior of the interpreter that may violate the examination policy of the Commission on Dental Competency Assessments

This Interpreter Disclosure Statement (with the photo of the interpreter) will be maintained by the Chief Examiner on site and sent with the photo identification badge to the Central Office of the CDCA when the Examination is completed.

(Signature of Candidate) (Date)

Below is the authorized interpreter ID card.

Cut where indicated and when completed, bring both parts of this form back to the Chief Examiner.

AUTHORIZED INTERPRETER

Your Candidate #

Place Photo Here

Interpreter Name

Date

Site

The Commission on Dental Competency Assessments
1506 Concourse Dr., Suite 100
Linthicum, MD 21090
301 532 3086

Please print all information clearly in ink

Interpreter Name

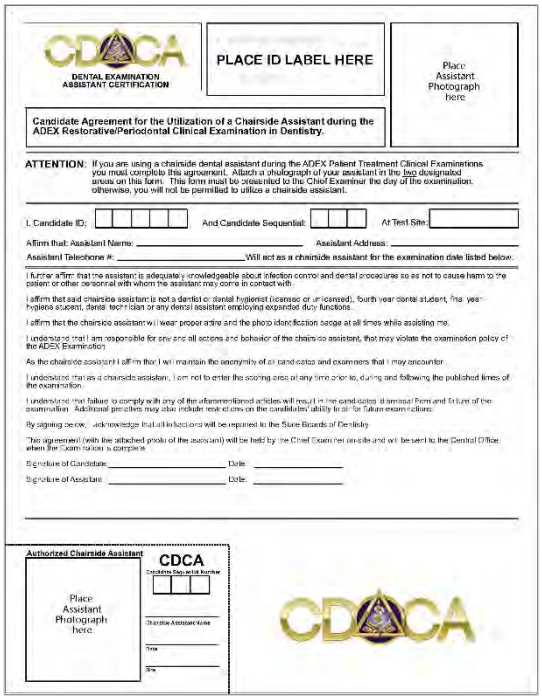
Interpreter Address

Interpreter Phone Number

3. *Candidate Assistant Form*

If a candidate chooses to use an assistant during the examination, a *Candidate Assistant Form* must be completed, and the assistant must be registered. TWO passport-sized photos of the assistant must accompany the form, and the assistant must bring two forms of ID, on with a photo, for verification of identity (see guidelines in Section I of this manual). Once the assistant registration process is complete, the assistant will be given a badge that **must** be worn on his/her outer-most garment at all times while on the clinic floor.

*NOTE: If an assistant is not registered, he/she will not be authorized on the clinic floor.


CDCA
DENTAL EXAMINATION ASSISTANT CERTIFICATION

PLACE ID LABEL HERE

Place Assistant Photograph here

Candidate Agreement for the Utilization of a Chairside Assistant during the ADEX Restorative/Periodontal Clinical Examination in Dentistry.

ATTENTION: If you are using a chairside dental assistant during the ADEX Patient Treatment Clinical Examinations you must complete this agreement. Attach a photograph of your assistant in the two designated areas on this form. This form must be presented to the Chief Examiner the day of the examination. otherwise, you will not be permitted to utilize a chairside assistant.

I, Candidate ID: ____ And Candidate Sequential: ____ At Test Site: ____

Affirm that: Assistant Name: ____ Assistant Address: ____

Assistant Telephone #: ____ Will act as a chairside assistant for the examination date listed below:

I further affirm that the assistant is adequately knowledgeable about infection control and dental procedures so as not to cause harm to the patient or other personnel with whom the assistant may come in contact with.

I affirm that said chairside assistant is not a dentist or dental hygienist (licensed or unlicensed), fourth year dental student, final year hygiene student, dental technician or any dental assistant employing expanded duty functions.

I affirm that the chairside assistant will wear proper attire and the photo identification badge at all times while assisting me.

I understand that I am responsible for any and all actions and behavior of the chairside assistant, that may violate the examination policy of the ADEX Examination.

As the chairside assistant I affirm that I will maintain the anonymity of all candidates and examiners that I may encounter.

I understand that as a chairside assistant, I am not to enter the scoring area at any time prior to, during and following the published times of the examination.

I understand that failure to comply with any of the aforementioned articles will result in the candidates dismissal from and failure of the examination. Additional penalties may also include revocation of the candidates' ability to sit for future examinations.

By signing below, I acknowledge that all instructions will be reported to the State Boards of Dentistry.

This agreement (with the attached photo of the assistant) will be held by the Chief Examiner on-site and will be sent to the Dental Office when the Exam Session is complete.

Signature of Candidate: ____ Date: ____

Signature of Assistant: ____ Date: ____

Authorized Chairside Assistant

Place Assistant Photograph here

CDCA

Candidate Sequential Number

Chairside Assistant Name

Date

Site

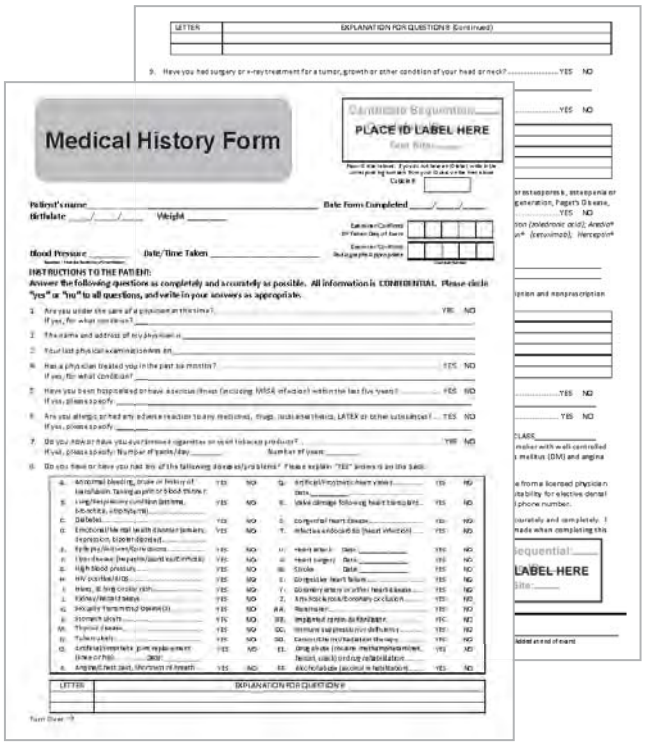
CDCA

4. *Patient Medical History Form*

Each patient must have a completed *Medical History Form*, which can be downloaded from your online candidate profile. This form MUST be signed by the patient ON the day of the exam and it will be reviewed by a CFE during the case acceptance procedure (see pg. 9-10 for further details).

If the patient will be treated by more than one candidate, each candidate must submit a separate *Medical History Form*.

The patient's blood pressure must be taken on the day of the exam and must be documented by a CFE during the case acceptance procedure. See Section I of this manual for additional patient selection guidelines.


Medical History Form

PLACE ID LABEL HERE

Patient's name ____ Date Form Completed ____

Birthdate ____ Weight ____

Blood Pressure ____ Date/Time Taken ____

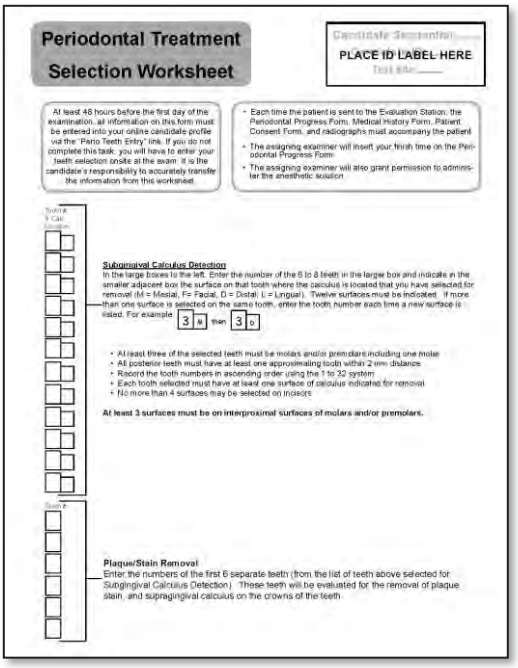
INSTRUCTIONS TO THE PATIENT:
Answer the following questions as completely and accurately as possible. All information is CONFIDENTIAL. Please circle "yes" or "no" to all questions, and write in your answers as appropriate.

LETTER | EXPLANATION FOR QUESTION # (Continued)

LETTER | EXPLANATION FOR QUESTION #

5. *Periodontal Treatment Selection Worksheet*

This form is available to candidates intending to challenge the Periodontal Scaling procedure and can be downloaded from the candidate's online profile. Prior to the examination day, candidates may use this worksheet to help them in their treatment selection preparation. This form is for candidate use only, and it will NOT be sent to the Evaluation Station. Once this form is completed, the information on it must be transferred to the software system (see #6 below).



Periodontal Treatment Selection Worksheet

PLACE ID LABEL HERE

At least 48 hours before the first day of the examination, all information on this form must be entered into your online candidate profile via the "Perio Teeth Entry" link. If you do not complete this task, you will have to enter your teeth selection onsite at the exam. It is the candidate's responsibility to accurately transfer the information from this worksheet.

- Each time the patient is sent to the Evaluation Station, the Periodontal Progress Form, Medical History Form, Patient Consent Form, and radiographs must accompany the patient.
- The assigning examiner will insert your finish time on the Periodontal Progress Form.
- The assigning examiner will also grant permission to administer the anesthetic solution.

Tooth # / Calculus Location

Subgingival Calculus Detection

In the large boxes to the left, Enter the number of the 6 to 8 teeth in the large box and indicate in the smaller adjacent box the surface on that tooth where the calculus is located that you have selected for removal (M = Mesial, F= Facial, D = Distal, L = Lingual). Twelve surfaces must be indicated. If more than one surface is selected on the same tooth, enter the tooth number each time a new surface is listed. For example: 3 M then 3 D

- At least three of the selected teeth must be molars and/or premolars including one molar
- All posterior teeth must have at least one approximating tooth within 2 mm distance
- Record the tooth numbers in ascending order using the 1 to 32 system
- Each tooth selected must have at least one surface of calculus indicated for removal
- No more than 4 surfaces may be selected on incisors

At least 3 surfaces must be on interproximal surfaces of molars and/or premolars.

Tooth #

Plaque/Stain Removal

Enter the numbers of the first 6 separate teeth (from the list of teeth above selected for Subgingival Calculus Detection). These teeth will be evaluated for the removal of plaque stain, and supragingival calculus on the crowns of the teeth.

For a case to be considered Acceptable, the following criteria must be met: (also see pg. 54 for additional guidelines)

- Six to eight teeth selected, each with at least one surface of calculus charted
- At least three posteriors (molars, premolars), including at least one molar, in the selection
- All posterior teeth must have at least one approximating tooth within a 2.0 mm distance
- Exactly 12 surfaces of subgingival calculus charted, including at least three surfaces of **interproximal** calculus on molars/premolars
- At least eight of the surfaces on canines, premolars or molars (no more than four surfaces on incisors)

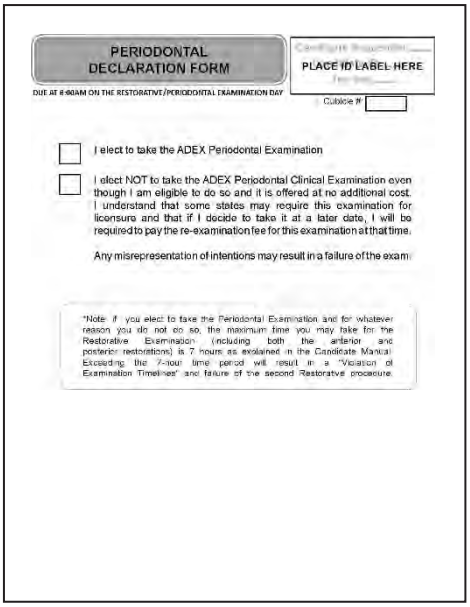
6. *Electronic Treatment Selection Entry*

Until 48 hours prior to the start of the first day of the exam, candidates may enter their treatment selections online through their candidate profiles. If you do not enter your teeth selection prior to 48 hours prior to the start of the first day of the exam, or if changes need to be made on the day of the exam, you may approach the check-in desk to make such changes/entries.

Once the CFE has approved the case for submission to the Evaluation Station, no changes may be made to the treatment selection.

7. *Periodontal Declaration Form*

This form is required by all candidates participating in the patient-based procedures and is used to document—prior to the examination—whether or not a candidate intends to challenge the Periodontal Scaling procedure. If a candidate declares that he/she is NOT challenging the Periodontal Scaling procedure, the total treatment time will be adjusted from 9 hours to 7 hours, as the candidate will only be performing two procedures. (*for additional details, see the Exam Timeline Chart on pgs. 22-23)



PERIODONTAL DECLARATION FORM

DUE AT 8:00AM ON THE RESTORATIVE/PERIODONTAL EXAMINATION DAY

PLACE ID LABEL HERE

Cubicle #

☐ I elect to take the ADEX Periodontal Examination

☐ I elect NOT to take the ADEX Periodontal Clinical Examination even though I am eligible to do so and it is offered at no additional cost. I understand that some states may require this examination for licensure and that if I decide to take it at a later date, I will be required to pay the re-examination fee for this examination at that time.

Any misrepresentation of intentions may result in a failure of the exam.

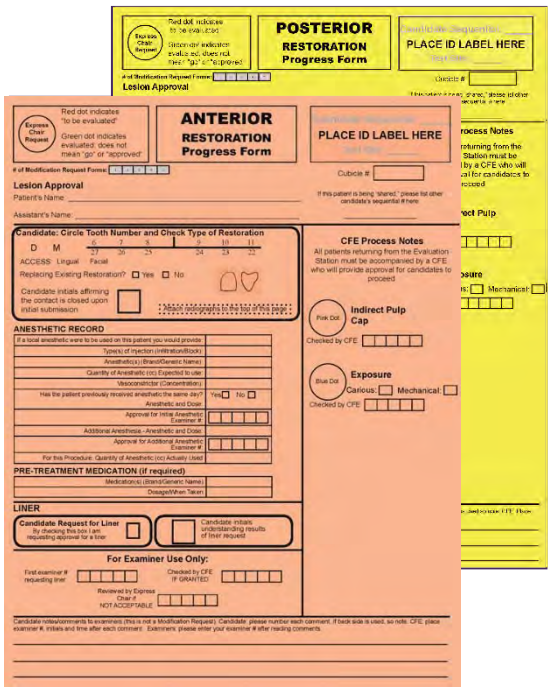
*Note: If you elect to take the Periodontal Examination and for whatever reason you do not do so, the maximum time you may take for the Restorative Examination (including both the anterior and posterior restorations) is 7 hours as explained in the Candidate Manual: Exceeding the 7-hour time period will result in a "Violation of Examination Timelines" and failure of the second Restorative procedure.

Forms to Complete During the Examination

1. *Progress Forms*

a. *Restorative Progress Form*

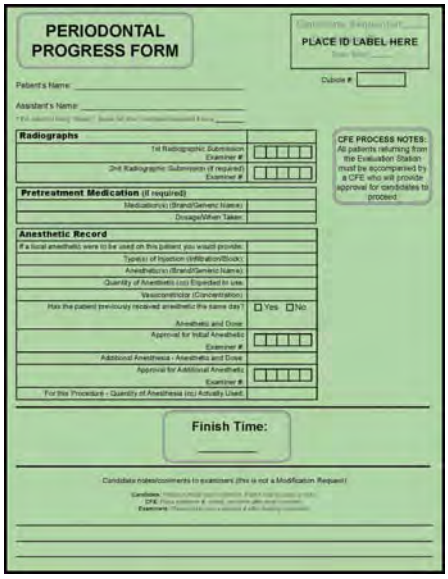
There are two different Progress Forms for the restorative dentistry examination: one for the anterior restoration and one for the posterior restoration. These forms are used to document important information during the course of the examination and to track a candidate's progress through the examination. They may be labeled and completed prior to arrival on the examination day, but candidates should check them for accuracy on the day of the examination.



Candidates must enter their 3-digit sequential number and cubicle number and place a Candidate peel-off ID label in the spaces provided at the top of the form.

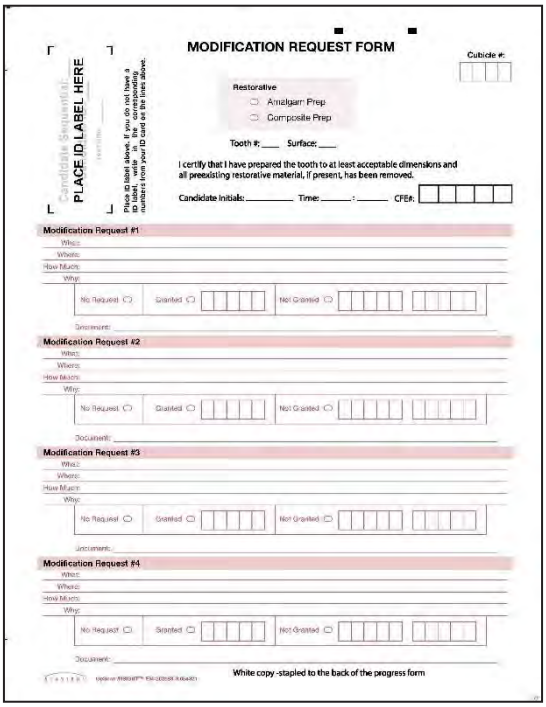
Candidates must check "YES" that the selected tooth is in contact at initial submission.

b. *Periodontal Progress Form*



The *Periodontal Progress Form* is used to track the candidate advancement through the periodontal scaling procedure. A candidate ID label should be placed in the top right-hand corner of the form, and the anesthetic record must be completed prior to requesting a CFE to begin the Periodontal Case Acceptance (PCA) procedure, even if no anesthetic will be used. Candidates should take careful note of the finish time that will appear at the bottom of this form when the patient returns from the Evaluation Station after the pre-treatment evaluation.

2. *Modification Request Form*



MODIFICATION REQUEST FORM

Cubicle #:

Candidate Sequential:

PLACE ID LABEL HERE

Place id label above. If you do not have a ID label, write in the corresponding numbers from your ID card on the lines above.

Restorative
- Amalgam Prep
- Composite Prep

Tooth #: ___ Surface: ___

I certify that I have prepared the tooth to at least acceptable dimensions and all preexisting restorative material, if present, has been removed.

Candidate Initials: _____ Time: ____ : ____ CFE#:

Modification Request #1
Why:
No Request ○ Granted ○ Not Granted ○
Document:

Modification Request #2
Why:
No Request ○ Granted ○ Not Granted ○
Document:

Modification Request #3
Why:
No Request ○ Granted ○ Not Granted ○
Document:

Modification Request #4
Why:
No Request ○ Granted ○ Not Granted ○
Document:

White copy -stapled to the back of the progress form

The *Modification Request Form* should be used during the cavity preparation of the restorative procedures only. The purpose of the form is to request permission to deviate from an "Acceptable" level restorative preparation. A candidate ID label must be placed in the appropriate place on the form, and the form must be submitted with the following information:

What is the candidate requesting to do? (type of modification)

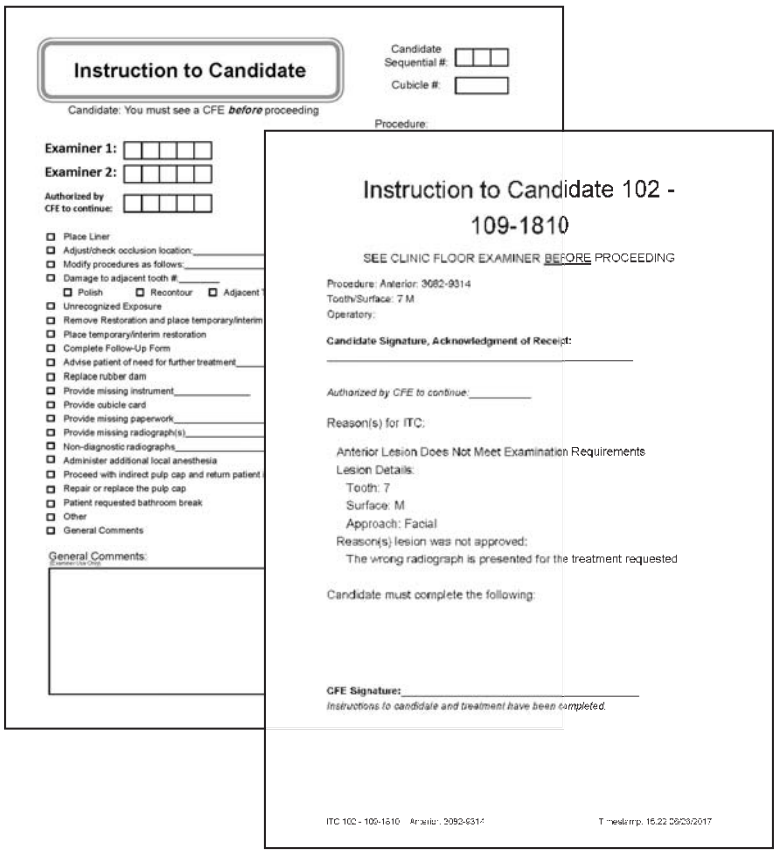
Where? (e.g. gingival axial line angle, mesial box)

How much must be removed? (e.g. 0.5 mm)

Why is the modification needed? (e.g. due to caries, decalcification)

3. *Instruction to Candidate Form*

Candidates may receive written instructions from examiners who are in the Evaluation Station. Receipt of instructions does not necessarily constitute a penalty, but all instructions must be reviewed with a CFE and subsequently followed prior to proceeding with any treatment. There are electronically generated *Instruction to Candidate Forms* as well as manually created forms. Both forms are equal but are relevant to different messages that examiners in the Evaluation Station wish to communicate to the candidate on the clinic floor.



Instruction to Candidate

Candidate Sequential #:

Cubicle #:

Candidate: You must see a CFE *before* proceeding

Procedure:

Examiner 1:

Examiner 2:

Authorized by CFE to continue:

- Place Liner
- Adjust/check occlusion location:
- Modify procedures as follows:
- Damage to adjacent tooth #
  - Polish Recontour Adjacent
- Unrecognized Exposure
- Remove Restoration and place temporary/interim
- Place temporary/interim restoration
- Complete Follow-Up Form
- Advise patient of need for further treatment
- Replace rubber dam
- Provide missing instrument
- Provide cubicle card
- Provide missing paperwork
- Provide missing radiograph(s)
- Non-diagnostic radiographs
- Administer additional local anesthesia
- Proceed with indirect pulp cap and return patient
- Repair or replace the pulp cap
- Patient requested bathroom break
- Other
- General Comments

General Comments:

Instruction to Candidate 102 - 109-1810

SEE CLINIC FLOOR EXAMINER BEFORE PROCEEDING

Procedure: Anterior: 3082-9314
Tooth/Surface: 7 M
Operatory:

Candidate Signature, Acknowledgment of Receipt:

Authorized by CFE to continue:

Reason(s) for ITC:

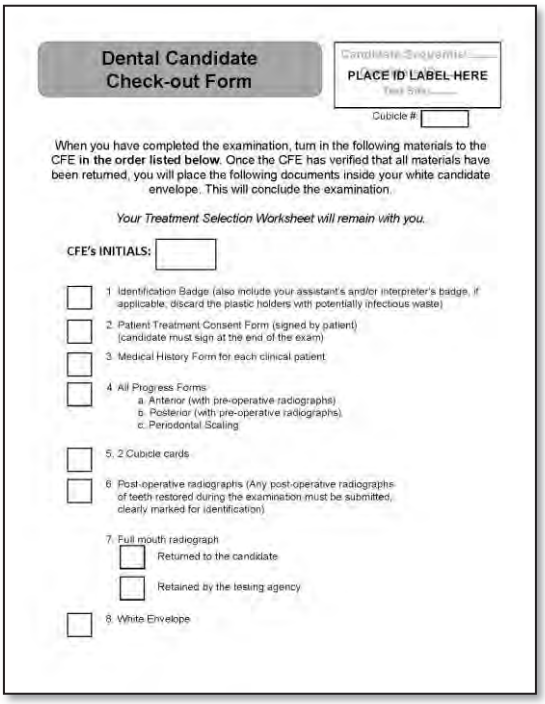
Anterior Lesion Does Not Meet Examination Requirements
Lesion Details:
Tooth: 7
Surface: M
Approach: Facial
Reason(s) lesion was not approved:
The wrong radiograph is presented for the treatment requested

Candidate must complete the following:

CFE Signature:
Instructions to candidate and treatment have been completed.

ITC 102 - 109-1810 Anterior: 3082-9314 Timestamp: 15:22 09/29/2017

4. *Check-out Form*



Dental Candidate Check-out Form

PLACE ID LABEL HERE

Cubicle #:

When you have completed the examination, turn in the following materials to the CFE **in the order listed below**. Once the CFE has verified that all materials have been returned, you will place the following documents inside your white candidate envelope. This will conclude the examination.

Your Treatment Selection Worksheet will remain with you.

CFE's INITIALS:

1. Identification Badge (also include your assistant's and/or interpreter's badge, if applicable; discard the plastic holders with potentially infectious waste)
2. Patient Treatment Consent Form (signed by patient) (candidate must sign at the end of the exam)
3. Medical History Form for each clinical patient
4. All Progress Forms
   a. Anterior (with pre-operative radiographs)
   b. Posterior (with pre-operative radiographs)
   c. Periodontal Scaling
5. 2 Cubicle cards
6. Post-operative radiographs (Any post-operative radiographs of teeth restored during the examination must be submitted, clearly marked for identification)
7. Full mouth radiograph
   - Returned to the candidate
   - Retained by the testing agency
8. White Envelope

When you are completely finished with all procedures, and the CFE has dismissed your final patient, clean your operatory in accordance with CDC guidelines, and then gather all forms ***in the order listed on this Check-out Form*** and place them in the provided white envelope. You may then proceed to the designated check-out desk, where a CDCA administrative representative will check inside the envelope to ensure that all required materials are present. If so, the CDCA administrator will initial in each block. Upon completion, the CDCA administrator will release you.

Full-Page Form Samples

(Forms must be downloaded from the CDCA website)

Patient Consent, Disclosure, and Assumption of Responsibility

Candidate Sequential:_____
Candidate ID:_____
PLACE ID LABEL HERE
Test Site:_____

Cubicle # _____

I authorize the individual listed below (the "candidate") to perform the following dental procedure(s) during the administration by the testing agency CDCA of a dental licensing examination (the "examination"):

- ☐ **Posterior Amalgam Prep and Restoration**
- ☐ **Posterior Composite Prep and Restoration**
- ☐ **Anterior Composite Prep and Restoration**
- ☐ **Periodontal Scaling**

Acknowledgment

I understand the following:

- the candidate is not a licensed dentist and the State Board has not yet determined whether the candidate has the requisite skills to attain a license
- the testing agency has no knowledge of the candidate's skill or competence and makes no promises about them
- any arrangements between the candidate and me regarding my serving as a patient (including any financial arrangements) are solely between the candidate and me, and such arrangements do not involve the testing agency in any way
- the testing agency has no duty to, and will not, notify me of inadequate work done by the candidate during the examination
- it is my responsibility to have any and all dental work performed by the candidate checked by a licensed dentist to determine that it is satisfactory

Disclosure of Risks

The candidate has explained to me the risks involved in the procedures the candidate will perform on me. The nature and purpose of the dental procedure(s), as well as the risks and possible complications, have been explained to me to my satisfaction by the candidate. My questions with regard to the dental procedure(s) have been answered.

Adequacy of Treatment

I understand that the treatment provided during the examination does not necessarily fulfill all my oral health needs, may not be performed correctly, or may not represent my entire treatment plan, and that further treatment may be necessary. I have been informed of the availability of services to complete treatment.

Authorization of Disclosure of Medical Information

I recognize that medical information which could be pertinent to the oral health care I receive in the course of the examination may be communicated to the testing agency, their examiners, the staff and clinicians of the dental school which is the location of the examination, and other medical professionals when deemed medically necessary, or when necessary for the administration for the examination. I authorize this disclosure. This authorization specifically includes the disclosure of radiographs (X-rays), and information about my current medical and dental condition and my prior medical and dental history.

Medical Condition and Medications

I have fully disclosed my current medical conditions and medical history to the best of my knowledge to the candidate. I understand that if I am taking medications that are associated with certain chronic conditions, I may not be accepted as a patient for the examination. I have fully disclosed all medications that I am currently taking to the candidate. I have been informed that patients who are taking bisphosphonate medications may be at risk of osteonecrosis of the jaw after dental treatment or as a result of dental infections. I understand that neither the testing agency nor the school assumes any responsibility or liability regarding the health status of patients or candidates or concerning the procedures conducted by the candidate. As neither the candidate nor patient are considered an employee of the testing agency or school, OSHA regulations do not apply. If an exposure to blood borne agents such as HIV or hepatitis or other infectious conditions occurs, it is not the responsibility of the school or testing agency to provide serologic testing, counseling,
follow up care or any other health service.

Candidate Sequential:____
Candidate ID:____
PLACE ID LABEL HERE
Test Site:____

Consent to X-Rays and Photographs

I consent to the taking of appropriate radiographs (X-rays) and the examination of my teeth and gums. I also consent to having testing agency examiners or the staff and clinicians of the dental school take photographs of my teeth and gums for use in future examinations, provided that my name is not in any way associated with the photographs or X-rays.

Anesthesia

I understand that as part of the dental procedure(s), it may be necessary to administer local anesthetics and I consent to the use of such anesthetics by the candidate.

Agreement

I release the CDCA, participating dental schools, and their employees and/or agents from any and all responsibility or liability of any nature whatsoever for their acts, and any acts of the candidate (including negligence), which occur during the course of this examination, and any damages or injuries I may suffer as a result of my participation in the examination. With full knowledge of all the risks described above, I hereby expressly assume all risks as described or which can be inferred from the statements in this document. I further agree that neither the CDCA nor the participating dental schools nor their employees or agents are responsible to provide any medical evaluation, treatment, counseling, follow-up care, or any compensation for any condition or occurrence arising out of any act or omission of the candidate, and I hereby indemnify and agree to hold them harmless from any such claims and expenses, including attorney's fees.

I verify that I am not a dentist (licensed or unlicensed), a dental student in the 4th or final year of dental school, or a dental hygiene student in the final year of school.

By my signature below, I verify that I have read and fully understood the above information, and I agree to the terms of this agreement.

Candidate: Printed Name / Candidate ID #

Candidate Signature

Date

Patient: Printed Name / Date of Birth

Patient Signature / Date

Patient Street Address

Patient City / State / Zip Code

Patient Phone Number / E-mail Address

THE COMMISSION ON DENTAL COMPETENCY ASSESSMENTS

INTERPRETER DISCLOSURE STATEMENT AND INTERPRETER ID FORM

Interpreter Photo

ATTENTION: If you will be using the services of an interpreter during the CDCA Patient Treatment Clinical Examinations, you must fill out this Interpreter Disclosure Statement and complete the attached Authorized Interpreter ID card including attaching a recent photo of the interpreter in both areas indicated. Detach the ID form below. Both forms must be presented in completed form, to the CDCA Chief Examiner on the day of the examination before the interpreter is permitted on the clinic floor.

I, CDCA Candidate ID: ☐☐☐☐☐ and Candidate Sequential: ☐☐☐ at Test Site _____

Affirm that:

_____
(Interpreter's Name)

who is serving as an interpreter for my patient during the CDCA examination on ☐☐/☐☐/☐☐☐☐

is not a faculty member, dentist or dental hygienist (licensed or unlicensed), fourth year dental student or final year dental hygiene student, and is at least 18 years of age.

I affirm that the interpreter will wear proper attire and the photo identification badge at all times while participating in this examination.

I understand that I am responsible for any actions and behavior of the interpreter that may violate the examination policy of The Commission on Dental Competency Assessments.

This Interpreter Disclosure Statement (with the photo of the interpreter) will be maintained by the Chief Examiner on site and sent with the photo identification badge to the Central Office of the CDCA when the Examination is completed.

☐ (Signature of Candidate)

☐☐/☐☐/☐☐☐☐ (Date)

Below is the authorized interpreter ID card.

Cut where indicated and when completed, bring both parts of this form back to the Chief Examiner.

Cut Here

AUTHORIZED INTERPRETER

Place Photo Here

Your Candidate # ☐☐☐

_____
Interpreter Name

_____
Date

_____
Site

This badge must be worn during the entire COCA Clinical Examination. Interpreters without a badge will not be permitted on the examination floor.

The Commission on Dental Competency Assessments
1304 Concourse Dr., Suite 100
Linthicum. MD 21090
301.533.3085

Please print all information clearly in ink.

_____
Interpreter Name

_____
Interpreter Address

_____
Interpreter Phone Number

This badge must be turned in with the photo attached at the end of the examination to the coordinator desk.

DENTAL EXAMINATION
ASSISTANT CERTIFICATION

Candidate Sequential:_____

PLACE ID LABEL HERE

Test Site: _____

Place Assistant Photograph here

Candidate Agreement for the Utilization of a Chairside Assistant during the ADEX Restorative/Periodontal Clinical Examination in Dentistry.

ATTENTION: If you are using a chairside dental assistant during the ADEX Patient Treatment Clinical Examinations you must complete this agreement. Attach a photograph of your assistant in the two designated areas on this form. This form must be presented to the Chief Examiner the day of the examination, otherwise, you will not be permitted to utilize a chairside assistant.

I, Candidate ID: [ ][ ][ ][ ][ ] And Candidate Sequential: [ ][ ][ ] At Test Site: [ ]

Affirm that: Assistant Name:_____ Assistant Address: _____

Assistant Telephone #:_____Will act as a chairside assistant for the examination date listed below.

I further affirm that the assistant is adequately knowledgeable about infection control and dental procedures so as not to cause harm to the patient or other personnel with whom the assistant may come in contact with.

I affirm that said chairside assistant is not a dentist or dental hygienist (licensed or unlicensed), fourth year dental student, final year hygiene student, dental technician or any dental assistant employing expanded duty functions.

I affirm that the chairside assistant will wear proper attire and the photo identification badge at all times while assisting me.

I understand that I am responsible for any and all actions and behavior of the chairside assistant, that may violate the examination policy of the ADEX Examination.

As the chairside assistant I affirm that I will maintain the anonymity of all candidates and examiners that I may encounter .

I understand that as a chairside assistant, I am not to enter the scoring area at any time prior to, during and following the published times of the examination.

I understand that failure to comply with any of the aforementioned articles will result in the candidates' dismissal from and failure of the examination. Additional penalties may also include restrictions on the candidates' ability to sit for future examinations.

By signing below, I acknowledge that all infractions will be reported to the State Boards of Dentistry.

This agreement (with the attached photo of the assistant) will be held by the Chief Examiner on-site and will be sent to the Central Office when the Examination is complete.

Signature of Candidate:_____Date:_____

Signature of Assistant_____Date: _____

Authorized Chairside Assistant

Place Assistant Photograph here

CDCA

Candidate Sequential Number

[ ][ ][ ]

_____
Chairside Assistant Name

_____
Date

_____
Site

Medical History Form

Candidate Sequential:_____
PLACE ID LABEL HERE
Test Site:_____

Place ID label above. If you do not have an ID label, write in the corresponding numbers from your ID card on the lines above

Cubicle #: ☐

Patient's name_____**Date Form Completed**_____/_____/_____

Birthdate_____/_____/_____ **Weight** _____

Examiner Confirms BP Taken Day of Exam ☐ ☐ ☐ ☐ ☐

Blood Pressure_____ **Date/Time Taken** _____ **Examiner Confirms Radiographs Appropriate** ☐ ☐ ☐ ☐ ☐

Required – Must Be Taken Day of Examination

Examiner Number

INSTRUCTIONS TO THE PATIENT:

Answer the following questions as completely and accurately as possible. All information is CONFIDENTIAL. Please circle "yes" or "no" to all questions, and write in your answers as appropriate.

1. Are you under the care of a physician at this time?..... **YES NO**
   If yes, for what condition? _____
2. The name and address of my physician is:_____
3. Your last physical examination was on_____
4. Has a physician treated you in the past six months? ..... **YES NO**
   If yes, for what condition? _____
5. Have you been hospitalized or have a serious illness (including MRSA infection) within the last five years?..... **YES NO**
   If yes, please specify:_____
6. Are you allergic or had any adverse reaction to any medicines, drugs, local anesthetics, LATEX or other substances? .... **YES NO**
   If yes, please specify:_____
7. Do you now or have you ever smoked cigarettes or used tobacco products?.....**YES NO**
   If yes, please specify: Number of packs/day_____ Number of years:_____
8. Do you have or have you had any of the following diseases/problems? Please explain "YES" answers on the back.

A.	Abnormal bleeding, bruise or history of transfusion. Taking aspirin or blood thinner.	**YES**	**NO**	**Q.**	Artificial/Prosthetic heart valves..... Date:_____.....	**YES**	**NO**
B.	Lung/Respiratory condition (asthma, bronchitis, emphysema).....	**YES**	**NO**	**R.**	Valve damage following heart transplant...	**YES**	**NO**
C.	Diabetes.....	**YES**	**NO**	**S.**	Congenital heart disease.....	**YES**	**NO**
D.	Emotional/Mental health disorder (anxiety, depression, bipolar disorder).....	**YES**	**NO**	**T.**	Infective endocarditis (heart infection)	**YES**	**NO**
E.	Epilepsy/Seizures/Convulsions.....	**YES**	**NO**	**U.**	Heart attack Date:_____	**YES**	**NO**
F.	Liver disease (Hepatitis/Jaundice/Cirrhosis)	**YES**	**NO**	**V.**	Heart surgery Date:_____	**YES**	**NO**
G.	High blood pressure.....	**YES**	**NO**	**W.**	Stroke Date:_____	**YES**	**NO**
H.	HIV positive/AIDS.....	**YES**	**NO**	**X.**	Congestive heart failure.....	**YES**	**NO**
I.	Hives, itching or skin rash.....	**YES**	**NO**	**Y.**	Coronary artery or other heart disease.....	**YES**	**NO**
J.	Kidney/Renal disease.....	**YES**	**NO**	**Z.**	Arteriosclerosis/Coronary occlusion.....	**YES**	**NO**
K.	Sexually Transmitted Disease(s).....	**YES**	**NO**	**AA.**	Pacemaker.....	**YES**	**NO**
L.	Stomach ulcers.....	**YES**	**NO**	**BB.**	Implanted cardio-defibrillator.....	**YES**	**NO**
M.	Thyroid disease.....	**YES**	**NO**	**CC.**	Immune suppression or deficiency.....	**YES**	**NO**
N.	Tuberculosis.....	**YES**	**NO**	**DD.**	Cancer/Chemo/Radiation therapy.....	**YES**	**NO**
O.	Artificial/Prosthetic joint replacement (knee or hip)... ..... Date:_____	**YES**	**NO**	**EE.**	Drug abuse (cocaine methamphetamines, heroin, crack) or drug rehabilitation.....	**YES**	**NO**
P.	Angina/Chest pain, Shortness of breath.....	**YES**	**NO**	**FF.**	Alcohol abuse (alcohol rehabilitation).....	**YES**	**NO**

LETTER	EXPLANATION FOR QUESTION 8

Turn Over →

LETTER	EXPLANATION FOR QUESTION 8 (Continued)

9. Have you had surgery or x-ray treatment for a tumor, growth or other condition of your head or neck? ..... **YES** **NO**

If yes, please list: _____

10. Do you have any other diseases, conditions, or problems not listed above? If yes, please explain:.....**YES** **NO**

OTHER CONDITION	EXPLANATION

11. Are you taking or have you ever taken any medications, (examples below), either orally or by injection, for osteoporosis, osteopenia or bone loss due to aging OR lung cancer, breast cancer, prostate cancer, colorectal cancer, wet macular degeneration, Paget's Disease, or multiple myeloma?.....**YES** **NO**

Examples: Fosamax® (alendronate); Boniva® (ibandronate); Actonel® (risedronate); Reclast® yearly injection (zoledronic acid); Aredia® (pamidronate); Zometa® (zoledronic acid); Bonefos® (clodronate); Avastin® (bevacizumab); Erbitux® (cetuximab); Herceptin® (trastuzumab)

If yes, please list the appropriate medication below:

_____

_____

12. Please list any **premedication, medications, pills, or drugs with dosage** which you are taking both prescription and nonprescription (**Must be completed the DAY OF THE EXAMINATION**)

MEDICATION/DOSAGE	REASON PRESCRIBED
1.	
2.	
3.	
4.	
5.	

13. **WOMEN ONLY:** Are you pregnant?.....**YES** **NO**

If yes, when is your expected due date? _____

Are you currently breast feeding?..... **YES** **NO**

14. **AMERICAN SOCIETY OF ANESTHESIOLOGY (ASA) CLASSIFICATION ..... CLASS**_____

(ASA I: Normal healthy patient; ASA II: Patient with mild systemic disease; no functional limitation–e.g., smoker with well-controlled hypertension; ASA III: Patient with severe systemic disease; definite functional impairment–e.g., diabetes mellitus (DM) and angina pectoris with relatively stable disease, but requiring therapy)

Any item on the Medical History with a "YES" response, in questions #4-13 could require a Medical Clearance from a licensed physician if the explanation section indicated the possibility of a systemic condition that could affect the patient's suitability for elective dental treatment during the examination. The Medical Clearance must include the physician's name, address, and phone number.

I certify that I have read and understand the above. I acknowledge that I have answered these questions accurately and completely. I will not hold the testing agency responsible for any action taken or not taken because of errors I may have made when completing this form.

PATIENT SIGNATURE: _____

DATE SIGNED: _____

CANDIDATE INITIALS: _____

DATE INITIALED: _____

Candidate Sequential:_____

Candidate ID:

PLACE ID LABEL HERE

Test Site:_____

CANDIDATE SIGNATURE: _____

(Added at end of exam)

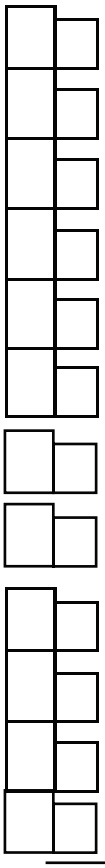
Periodontal Treatment Selection Worksheet

Candidate Sequential:_____
Candidate ID:_____
PLACE ID LABEL HERE
Test Site:_____

At least 48 hours before the first day of the examination, all information on this form must be entered into your online candidate profile via the "Perio Teeth Entry" link. If you do not complete this task, you will have to enter your teeth selection onsite at the exam. It is the candidate's responsibility to accurately transfer the information from this worksheet.

- Each time the patient is sent to the Evaluation Station, the Periodontal Progress Form, Medical History Form, Patient Consent Form, and radiographs must accompany the patient
- The assigning examiner will insert your finish time on the Periodontal Progress Form
- The assigning examiner will also grant permission to administer the anesthetic solution

Tooth # & Calc. Location



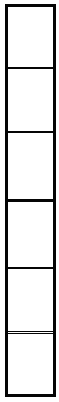
Subgingival Calculus Detection

In the large boxes to the left. Enter the number of the 6 to 8 teeth in the larger box and indicate in the smaller adjacent box the surface on that tooth where the calculus is located that you have selected for removal (M = Mesial, F= Facial, D = Distal, L = Lingual). Twelve surfaces must be indicated. If more than one surface is selected on the same tooth, enter the tooth number each time a new surface is listed. For example: 3 M then 3 D

- At least three of the selected teeth must be molars and/or premolars including one molar
- All posterior teeth must have at least one approximating tooth within 2 mm distance
- Record the tooth numbers in ascending order using the 1 to 32 system
- Each tooth selected must have at least one surface of calculus indicated for removal
- No more than 4 surfaces may be selected on incisors

At least 3 surfaces must be on interproximal surfaces of molars and/or premolars.

Tooth #



Plaque/Stain Removal

Enter the numbers of the first 6 separate teeth (from the list of teeth above selected for Subgingival Calculus Detection). These teeth will be evaluated for the removal of plaque, stain, and supragingival calculus on the crowns of the teeth.

PERIODONTAL DECLARATION FORM

DUE AT 8:00AM ON THE RESTORATIVE/PERIODONTAL EXAMINATION DAY

Candidate Sequential:_____
Candidate ID:_____
PLACE ID LABEL HERE
Test Site:_____

Cubicle #: ☐

☐ I elect to take the ADEX Periodontal Examination

☐ I elect NOT to take the ADEX Periodontal Clinical Examination even though I am eligible to do so and it is offered at no additional cost. I understand that some states may require this examination for licensure and that if I decide to take it at a later date, I will be required to pay the re-examination fee for this examination at that time.

Any misrepresentation of intentions may result in a failure of the exam.

*Note: if you elect to take the Periodontal Examination and for whatever reason you do not do so, the maximum time you may take for the Restorative Examination (including both the anterior and posterior restorations) is 7 hours as explained in the Candidate Manual. Exceeding the 7-hour time period will result in a “Violation of Examination Timelines” and failure of the second Restorative procedure.

Express Chair Request

Red dot indicates "to be evaluated"

Green dot indicates evaluated; does not mean "go" or "approved"

ANTERIOR RESTORATION Progress Form

Candidate Sequential: _____

PLACE ID LABEL HERE

Test Site: _____

# of Modification Request Forms: 1 2 3 4 5

Cubicle #:

Lesion Approval

Patient's Name: _____

Assistant's Name: _____

If this patient is being "shared," please list other candidate's sequential # here:

_____

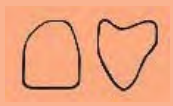
Candidate: Circle Tooth Number and Check Type of Restoration

D M

6	7	8	9	10	11
27	26	25	24	23	22

ACCESS: Lingual Facial

Replacing Existing Restoration? ☐ Yes ☐ No



Candidate initials affirming the contact is closed upon initial submission ☐

Attach radiographs to the top of this page

ANESTHETIC RECORD

If a local anesthetic were to be used on this patient you would provide:	
Type(s) of Injection (Infiltration/Block):	
Anesthetic(s) (Brand/Generic Name):	
Quantity of Anesthetic (cc) Expected to use:	
Vasoconstrictor (Concentration):	
Has the patient previously received anesthetic the same day? Anesthetic and Dose:	Yes ☐ No ☐
Approval for Initial Anesthetic Examiner #:	
Additional Anesthesia - Anesthetic and Dose:	
Approval for Additional Anesthetic Examiner #:	
For this Procedure: Quantity of Anesthetic (cc) Actually Used	

PRE-TREATMENT MEDICATION (if required)

Medication(s) (Brand/Generic Name)	
Dosage/When Taken	

LINER

Candidate Request for Liner
By checking this box I am requesting approval for a liner ☐

☐ Candidate initials understanding results of liner request

For Examiner Use Only:

First examiner # requesting liner

Checked by CFE IF GRANTED

Reviewed by Express Chair if NOT ACCEPTABLE

CFE Process Notes

All patients returning from the Evaluation Station must be accompanied by a CFE who will provide approval for candidates to proceed

Pink Dot

Indirect Pulp Cap

Checked by CFE

Blue Dot

Exposure

Carious: ☐ Mechanical: ☐

Checked by CFE

Candidate notes/comments to examiners (this is not a Modification Request). Candidate: please number each comment. If back side is used, so note. CFE: place examiner #, initials and time after each comment. Examiners: please enter your examiner # after reading comments.

CANDIDATE'S NOTES and COMMENTS TO EXAMINER, CONT'D
(Not Modification Requests):

Candidate: Number each comment
CFE: Place your examiner number, initials, and time noted after each comment

Express Chair Request

Red dot indicates "to be evaluated"

Green dot indicates evaluated; does not mean "go" or "approved"

POSTERIOR RESTORATION Progress Form

Candidate Sequential: _____

PLACE ID LABEL HERE

Test Site: _____

# of Modification Request Forms: 1 2 3 4 5

Cubicle #: _____

If this patient is being "shared," please list other candidate's sequential # here:

_____

Lesion Approval

Patient's Name: _____

Assistant's Name: _____

Candidate: Circle Tooth Number & Check Restoration Type

1 2 3 4 5 | 12 13 14 15 16

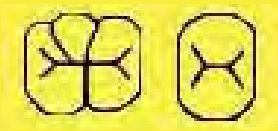
32 31 30 29 28 | 21 20 19 18 17

Posterior Amalgam MO ☐ DO ☐ MOD ☐

Posterior Composite MO ☐ DO ☐ MOD ☐

Added Surfaces _____

Examiner #



Candidate initials affirming the contact is closed upon initial submission

Attach radiographs to the top of this page

ANESTHETIC RECORD

If a local anesthetic were to be used on this patient you would provide:	
Type(s) of Injection (Infiltration/Block):	
Anesthetic(s) (Brand/Generic Name):	
Quantity of Anesthetic (cc) Expected to use:	
Vasoconstrictor (Concentration):	
Has the patient previously rec'd anesthetic the same day? Anesthetic and Dose:	Yes ☐ No ☐
Approval for Initial Anesthetic Examiner #:	
Additional Anesthesia - Anesthetic and Dose:	
Approval for Additional Anesthetic Examiner #:	
For this Procedure Quantity of Anesthetic (cc)Actually used	

PRE-TREATMENT MEDICATION (if required)

Medication(s) (Brand/Generic Name)	
Dosage/When Taken	

LINER

Candidate Request for Liner ☐
By checking this box I am requesting approval for a liner

☐ Candidate initials understanding results of liner request

For Examiner Use Only:

First examiner # requesting liner

Checked by CFE IF GRANTED

Reviewed by Express Chair if NOT ACCEPTABLE

POSTERIOR COMPOSITE TYPE:

☐ Pulpal Floor Present ☐ Pulpal Floor Not Present

Examiner #

CFE Process Notes

All patients returning from the Evaluation Station must be accompanied by a CFE who will provide approval for candidates to proceed

Pink Dot **Indirect Pulp Cap**

Checked by CFE

Blue Dot **Exposure**

Carious: ☐ Mechanical: ☐

Checked by CFE

Candidate Notes/Comments to Examiners (This is not a Modification Request). Candidate: Please number each comment. If back side is used so note. CFE: Place examiner #, initials and time after each comment. Examiners: Please enter your examiner # after reading comments.

CANDIDATE'S NOTES and COMMENTS TO EXAMINER, CONT'D
(Not Modification Requests):

Candidate: Number each comment
CFE: Place your examiner number, initials, and time noted after each comment

PERIODONTAL PROGRESS FORM

Candidate Sequential:____
Candidate ID:____
PLACE ID LABEL HERE
Test Site:____

Cubicle #: ☐

Patient's Name: _____

Assistant's Name: _____

If this patient is being "shared," please list other Candidate Sequential # here: _____

Radiographs	
1st Radiographic Submission Examiner #:	☐☐☐☐☐
2nd Radiographic Submission (if required) Examiner #:	☐☐☐☐☐

Pretreatment Medication **(if required)**	
Medication(s) (Brand/Generic Name):	
Dosage/When Taken:	

Anesthetic Record	
If a local anesthetic were to be used on this patient you would provide:	
Type(s) of Injection (Infiltration/Block):	
Anesthetic(s) (Brand/Generic Name):	
Quantity of Anesthetic (cc) Expected to use:	
Vasoconstrictor (Concentration):	
Has the patient previously received anesthetic the same day? Anesthetic and Dose:	☐ Yes ☐ No
Approval for Initial Anesthetic Examiner #:	☐☐☐☐☐
Additional Anesthesia - Anesthetic and Dose:	
Approval for Additional Anesthetic Examiner #:	☐☐☐☐☐
For this Procedure - Quantity of Anesthesia (cc) Actually Used:	

CFE PROCESS NOTES:
All patients returning from the Evaluation Station must be accompanied by a CFE who will provide approval for candidates to proceed

Finish Time:

_____

Candidate notes/comments to examiners (this is not a Modification Request)

Candidate: Please number each comment. If back side is used, so note.
CFE: Place examiner #, initials, and time after each comment.
Examiners: Please enter your examiner # after reading comments.

MODIFICATION REQUEST FORM

Cubicle #:

Candidate Sequential:

PLACE ID LABEL HERE

Test Site:

Place ID label above. If you do not have a ID label, write in the corresponding numbers from your ID card on the lines above.

Restorative

- ○ Amalgam Prep
- ○ Composite Prep

Tooth #: ____ Surface: ____

I certify that I have prepared the tooth to at least acceptable dimensions and all preexisting restorative material, if present, has been removed.

Candidate Initials: _____ Time: _____ : _____ CFE#:

Modification Request #1

What:

Where:

How Much:

Why:

No Request ○ | Granted ○ | Not Granted ○

Document:

Modification Request #2

What:

Where:

How Much:

Why:

No Request ○ | Granted ○ | Not Granted ○

Document:

Modification Request #3

What:

Where:

How Much:

Why:

No Request ○ | Granted ○ | Not Granted ○

Document:

Modification Request #4

What:

Where:

How Much:

Why:

No Request ○ | Granted ○ | Not Granted ○

Document:

White copy -stapled to the back of the progress form

SCANTRON OpScan iNSIGHT™ EM-262583-3:654321

Instruction to Candidate

Candidate: You must see a CFE ***before*** proceeding

Candidate Sequential #: ☐☐☐

Cubicle #: ☐

Procedure:

- ☐ Anterior Preparation
- ☐ Anterior Restoration
- ☐ Posterior Composite Preparation
- ☐ Posterior Composite Restoration
- ☐ Posterior Amalgam Preparation
- ☐ Posterior Amalgam Restoration
- ☐ Perio

Tooth # (if applicable) ☐

Examiner 1: ☐☐☐☐☐

Examiner 2: ☐☐☐☐☐

Authorized by CFE to continue: ☐☐☐☐☐

- ☐ Place Liner
- ☐ Adjust/check occlusion location:_____
- ☐ Modify procedures as follows:_____
- ☐ Damage to adjacent tooth #:_____
  - ☐ Polish ☐ Recontour ☐ Adjacent Tooth Requires Restoration
- ☐ Unrecognized Exposure
- ☐ Remove Restoration and place temporary/interim restoration
- ☐ Place temporary/interim restoration
- ☐ Complete Follow-Up Form
- ☐ Advise patient of need for further treatment_____
- ☐ Replace rubber dam
- ☐ Provide missing instrument_____
- ☐ Provide cubicle card
- ☐ Provide missing paperwork_____
- ☐ Provide missing radiograph(s)_____
- ☐ Non-diagnostic radiographs_____
- ☐ Administer additional local anesthesia
- ☐ Proceed with indirect pulp cap and return patient immediately for grading
- ☐ Repair or replace the pulp cap
- ☐ Patient requested bathroom break
- ☐ Other
- ☐ General Comments

General Comments:
(Examiner Use Only)

Candidate: Place an ID label below and enter your initials to confirm that you understand

Candidate Sequential:____
Candidate ID:____
PLACE ID LABEL HERE
Test Site:____

Initials: ☐

Dental Candidate Check-out Form

Candidate Sequential:_____
Candidate ID:_____
PLACE ID LABEL HERE
Test Site:_____

Cubicle #: ☐

When you have completed the examination, turn in the following materials to the CFE **in the order listed below**. Once the CFE has verified that all materials have been returned, you will place the following documents inside your white candidate envelope. This will conclude the examination.

Your Treatment Selection Worksheet will remain with you.

CFE's INITIALS: ☐

☐ 1. If applicable, your assistant's and/or interpreter's badge (throw your candidate ID badge away and discard all plastic badge holders)

☐ 2. Patient Treatment Consent Form (signed by patient) (candidate must sign at the end of the exam)

☐ 3. Medical History Form for each clinical patient

☐ 4. All Progress Forms
   a. Anterior (with pre-operative radiographs)
   b. Posterior (with pre-operative radiographs)
   c. Periodontal Scaling

☐ 5. 2 Cubicle cards

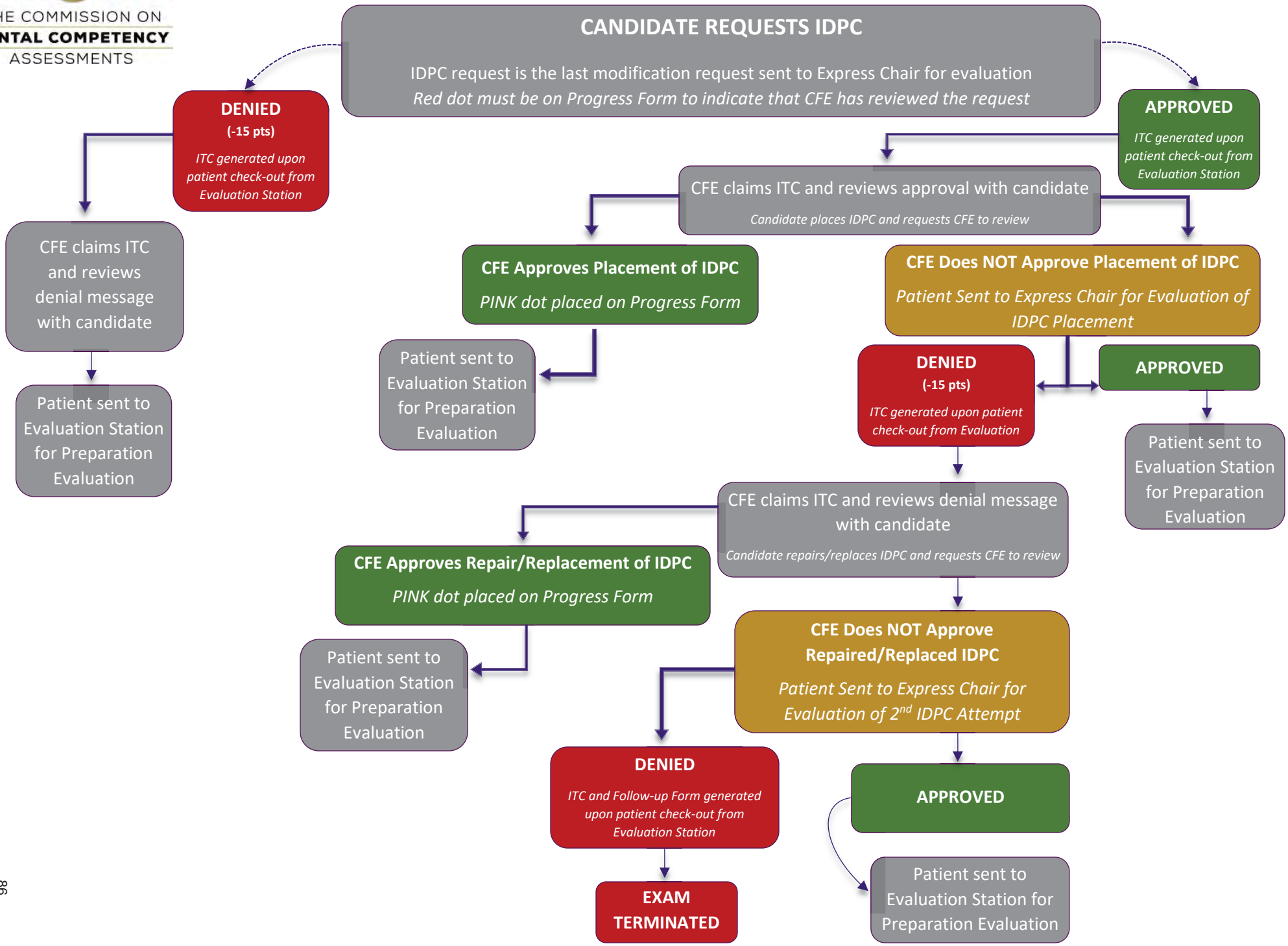
☐ 6. Post-operative radiographs (Any post-operative radiographs of teeth restored during the examination must be submitted, clearly marked for identification)

7. Full mouth radiograph
   ☐ Returned to the candidate
   ☐ Retained by the testing agency

☐ 8. White Envelope

THE COMMISSION ON DENTAL COMPETENCY ASSESSMENTS

INDIRECT PULP CAP REQUEST FLOW CHART



THE COMMISSION ON DENTAL COMPETENCY ASSESSMENTS

RESTORATIVE EXAM FLOW CHART

Candidate Cubicle Set-Up

Enter clinic; take patient's blood pressure; complete appropriate paperwork

Request a CFE

CFEs conduct the patient/paperwork approval process, the first step in evaluation

Lesion Evaluation

CFE will request a runner to escort your patient to the check-in desk; all required forms and instruments must accompany patient to the evaluation station

Lesion Denied

(ITC with denial details will accompany Progress Form; SEE A CFE)

Find another lesion and/or patient, complete appropriate paperwork, and then return to the "Request a CFE" step above

Lesion Approved

Proceed to prepare your first lesion (only one lesion may be completed at a time)

Preparation Evaluation

CFE will request a runner to escort your patient to the check-in desk; all required forms and instruments must accompany your patient

ITC Returned

Locate a CFE

No ITC Returned

Proceed with restoration

Modification Request

Request a CFE to send a runner to escort your patient to the check-in desk; all required paperwork and instruments must accompany your patient

Modification Denied

Requested modification(s) not allowed; you may choose to resubmit another modification request, or you may proceed to the Preparation Evaluation

Modification Approved

Continue by completing approved modification; once completed, request a CFE before proceeding to the Preparation Evaluation

Restoration Evaluation

CFE will request a runner to escort your patient to the check-in desk; all required forms and instruments must accompany your patient

ITC Returned

Locate a CFE

No ITC Returned

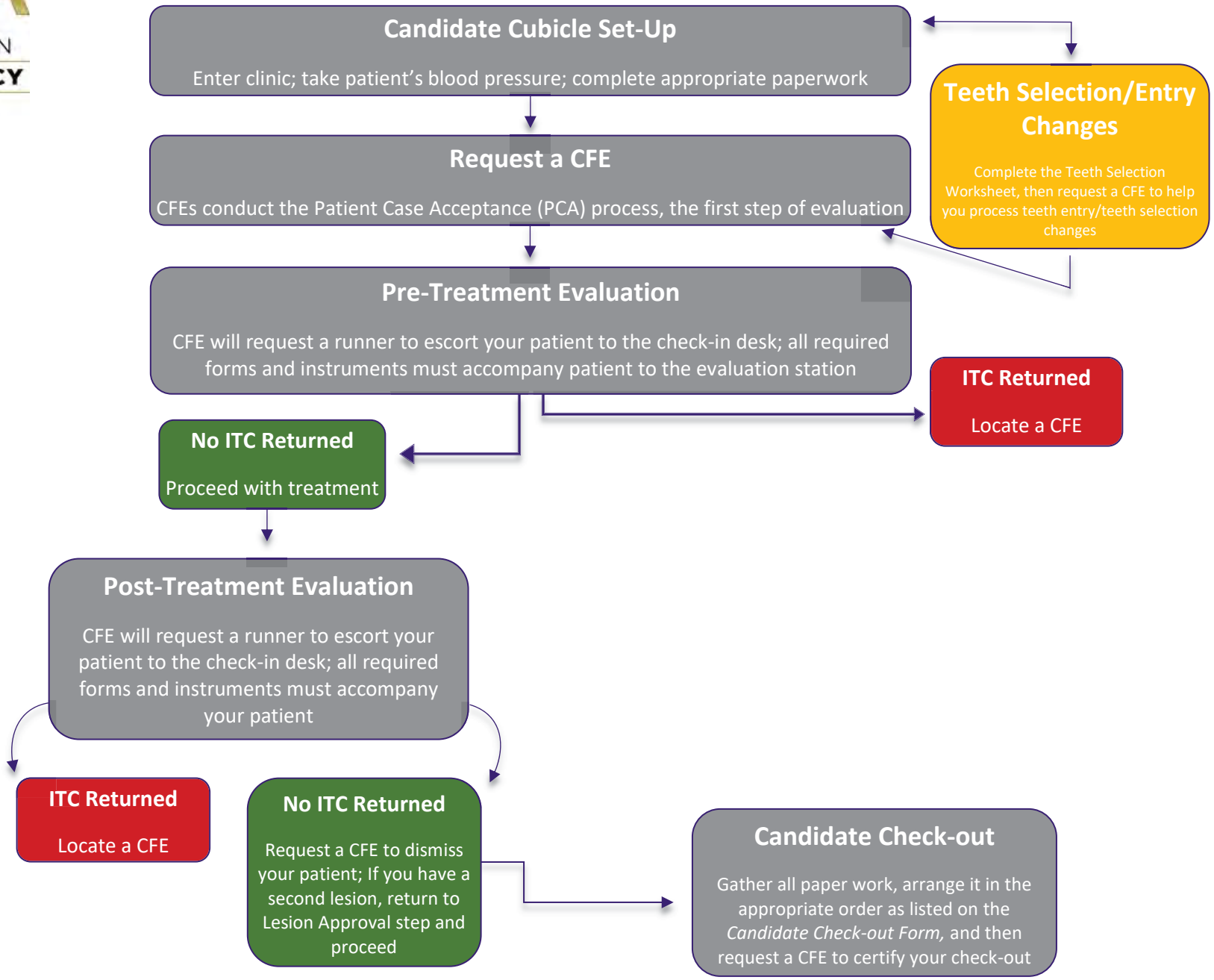
Request a CFE to dismiss your patient; If you have a second lesion, return to Lesion Approval step and proceed

Candidate Check-out

Gather all paper work, arrange it in the appropriate order as listed on the *Candidate Check-out Form,* and then request a CFE to certify your check-out

THE COMMISSION ON DENTAL COMPETENCY ASSESSMENTS

PERIODONTAL EXAM FLOW CHART



Developed by:

The American Board of Dental Examiners

Administered by:

The Commission on Dental Competency Assessments

Registration
AND
DSE OSCE Manual

2020 ADEX Dental Examination Series

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EXAMINATION AND MANUAL OVERVIEW

The CDCA administers the ADEX clinical dental licensure examination. The ADEX dental exam series consists of a computer-based exam (DSE OSCE), simulated patient-based procedures (manikin procedures), as well as patient-based procedures (restorative procedures & periodontal procedure). All examinations are based on specific performance criteria as developed by ADEX which will be used to measure the clinical competency of candidates. This manual has been designed to assist candidates who are challenging any part of the ADEX exam series with the registration process, as well as offer examination content of the Diagnostic Skills Examination OSCE (DSE OSCE).

All candidates who take any parts of the ADEX dental examination series administered by the CDCA between January 1, 2020 and December 31, 2020 are responsible for reading and understanding the 2020 examination manual(s) published by the CDCA, any documented changes to the 2020 manual(s), and for reviewing and understanding all other material provided by the CDCA regarding the exams administered between January 1, 2020 and December 31, 2020. If any questions arise during the registration process, candidates are responsible for communicating their questions to the CDCA staff ***via email*** (see contact information below). Questions MUST be submitted in writing.

In order to be successful in the registration process, candidates must review and master the guidelines provided by this manual and the CDCA. Otherwise, the candidate's ability to efficiently and effectively take the ADEX dental examination may be affected, and may subsequently result in dismissal from and/or failure of one or more examination procedures.

During the online registration process, candidates are required to create a unique profile that contains all relevant contact information. It is extremely important that candidates maintain a current email and physical mailing address in their online candidate profiles. This is the only way to ensure that there will be a timely receipt of important materials from the CDCA.

The CDCA has a blanket malpractice insurance policy that covers all dental candidates and their assistants for all ADEX examinations. Therefore, candidates and/or their assistants are not required to obtain additional limited liability insurance.

The CDCA reserves the right to cancel or reschedule any examination in the event of an emergency or other unforeseen circumstance that is beyond the CDCA's control. The CDCA would either refund those candidates' application fees or reassign candidates to the next available examination site or reschedule the examination at the earliest possible date.

Every effort has been made to ensure that this manual is accurate, comprehensive, clear, and up-to-date. In the rare instances when examination related instructions need to be updated or clarified during the examination year those changes will be communicated to the candidates by the CDCA. There may also be other test related material sent to candidates. These materials will be available through their online candidate profiles and/or at registration on the day of the exam.

CDCA
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DENTAL COMPETENCY
ASSESSMENTS

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Contact our team: https://www.cdcaexams.org/contact

I. About the CDCA

The Commission on Dental Competency Assessments (CDCA) was founded in 1969 as the Northeast Regional Board (NERB) to facilitate the licensure process for candidates and eliminate the need for repetition of state board clinical examinations. The CDCA is a nonprofit, independent corporation, comprised of a consortium state and international dental boards. The CDCA develops, administers, scores, and reports the results of its examinations in Dentistry and Dental Hygiene. Each state board whose members participate in the CDCA accepts the results of these clinical examinations in lieu of its own individually administered clinical examination.

Vision Statement

It is the vision of the CDCA to be a preeminent resource in the development, innovation and administration of competency assessments for the oral health professions.

Mission Statement

The CDCA is:

- *Committed to serving boards of dentistry by designing and administering assessments that are based on sound principles of testing and measurement.*
- *Pledged to excellence, integrity and fairness.*
- *Committed to a national uniform examination process dedicated to the protection of the public through cooperation with state dental boards, testing agencies, organized dental and dental hygiene, and educational institutions.*

II. About ADEX

The American Board of Dental Examiners, Inc. (ADEX) is a private not-for-profit consortium of state and regional dental boards throughout the United States, its territories, and Jamaica. ADEX provides for the ongoing development of a series of common, national dental licensing examinations that are uniformly administered by individual state or regional testing agencies on behalf of their participating and recognizing licensing jurisdictions. CITA and the CDCA are members of ADEX and have adopted the ADEX dental examination series as well as the ADEX dental hygiene examination.

ADEX MISSION STATEMENT: "To develop clinical licensure examinations for dental professionals"

The individual examinations of the ADEX examination series are developed and maintained by the **American Board of Dental Examiners (ADEX).** The content of each of the examinations, the criteria used to make evaluations of performance, and the protocol for scoring of the examinations are responsibilities of the ADEX. ADEX does not administer the examinations it develops.

A. ADEX Dental Examination Series

The ADEX dental examination series is the examination developed by the American Board of Dental Examiners, Inc. (ADEX) and administered by the Commission on Dental Competency Assessments (CDCA, formerly the NERB) and the Council of Interstate Testing Agencies, Inc. (CITA). The ADEX examination series consists of computer simulations and clinical examinations performed on patients and manikins. The ADEX examination series is utilized to assist licensing jurisdictions in making decisions concerning the licensure of dentists. The ADEX dental examination series for 2020 consists of up to five skill-specific clinical and simulated clinical examinations:

One written computer examination
-Section I: Diagnostic Skills Examination OSCE (DSE OSCE) Section (computer-based)

Two simulated clinical examinations
-Section II: Endodontic Clinical Examination Section (manikin-based)
-Section III: Fixed Prosthodontic Clinical Examination Section (manikin-based)

Two clinical examinations performed on live patients
-Section IV: Periodontal/Scaling Clinical Examination Section (optional, based on the requirements in the state where the candidate seeks licensure)
-Section V: Restorative Clinical Examination Section (includes anterior and posterior)

Candidates taking this examination series do so voluntarily and agree to accept the provisions and to follow the rules established by ADEX and the CDCA for the examination as detailed in this manual.

B. ADEX Recognizing Jurisdictions

The ADEX Examination Series is widely accepted for use in the dental licensure process in jurisdictions throughout the United States and in Jamaica. Please consult the CDCA website at www.cdcaexams.org for a map of those states, jurisdictions, and countries that accept the results of the ADEX dental examination. Because of the rapidly changing nature of the licensure process in the United States, candidates are advised to contact the board of dentistry in the jurisdiction in which they intend to seek licensure to determine whether ADEX Exam results are acceptable in that jurisdiction.

Please note that depending on the requirements of each state, some states may require an additional module(s) or competency. ***Candidates should contact the jurisdiction in which they wish to practice to confirm all requirements for licensure in that jurisdiction.***

C. ADEX Status

"ADEX Status" is achieved when a candidate has successfully completed the required computer simulated exam (DSE OSCE), Sections I, II, III and V of the ADEX Dental Examination Series with a score of "PASS - 75 or greater" in each of the sections, as well as has graduated from a dental school which has been accredited by the Commission on Dental Accreditation (CODA) or the Commission on Dental Accreditation of Canada (CDAC). While the Periodontal/Scaling Clinical Examination (Section IV) is not required for ADEX Status, it may be required for licensure in many jurisdictions.

It is the candidate's responsibility to contact the licensing jurisdiction of interest to determine current eligibility and additional requirements. Individual jurisdictions may require an additional state jurisprudence examination or other additional examinations.

NOTE: Candidate results may be shared among all agencies that administer the ADEX dental exam for the purposes of effectively reporting ADEX Status, as well as adhering to both the 18-month rule and the 3-time failure rule.

D. 18-Month Rule

Candidates will have 18 months to successfully complete the required 5-part ADEX dental exam series (including the Diagnostic Skills Examination OSCE but not considering the Periodontal portion as required).

For CIF candidates, that 18 months will begin on July 1st of the year prior to their class graduation date.

For Traditional candidates, it will begin on the date of the first computer-based or clinical exam challenged.

If a candidate does not successfully complete the ADEX dental exam series within that period, that candidate must re-take all required parts of the examination, including the computer-based portion.

E. 3-Time Failure Rule

Candidates failing one or more of the same parts of the ADEX dental examination series on three (3) successive attempts must re-take **all** parts of the examination, including any computer-based portions. Any procedures on which the candidate may have been previously successful will not be recognized or counted toward successful completion of the re-test of the entire ADEX examination series. The candidate will be considered an initial applicant and must register for the ADEX dental examination series.

III. Application and Exam Registration Process

A. Online Candidate Profile Establishment and Management

Applicants are required to fully complete an online profile via https://cdcaexams.brighttrac.com prior to being permitted to register for any parts of the ADEX dental examination.

It is in the candidates' best interest to create their required profiles well in advance of a published registration deadline. Profiles must be verified in order to apply for any exam date, and the profile verification process can take 2-3 business days. Late fees will be assigned for any exam registrations that are submitted after the examination's published deadline. Therefore, candidates should plan accordingly when beginning the registration process. See the CDCA website (www.cdcaexams.org) for specific deadlines for each exam.

If you have already graduated from a dental program: Only applicants who have received a DDS or DMD degree from schools accredited by the American Dental Association Commission on Dental Accreditation (ADA/CODA) or by the Commission on Dental Accreditation of Canada (CDAC) are eligible to apply for the ADEX dental licensure examination. Internationally-trained candidates who have obtained an official letter of authorization from a Licensing Dental Board are also eligible to apply.

1. How to Create your Profile:

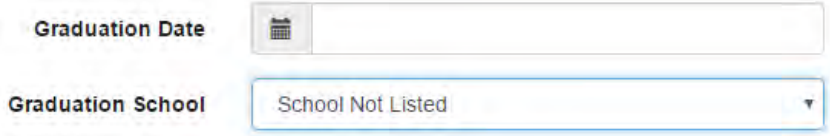
STEP 1: **Go to** https://cdcaexams.brighttrac.com

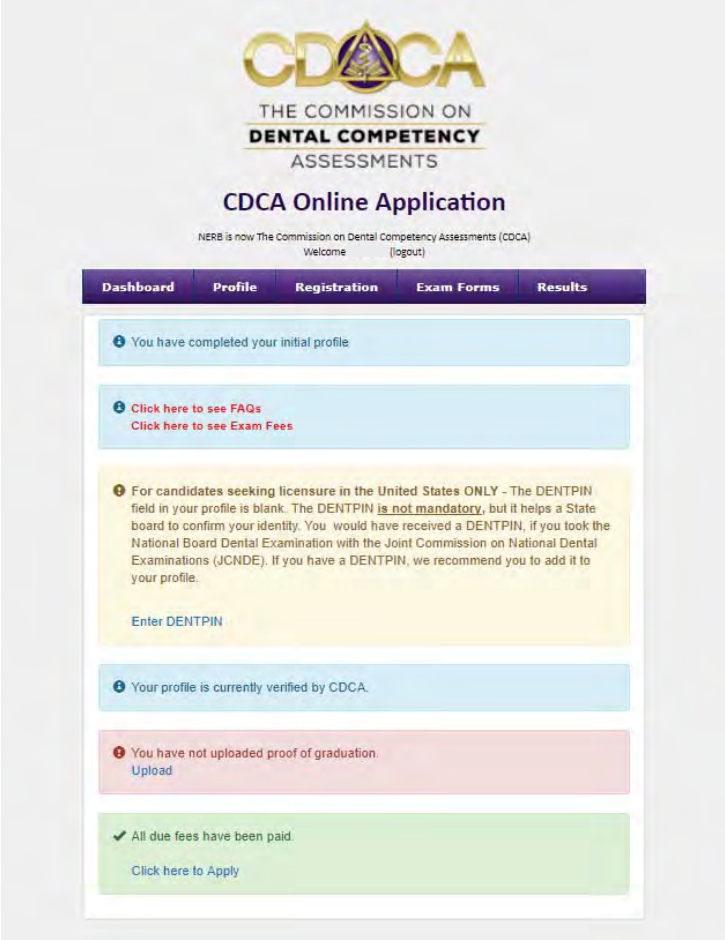
Click the *fill out a basic profile* link and complete the form.

Please ensure that you register with an email address that you check often to ensure that emails from the CDCA office reach you. The CDCA recommends that candidates use their personal emails for exam registration, as candidates often do not have access to their school emails after they have graduated. The email address you enter will become your username to login to your profile and will be used to communicate your site assignment and notify you when results have been released. Be sure to double check your email address before completing your profile.

TO RESET YOUR PASSWORD AT ANY TIME, CLICK THE FORGOT PASSWORD LINK

Internationally-trained candidates (other than a Canadian graduate) wishing to challenge the ADEX dental examination series administered by CDCA must first contact the state where they wish to practice and have that state write a letter of authorization from that state (on official letterhead) that the candidate is authorized to challenge the ADEX dental examination series. As a result, the grades for the examination will only be sent to that state. Internationally-trained candidates must upload the official letter from their supporting state and should enter the date on which they completed their undergraduate program of study and should choose “School Not Listed”





Once you have completed entering in your information, you will see your Profile homepage with following tabs (in purple):

Dashboard: Under this tab you will find a list of items you must submit for verification of your candidate profile and the status of each item.

Item highlighted in blue = information for you

Item highlighted in red = item requires attention

Item highlighted in yellow = Optional (generally)

Profile: Under this tab you can view and edit your personal information and upload your photo, proof of graduation, etc. Candidates should maintain a current email and physical mailing address with the CDCA. Candidate payment history is also located here (“View Previous Payments”).

Registration: Once all profile information has been uploaded and your profile has been verified you may use this tab to apply for examinations. *Note: you will have 72 hours to pay for your exam once you apply. If you do not, your application will be removed and you must reapply. Please note that you will only be able to re-apply if the site still has available space. Detailed instructions will be presented based on the available examinations. This tab is also where your clinical assignment will be listed once the site schedule is finalized.

Exam Forms: Procedure-related documents may be found here.

Results: Your results will be posted under this tab once they are verified and released. You may also download an ***unofficial*** copy of your results. (*Unofficial copies are NOT accepted for license applications. Do NOT mail this unofficial copy to the state board.)

STEP 2: UPLOAD A PHOTO THAT MEETS THE FOLLOWING REQUIREMENTS

On your *Dashboard* page, you will be prompted to upload a photo in which you are wearing professional attire or clinically-acceptable scrubs. A current passport quality photo is required. All photos will be reviewed by CDCA and may be rejected if they are not found to be acceptable for identification purposes. Submitting an unacceptable photo will delay your registration, as this photo will be printed on your ID badge for wear at all times during the exam. Click the *Upload* link and follow the instructions.

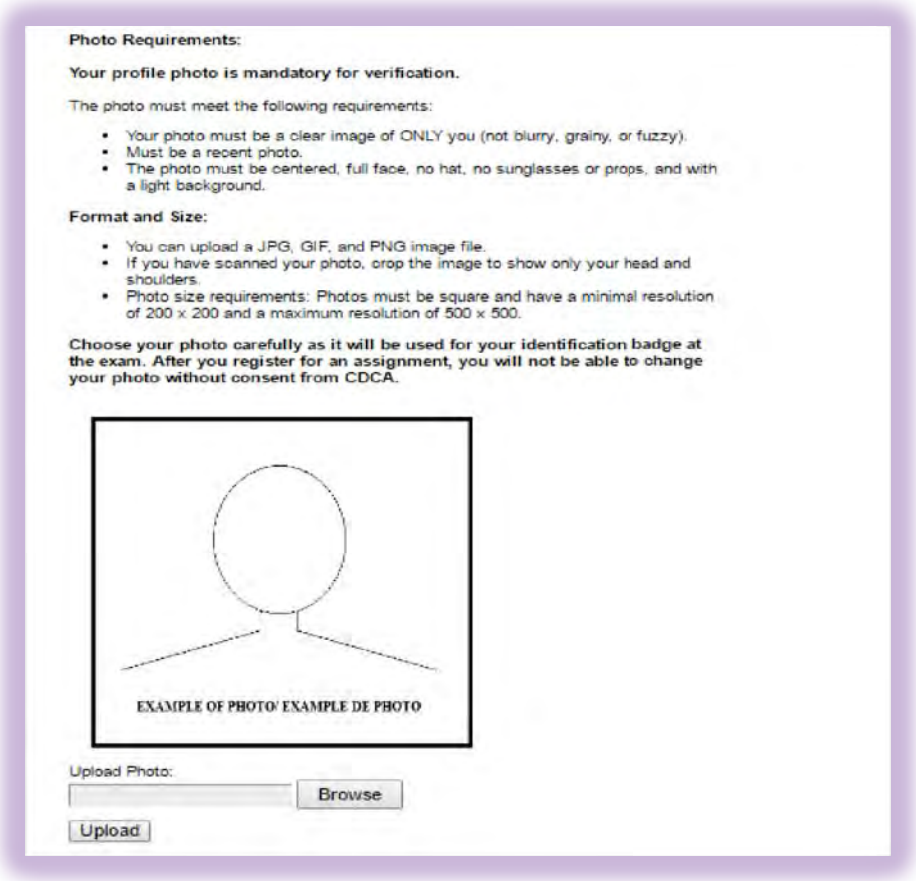


Photo Requirements:

Your profile photo is mandatory for verification.

The photo must meet the following requirements:

- Your photo must be a clear image of ONLY you (not blurry, grainy, or fuzzy).
- Must be a recent photo.
- The photo must be centered, full face, no hat, no sunglasses or props, and with a light background.

Format and Size:

- You can upload a JPG, GIF, and PNG image file.
- If you have scanned your photo, crop the image to show only your head and shoulders.
- Photo size requirements: Photos must be square and have a minimal resolution of 200 x 200 and a maximum resolution of 500 x 500.

Choose your photo carefully as it will be used for your identification badge at the exam. After you register for an assignment, you will not be able to change your photo without consent from CDCA.

EXAMPLE OF PHOTO/ EXAMPLE DE PHOTO

Upload Photo:

Browse

Upload

STEP 3: UPLOAD REQUIRED DOCUMENTS (FOR NON-CIF CANDIDATES)

Candidates must submit required documents indicating that they are qualified to participate in the ADEX exam series. Depending on your status—still in school, graduated, in a post-graduate program, internationally trained, already practicing, or any other status—there are required documents that must be verified as part of the online profile creation process. Please read through the following requirements carefully to ensure that you upload the correct documents.

A. Internationally-trained Candidates:

1. Currently NOT enrolled in a CODA or CDAC post-graduate program: Candidates with an undergraduate dental degree from a non-U.S. or Canadian educational program must be authorized to take the examination by at least one state or jurisdiction that accepts the results of the ADEX examination as an initial licensure exam in that jurisdiction. Therefore, graduates of international dental programs must contact the jurisdiction in which they are seeking licensure and have that state draft a letter (on its official letterhead) in writing to indicate that the candidate is authorized to attempt the licensure exam in order to apply for licensure in that state only. Results are sent to that individual state only. Internationally-trained candidates do NOT receive "ADEX Status."

2. Currently enrolled in a CODA or CDAC post-graduate program: There are special protocols that the CDCA will assist you with. Please contact the CDCA once your profile has been verified (https://www.cdcaexams.org/contact).

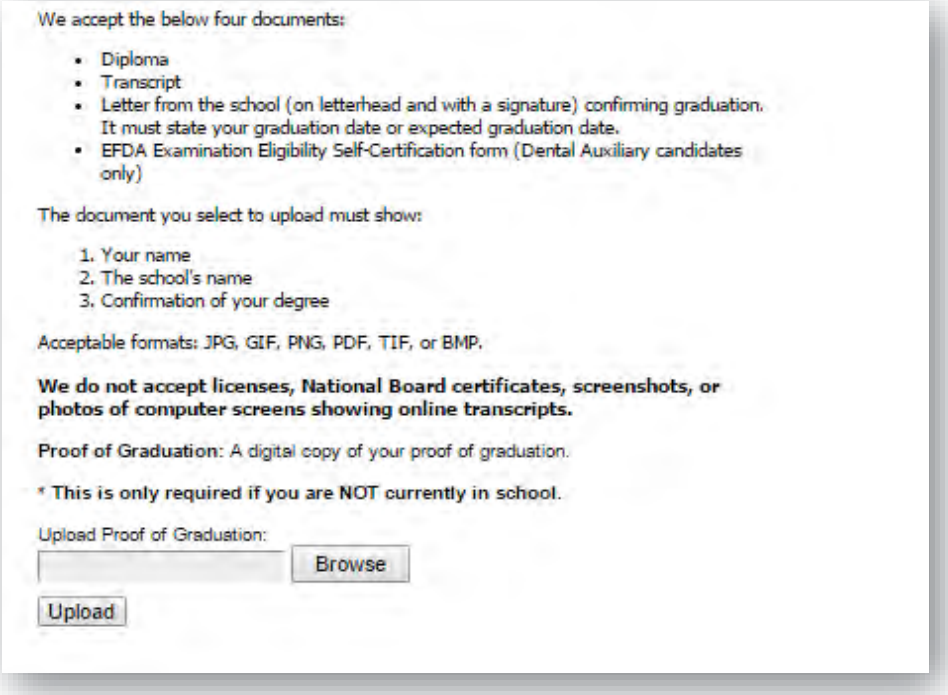
B. Proof of Graduation/Letter of Authorization:

1. Candidates who have graduated from a CODA or CDAC school: a copy of your diploma or a copy of your transcript is required. If neither a copy of your diploma or a copy of your transcript is available, a letter from your school (on official school letterhead) confirming graduation is required.

2. Candidates who have not yet graduated: If the CDCA does not currently administer an exam at your school of record, a letter from the school on official letterhead confirming that you are authorized to participate in a clinical exam, as well as your expected graduation date, is required.

If you are currently enrolled in a program where the CDCA currently administers an exam, your school coordinator will manage your proof of graduation. You do not need to upload any documents to this area.

3. You will see the following requirements and format guidelines on the screen. You may only upload ONE file, so ensure that all pages are combined into a single file (see acceptable formats to the right).


We accept the below four documents:

- Diploma
- Transcript
- Letter from the school (on letterhead and with a signature) confirming graduation. It must state your graduation date or expected graduation date.
- EFDA Examination Eligibility Self-Certification form (Dental Auxiliary candidates only)

The document you select to upload must show:

1. Your name
2. The school's name
3. Confirmation of your degree

Acceptable formats: JPG, GIF, PNG, PDF, TIF, or BMP.

We do not accept licenses, National Board certificates, screenshots, or photos of computer screens showing online transcripts.

Proof of Graduation: A digital copy of your proof of graduation.

*** This is only required if you are NOT currently in school.**

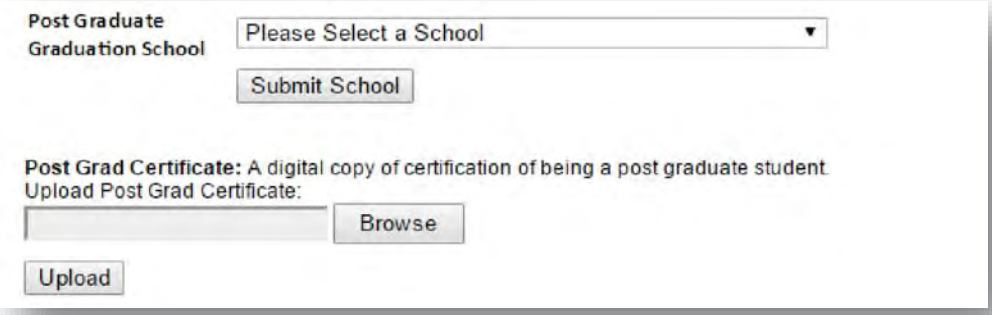
Upload Proof of Graduation:

Browse

Upload

C. Post-Graduation:

Candidates enrolled in a post-graduate program or residency may upload a Post Grad Certificate, which is documentation that indicates their enrollment in a ADA/CODA or CDAC graduate program. Internationally-trained candidates may upload their post-graduate program enrollment documentation, but their eligibility to challenge the exam is based on the approval of a licensing jurisdiction.


Post Graduate Graduation School

Please Select a School

Submit School

Post Grad Certificate: A digital copy of certification of being a post graduate student.
Upload Post Grad Certificate:

Browse

Upload

D. Candidate Disqualification:

A candidate may be disqualified from participating in the examination series by the dean of his/her dental school at any time after certification if the candidate ceases to be a senior student of record or the dean (or designated school official) determines that the candidate is ineligible for any reason. Candidates should then contact the CDCA Central Office at https://cdcaexams.org/contact (select the "Licensure Candidates" button) at least 72 hours prior to the first exam day in order to avoid a "No Show" result at their previously scheduled exam as well as forfeiture of all fees paid for that exam.

Any fees paid by candidates who are ineligible will be applied to a future exam or will be refunded to the candidate, minus a $100 administrative fee. A candidate who is disqualified for the remainder of the academic year during the Curriculum Integrated Format will have access

to the Traditional Format in a subsequent academic year if he/she graduates and presents a diploma. In such a case, the candidate must submit a new registration and may incur additional facility fee charges.

STEP 4: VERIFICATION PROCESS

Once you have completed uploading the appropriate documentation and appropriate professional photo, your profile will enter the verification process, and a qualified CDCA staff member (or, if you are taking the exam at a CIF or closed site, your CDCA school coordinator) will review the documents and your photo to ensure that they are completed correctly. If any questions arise in the process, you will be contacted via email. The verification process usually takes 2-3 business days if your profile is being reviewed by a qualified CDCA staff member.

During the verification process, you may see the following, or similar, messages displayed in your online candidate profile (The EFDA note does NOT apply to Dental Candidates):

Your graduation status has not yet been determined. If you are currently in school, in a CDCA Member State, then your status will be updated by CDCA or directly by your school.

If the CDCA does not currently administer an exam at your school, please upload a letter from your school (on school's official letterhead) that authorizes you as a student in good standing to sit for a clinical examination. The letter must also include your anticipated graduation date.

For Dental Auxiliary candidates - You are required to upload the EFDA Examination Eligibility Self-Certification form as proof of graduation. This can be found in the EFDA exam manual.

Some of these messages indicate that your profile is still missing information, and some of these messages are intended to communicate important information to you. Once your profile has been verified, you will see the following message displayed in blue:

Your profile is currently verified by CDCA.

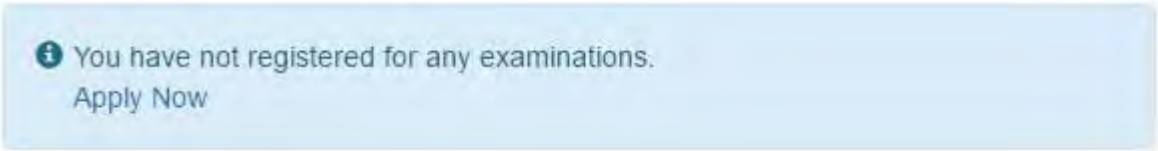
You have completed your initial profile

Click here to see the FAQ

2. How to Register for an Exam:

STEP 1: APPLY FOR AN EXAM

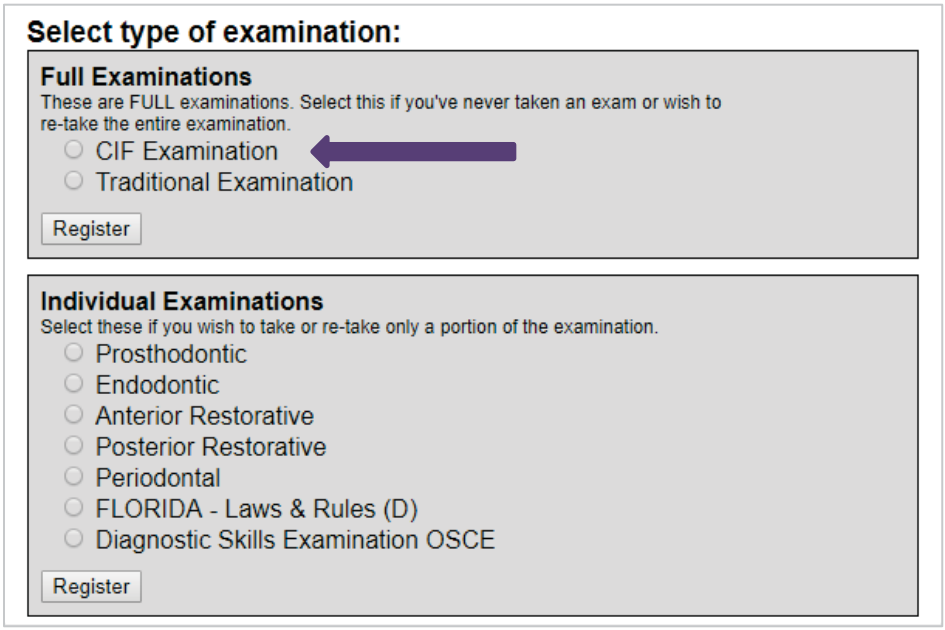
a. After your profile and graduation status are verified, you will be able to click on the *Registration* tab to register for examinations.



b. Exam Registration by Format

1) DENTAL CURRICULUM INTEGRATED FORMAT (CIF):

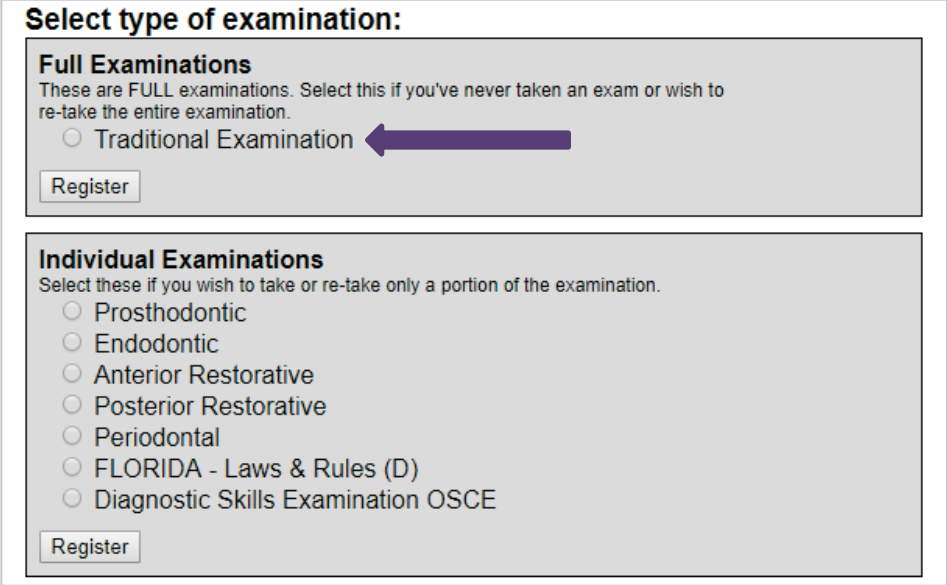
CIF is available to those candidates currently in schools where the CDCA administers an exam. This exam administration format is only available to dental students of record at the school where the exam is administered. See the next page for additional details on re-takes for the CIF format, and see page 13 for details on how to re-register for individual procedures.



Candidates who need to retake any portion of the exam during a PC-CIF series will be automatically re-registered for the incomplete procedure(s) and will be notified via email that their online application has unpaid fees. **All fees must be paid within 72-hours of their posting.**

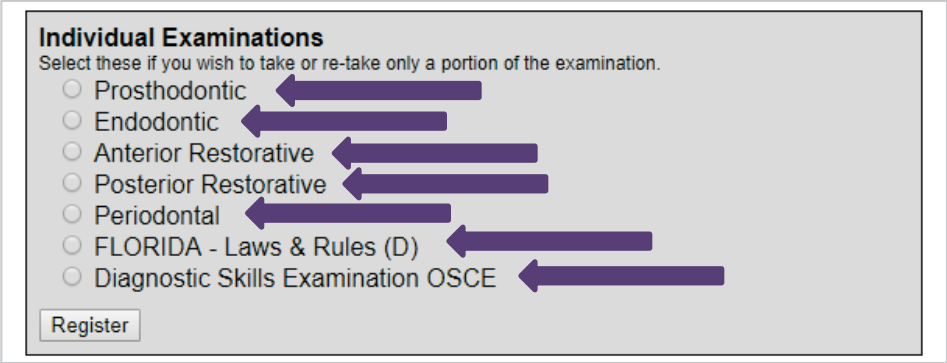
2) DENTAL TRADITIONAL FORMAT:

The Traditional Format is available to all eligible candidates unless the site is closed to non-graduates from that school. See the next page for information about re-taking individual procedures.



3) INDIVIDUAL EXAMINATION PROCEDURES

Candidates may register for individual examination procedures by selecting the appropriate procedure from the list. See the note in the purple box below for details about how to register for more than one procedure.



ALL CANDIDATES: If you wish to take more than one procedure, then you must apply for each procedure separately. Only pay once you have registered for all exam parts you intend to challenge.

(i.e.: If you want to register for all manikin procedures of the exam, you need to register for the prosthodontics procedure AND then register for the endodontics procedure. THEN, you will pay for all procedures at one time). Verify that you have applied for all procedures that you need to take by clicking on the *Registration* tab of your candidate profile.

c. Application Deadlines and Site-Specific Information

Candidates must have completed the registration process for an exam at least 6 weeks prior to the first day of the exam, or they may be charged a $500 late application fee.

Exams close three weeks prior to the first day of the exam, and the final candidate roster is published at that time. Candidates whose operatories have been reserved for the exam day will be notified via email and they will receive additional information specific to that exam site from the CDCA central office. Candidates should review their online profiles for arrival times and additional details.

Site Information Sheets are emailed to the candidates on the final roster once the exam has been closed (3 weeks prior to the first day of the exam). These Site Information Sheets can also be found on the dental calendar page of the CDCA website.

Most non-students of record must pay a facility fee in accordance with the site requirements, and must pay the fee directly to the school.* Candidates are encouraged to reference the site information sheet prior to registering for specific cost information.

*UFCD, LECOM, USC, and Case Western facility fees are applied to candidate profiles for those candidates challenging the exam at those locations

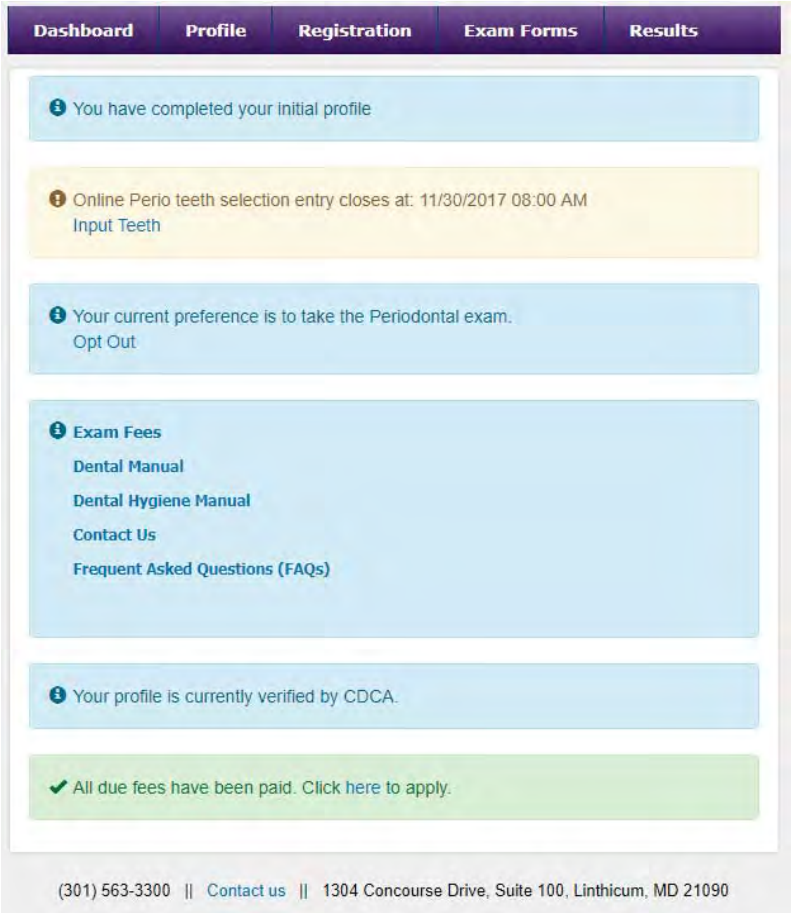
STEP 2: PAY

Once you have completed registering for all exam parts you intend to attempt at the exam site, submit your payment for examination fees by using a VISA or MasterCard credit card (Only VISA or MasterCard will be accepted). Debit cards may be used if allowable by the issuing bank and bear the VISA or MasterCard logo. All payments are drawn immediately and must be paid in full. DO NOT select an exam date unless you are able to submit a full payment. Failure to pay the registration fee at the time of registration may result in your registration being canceled. You may re-register if space is available.

Failure to pay the initial registration fees within 72 hours will result in the candidate being automatically dropped from the exam for which the candidate has begun registration.

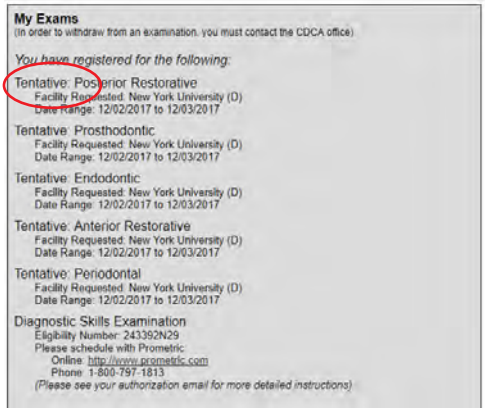
If your payment is declined, please check that you have entered the correct billing address associated with the credit card, check the expiration date and/or whether or not your credit card has a spending limit

STEP 3: MONITOR YOUR CANDIDATE STATUS



Once you have completed your profile and have paid for your exam, you will need to frequently visit your candidate dashboard to view important messages. You are responsible to thoroughly read the messages that are posted on your dashboard and follow all instructions. If you have any questions, reach out to the CDCA Candidate Services team by selecting the "Registration" topic within the "Licensure Candidates" group at https://cdcaexams.org/contact.

NOTE: For all registrations except the DSE OSCE, your registration will show as "Tentative" until the exam has closed (3 weeks prior to the first exam day). See example below.



3. Application Process Adjustments

a) Late Applications

Late applications may be accepted depending on available space. Once the published deadline has passed, candidates wishing to apply for an exam must submit their request to https://www.cdcaexams.org/contact. Applications received after the published deadline may be assessed a late application fee which must be paid online within seventy-two (72) hours. Fees for late applications are listed on the CDCA website.

b) Changes to DSE OSCE Registrations

Candidates wishing to change their computerized exam date or time must reschedule or cancel their appointment at least one (1) calendar day prior to their scheduled date. Rescheduling of appointments can be accomplished via www.prometric.com or by calling 800-796-9857; both are available 24 hours a day, 7 days a week.

If changes are made 1-5 days prior to the scheduled test date, a $50.00 administrative fee will be charged to the candidate. If changes are made 6-29 days prior to the scheduled test date, a $25.00 administrative fee will be charged to the candidate by Prometric upon re-scheduling.

Candidates rescheduling their DSE OSCE through the internet are encouraged to print out a hard-copy confirming their new appointment.

c) Fee Deferrals for Clinical Exams

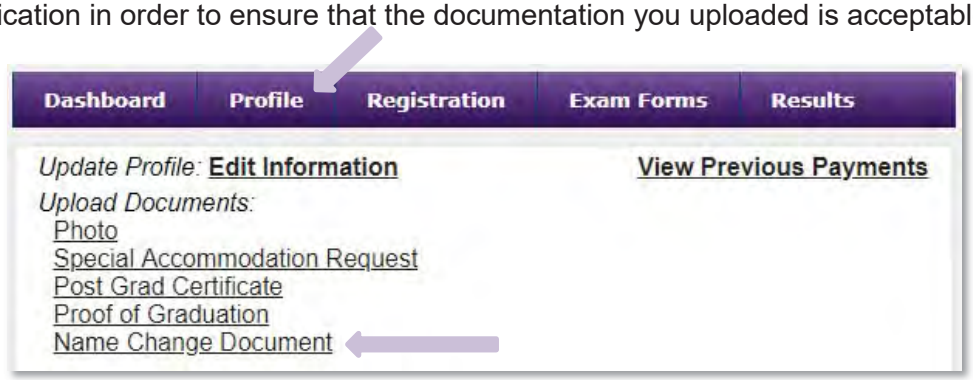
Candidates requesting to move their examination date to a future date after the registration deadline will be charged a $100 administrative fee and will have their paid exam fees applied to a future examination. Candidates must contact the CDCA at least 72 hours prior to the first exam day (cdcaexams.org/contact).

d) Refunds for Clinical Exams

Candidates who request a refund prior to the registration deadline will be fully refunded within 10 business days. Candidates requesting to withdraw after the registration deadline will have a $100 administrative fee deducted from their refund.

e) Name Changes

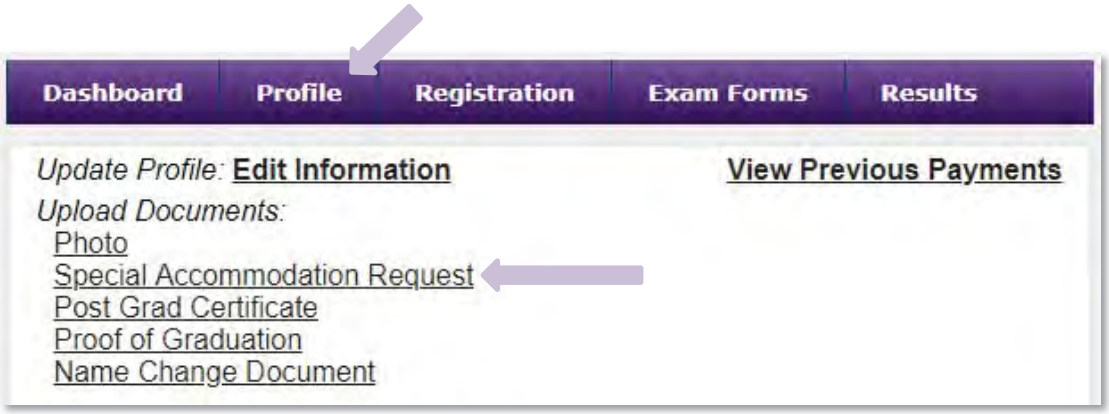
A candidate whose name has legally changed after creating a profile but before attempting any part of the ADEX examination series must FIRST ensure that all of their IDs reflect their new name. Candidates are required to present two forms of identification (one must be a photo ID) when checking-in to the testing center for any computer-based exam, as well as during candidate registration at either the manikin or patient-based exams. Once the identifications have been changed to reflect the new name, a Name Change Document must be uploaded in the candidate's online profile. If your profile has already been verified, your profile will require re-verification in order to ensure that the documentation you uploaded is acceptable:



Once the correct documentation is uploaded, you must contact the CDCA (cdcaexams.org/contact) to indicate that you are requesting that your name be changed and that you have uploaded the documentation to your profile.

4. Special Accommodations Requests

All requests are reviewed by the CDCA Director of Examinations and are subject to approval. **For the Prometric exam, all special testing accommodations MUST be approved by the CDCA prior to scheduling your exam with Prometric.** A doctor's / testing specialist's note on his/her official letterhead (or with official stamp) that explains the candidate's condition and what testing accommodations are requested must be uploaded to the candidate's online profile:



Once the correct documentation is uploaded, you must contact the CDCA (cdcaexams.org/contact) to indicate that you are requesting special testing accommodations and that you have uploaded the documentation to your profile. Without a doctor's / testing specialist's request for accommodations, your request will not be reviewed by the Director of Examinations, which means that your request will be automatically denied. Please note that if your profile has already been verified, you will be able to upload documentation, but you will not be able to register for any exams until the CDCA re-verifies your profile.

Any special accommodations must be requested prior to scheduling the DSE OSCE exam.

IV. Scoring and Results Release

A. Scoring

1. General Overview

The scoring system for the clinical examinations of the ADEX series is based on pre-established criteria. Parts within the examinations are graded independently (Endodontics, Prosthodontics, Anterior Restoration, Posterior Restoration, and Periodontal/Scaling) and always in a triple-blind manner, meaning that three qualified examiners evaluate the performance independently and anonymously. A candidate must demonstrate competence in each procedure required for licensure (the Periodontal/Scaling Examination is an optional examination for candidates; some jurisdictions require the Periodontal/Scaling Examination). A poor or failing performance in one part is not compensated for by a good performance in the others. In addition, the candidate must pass the computer-based Diagnostic Skills Examination OSCE (DSE OSCE) in order to pass the overall examination and achieve "ADEX Status."

To pass the ADEX Dental Examination, the candidate must score 75 or higher on all required parts. State statutes have set 75 as the minimum passing score and the CDCA is not permitted to round up or accept any score less than 75.

General descriptions of the levels of evaluation are as follows:

- **Adheres to Criteria**: The treatment is of acceptable quality, demonstrating competence in clinical judgment, knowledge and skill.
- **Marginally Substandard**: The treatment demonstrates less than desirable clinical judgment, knowledge, or skill.
- **Critically Deficient:** The treatment is of unacceptable quality, demonstrating critical areas of incompetence in clinical judgment, knowledge or skill.

A rating is assigned for each criterion in every procedure by three calibrated, independent examiners, as previously noted. Based on the level at which a criterion is rated by at least two of the three examiners, points will be awarded to the candidate. However, if a criterion is assigned a rating of critically deficient by two or more examiners, no points are awarded for that procedure or for the examination section, and the candidate's performance is terminated.

2. Manikin Grading

Sometimes, the completed treatment for the simulated patients is evaluated and scored off-site at a central location. At some examinations, usually those in the Traditional Format, the evaluations are completed on site.

3. Patient-based Grading

   Evaluations and scoring of candidate performance in the patient centered examinations are always done on-site, and the anterior and posterior restorations are graded separately. If the first restorative procedure receives a passing grade, that grade will stand even if the grade on the second restoration is below 75. However, if the performance on the first attempted restorative procedure is unsuccessful, the candidate will not be permitted to proceed to the second restoration. In the case of a failure, the candidate may apply and re-take the failed restorative procedure(s) at a subsequent examination.

B. Results Release

1. *Candidates:* Scores for all non-CIF ADEX examinations are released to candidate profiles within 10-15 business days after the candidate's examination is completed. Candidates will receive an email notification once their results have been released, and they will need their email and password to access their online candidate profile and results.
2. *Schools:* Results of students of record are released to the dental schools where the CDCA administers the exam, so that School Coordinators may view their students' exam results. School Coordinators are able to use the results of their candidates as opportunities for curriculum development and candidate remediation.
3. *Dental Boards:* Results of all candidate performances are released to participating dental boards within ten (10) business days of the completion of the examination evaluation. Candidates should contact the individual dental board for understanding of that board's acceptance period for the ADEX dental examination series, and to ensure that they have completed all requirements for licensure as set forth by their licensing dental board.
4. *Remediation:* The CDCA does not require candidates to participate in remediation prior to re-challenging any portion of the ADEX Dental Examination series on which they were unsuccessful. However, candidates should contact their licensing dental board to determine if they must complete any remediation requirements prior to re-challenging any procedure.

V. Score Reports, Score Certifications, and Appeals

A. Score Reports

Sometimes, a licensing dental board requires a certified paper copy of the candidate results of the ADEX Dental Examination series. There is a fee of thirty five dollars ($35.00) per address, and all payments must be made using a VISA or MasterCard. Candidates may request this official Score Report online at www.cdcaexams.org/score-report.

Candidates may request their individual score report, or a third party may request the score report on behalf of the licensing dental board. When requesting a score report, be sure to select the appropriate option on the website:

CANDIDATE SCORE REPORT REQUEST

THIRD PARTY SCORE REPORT REQUEST

Candidates should have all exam-related information on hand when making a request:

B. Score Certifications

Candidates may request to have the score that was reported re-calculated by hand and then have the results reported back to them. The Score Certification process includes a review of the electronic evaluation and accompanying documents from which the examination score was generated to determine if any irregularities or errors may have occurred in calculating the final score for a procedure. Irregularities or errors in scoring include duplicate entries, missing or extraneous mark(s) on accompanying documents that could have been misread prior to evaluation or a mathematical error.

Score Certification is not a review of the examination process or candidate performance and a listing of specific candidate errors is not included.
NOTE: All failing scores are routinely checked prior to being released.

A candidate may request a Score Certification of his/her respective results on the ADEX Dental Examination online at cdcaexams.org/score-certification-and-appeals. All requests must include the candidate's name, ID number, site of the examination, date of the examination, and current address. There is a fee of fifty dollars ($50.00), and all payments must be made using a VISA or MasterCard.

C. Appeals

1. *Candidate Appeals Procedure Overview:*

   Candidates may appeal the results of their unsuccessful examination performance if they believe the results were adversely affected by extraordinary circumstances during the examination that ultimately affected the final outcome. Appeals are reviewed on the basis of facts surrounding the decision during the examination. Appeals based on patient behavior, tardiness or failure to appear will not be considered. All reviews of candidate appeals include the score certification procedure described above and are based on a re-assessment of electronic and written documentation of the candidate's performance on the examination. A candidate appeal must be made in writing by completing the *Appeals Form* (available for download at cdcaexams.org/score-certification-and-appeals) and submitting it, along with a cashier's check or money order in the amount of four hundred dollars ($400.00) payable to the CDCA, via certified mail, addressed to:

   Candidate Appeals Panel
   The Commission on Dental Competency Assessments
   1304 Concourse Drive, Suite 100
   Linthicum, MD 21090

2. *Unwarranted Appeals:*

   The review will not take into consideration other documentation, which is not part of the examination process. Opinions of the candidate, auxiliaries, faculty members, patients, colleagues, examiners acting outside the area of their assignment and records of academic achievement are not considered in determining the results of the examination and do not constitute a factual basis for an appeal. Consideration can only be given to electronic and written documents, radiographs, or other materials that were submitted during the examination and have remained in the possession of the testing agency. Any other information, such as radiographs, photographs or models made after completion of the examination will not be considered in the appeals process.

The appeals process is the final review authority. If the appeal is denied, there is no further review process within the CDCA.

VI. ADEX Computer-based Examination: The Diagnostic Skills Examination OSCE

A. DSE OSCE Overview

The computer-based Diagnostic Skills Examination Objective Structured Clinical Examination (DSE OSCE) is administered at a Computer Testing Center upon authorization by the CDCA. Candidates register for the DSE OSCE through their online candidate profiles, and they may attempt the DSE OSCE either before or after the manikin or patient-based examination sections. The test is administered on one day and is approximately four (4) hours in length. As with all sections of the ADEX Dental Examination Series, the 18-month rule and the 3-time failure rule apply to the DSE OSCE.

The DSE OSCE is divided into two sections with a 15-minute break in between each section. The two exam sections will cover a total of three areas of study, and the exam is designed to progressively assess more complex levels of diagnosis and treatment planning knowledge, skills, and abilities (see page 26 for a detailed chart). Pilot questions that are being tested for use in future versions of the examination may be added but are not included in, nor do they affect the candidate's final score. Additional time is provided for pilot questions. In general, the three areas of study the DSE OSCE focuses on are as follows:

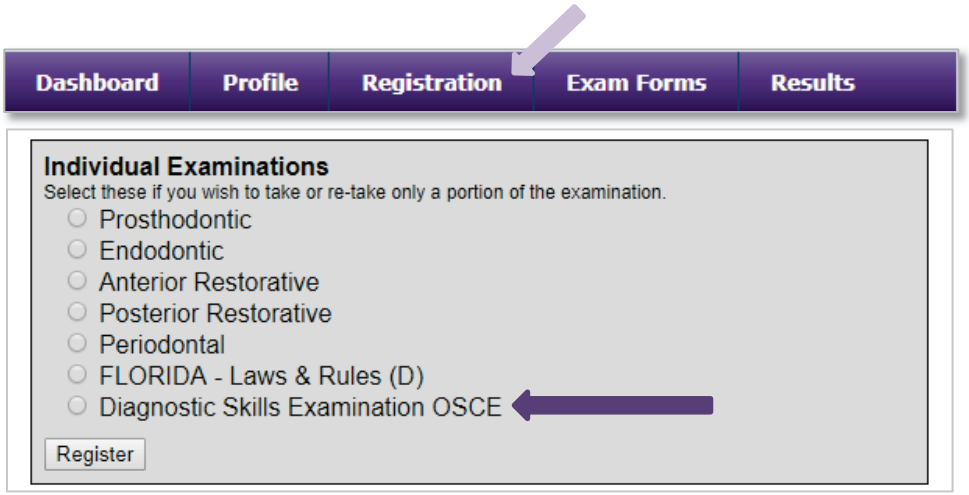
1. *Patient Evaluation (PE)*: designed to assess the candidate's abilities to recognize critical clinical conditions or situations encountered regularly in the general practice of dentistry (30 items).
2. *Comprehensive Treatment Planning (CTP)*: designed to assess the candidate's abilities to recognize critical clinical conditions or situations encountered regularly in the general practice of dentistry, and also to identify the appropriate treatment options required for the clinical condition or situation depicted in simulations (90 items).
3. *Cross-Cutting Clinical Judgments*: designed to assess the candidate's abilities to recognize critical clinical conditions or situations encountered regularly in the general practice of dentistry and to formulate appropriate treatment options as well as evaluation of treatment outcomes (60 items).

Simulations of patients are made through photographs, radiographs, images of study and working models, laboratory data and other clinical digitized reproductions. The items in the DSE OSCE will include multiple choice (traditional/single response), multiple choice (multiple response), extended match, drop down, fill in the blank, hot spot, and drag & drop questions. See the CDCA AIT FAQ located at www.cdcaexams.org/test-prep-2 for more specific details on the item types.

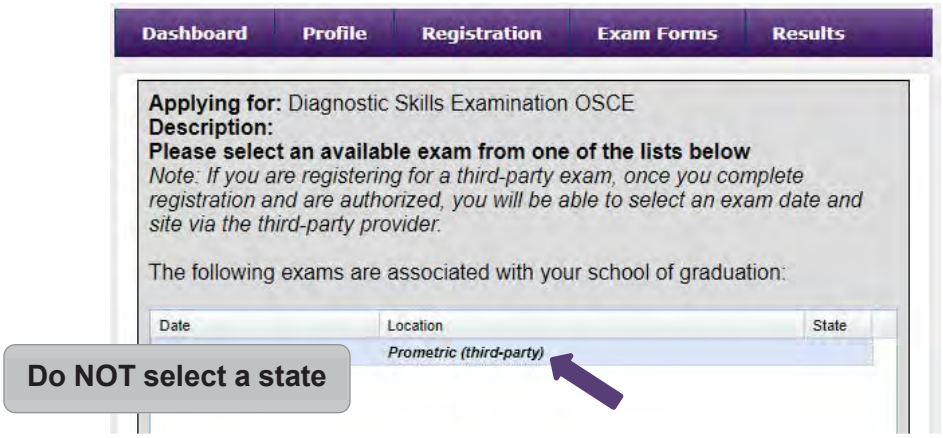
B. DSE OSCE Scheduling

Candidates have two options to register for the DSE OSCE through their online candidate profiles. Candidates may apply for the DSE OSCE only, or they may receive a DSE authorization by registering for the full CIF or Traditional exam. See the registration steps below for both processes.

1. FIRST OPTION: Apply Online for DSE OSCE ONLY:
   a. You will receive an email confirmation with additional instructions once you have registered and paid for the DSE OSCE.



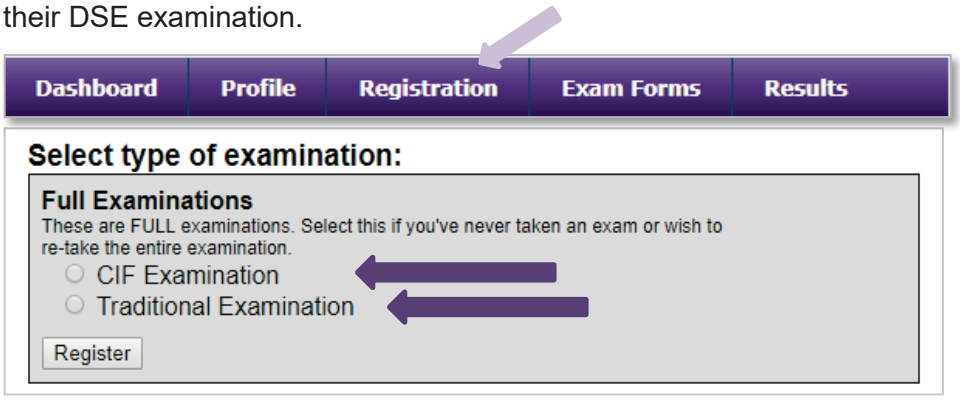
b. After Selecting the Diagnostic Skills Examination OSCE, you must select "Prometric (third-party)" on the next page in order to continue registration. Prometric is the only third-party administrator of the DSE OSCE, so it will be your only choice.



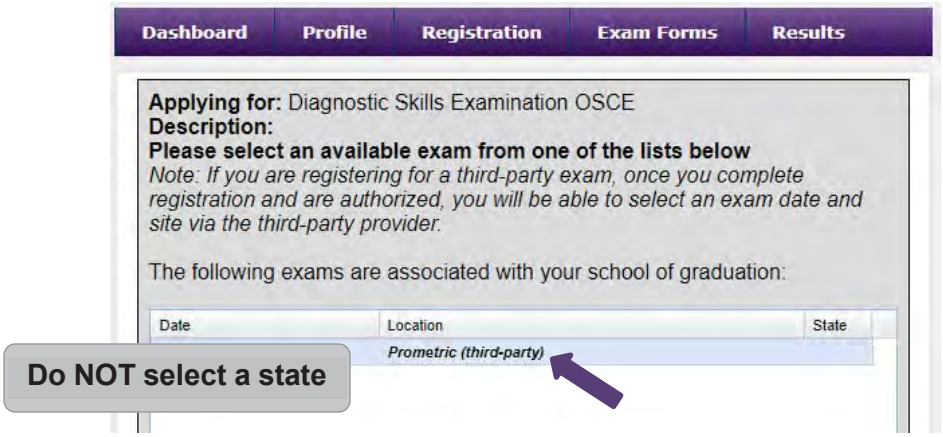
SKIP TO STEP 3 BELOW AND CONTINUE REGISTRATION PROCESS

2. SECOND OPTION: Receive DSE Authorization when Applying Online for FULL Examination (Full CIF or Traditional):

   a. If you are registering for either the CIF exam or Traditional Exam, you will automatically be registered for the DSE. Once the registration has been completed and paid for, candidates will receive an email confirmation with additional instructions for scheduling their DSE examination.



b. To register for the DSE OSCE, after selecting the Diagnostic Skills Examination OSCE, you must select "Prometric (third-party)" on the next page in order to continue registration. Prometric is the only third-party administrator of the DSE OSCE, so it will be your only choice. Do NOT select a state.



3. Contact Prometric:

Upon completion of the registration and payment processes, candidates will receive an email with additional details for how to contact Prometric to schedule their DSE OSCE exam. The most efficient way to reserve a seat at a Prometric Testing Center is online at: www.prometric.com/en-us/clients/cdca/Pages/landing.aspx

Candidates must enter CDCA as the Test Sponsor when contacting Prometric.

Prometric Testing Centers are open for testing Monday through Saturday, with varying hours depending on the individual testing center. All reservations must be made with at least 24-hours in advance of the preferred test time, and are scheduled based on availability. Candidates are strongly encouraged to contact Prometric as far in advance of their desired test date as possible. ****Any special accommodations must be requested prior to scheduling the DSE OSCE exam.** You may request special accommodations via https://cdcaexams.org/contact (select "Licensure Candidates, and then select the "computerized exams" topic).

In order to register online you must provide an e-mail address, and please select the CDCA as your test sponsor. Prometric will send you an e-mail confirming your appointment.

If any questions about registration for the DSE OSCE arise, contact Prometric at 1-800-797-1813.

As stated earlier in the registration section of this manual, if candidates wish to change their DSE OSCE exam date or time, they must reschedule or cancel their appointment at least one (1) calendar day before their scheduled exam date. Rescheduling of appointments can be accomplished via www.prometric.com or by calling 1-800-796-9857. Both are available 24 hours a day, 7 days a week.

Prometric's change/cancelation policy is as follows:
$50.00 fee if the change is made 1 to 5 days before the scheduled test date.
$25.00 fee if the change is made 6 to 29 days before the scheduled test date.

*all fees are paid directly to Prometric upon arrival to the facility on the new test date.
*If you are rescheduling online, print out a hard-copy confirming your new appointment.

4. Arrival Procedures:

Candidates should arrive at the Prometric Center at least 30 minutes prior to their scheduled appointment to allow time for check in. Candidates who fail to appear for their scheduled test by the examination start time, or who fail to appear at all will forfeit all associated exam fees and must re-register, pay again, and reschedule a seat at the testing center on a later date.

In order to gain admission, two forms of personal identification, both of which must include the candidate's signature, and at least one ID must contain a recent photograph.

Acceptable forms of ID include: driver's license, passport, military ID, and other forms of government identification. A credit card may be utilized as a secondary form of identification. Social Security Cards, out of date driver's licenses, and school ID's are not considered valid ID for this purpose. Both IDs must show the same "first and last name" displayed on the candidate's CDCA profile.

If you legally changed your name and have already scheduled an appointment with Prometric, you must bring the legal name change document with you on the day of the exam (i.e.: Marriage License, Divorce Decree, Naturalization Certificate).

You may also submit documents via the "Computerized Exams" option for Licensure Candidates on https://cdcaexams.org/contact at least 2 business days before your scheduled Prometric appointment and a CDCA Candidate Services team member will work with Prometric to update your information.

C. DSE OSCE Content

The DSE OSCE content is developed by the Dental Examination Committee. The committee has considerable content expertise and also relies on practice surveys, current curricula, standards of competency and guidance for clinical licensure examinations in dentistry from the American Association of Dental Boards (AADB) to ensure that the content and protocol of the examination are current and relevant. The examination content and evaluation methodologies are reviewed annually and periodically change to reflect current best practices. Because of the broad-based approach to test development, no single textbook or publication can be used as a reference. The examination is based on concepts taught and accepted by educational institutions accredited by the Commission on Dental Accreditation (CODA) or Canadian Commission on Dental Accreditation (CCODA). Any current textbook relevant to the subject matter of the examination utilized in such institutions is suitable as a study reference.

Simulations of actual patients are illustrated through computer-enhanced photographs, radiographs, optical images of study, and working models, laboratory data, and other clinical digitized reproductions. The DSE OSCE is a computerized objective simulated clinical examination (OSCE).

In each subsection, candidates may skip or mark items to be considered later. Once a subsection is completed, the candidate must lock out of the subsection and will not be able to return to that subsection again. The time indicated on the computer screen is the amount of time for that subsection. There is no specific time limitation for each item.

The chart below details the content of the DSE OSCE and the weight of each area of study. The CDCA does NOT offer any study material for the DSE OSCE examination.

DSE OSCE CONTENT	
Patient Evaluation	**20%**
Pathology	10%
Physical Evaluation	10%
Anatomy Identification of Systemic Conditions Radiology Lab Diagnostics Therapeutics	
Comprehensive Treatment Planning	**60%**
Systemic Diseases/Medical Emergencies/ Special Care and Oral Medicine	20%
Periodontal Diagnosis and Treatment Planning	10%
Restorative Dentistry	18%
Specialties	12%
Endodontics Orthodontics Oral Surgery Pediatric Dentistry	
Cross-Cutting Clinical Judgments	**20%**
Medical Emergencies	
Infection Control	
Prosthodontics	

D. DSE OSCE Scoring

There are 165 scored points on the DSE OSCE. There are 15 of the 165 scored points that come from pilot questions. The final score for the DSE OSCE is based on the percentage of items answered correctly and scaled to equate scores from year to year. Out of 100 possible points, a scaled score of 75 or higher is required to pass. Results are released in accordance with the CDCA administrative procedures as described in the “Results Release” section of this manual.

CDCA PRE-EXAM CHECKLIST

BEFORE THE REGISTRATION DEADLINE

- ☐ If you are attempting any Manikin procedures, read the entire Manikin Examination manual
- ☐ If you are attempting any Patient-based procedures, read the entire Patient-based exam manual
- ☐ Complete the online candidate profile creation process by following the instructions in the *Application and Exam Registration Process* (beginning on pg. 8 of this manual)
- ☐ Check your online profile to verify that all exam parts have been selected (*Registration* tab), all appropriate documents have been uploaded (*Profile* tab), and that all fees have been paid (*Dashboard* tab) prior to the registration deadline

DSE OSCE: PROMETRIC TESTING CENTERS

- ☐ Upon receiving the confirmation email that you have registered and paid for the DSE OSCE, complete the Prometric scheduling process at: www.prometric.com/en-us/clients/cdca/Pages/landing.aspx.If you have any questions about the online scheduling process, you may contact Prometric by phone at 1-800-796-9857, 24 hours a day, 7 days a week
- ☐ Take two forms of personal identification to the Prometric Testing Center: one with a recent photo, and both with your signature. Acceptable forms of ID include: valid current driver's license, passport, and military ID. A credit card is acceptable as a secondary form of ID. See additional guidelines on pg. 24-25 of this manual

TAKE TO THE CLINICAL EXAMINATION SITE AND THE EXAM ORIENTATION

- ☐ Two forms of identification, one with your signature and one with a recent photograph. Both forms of ID must be current; they cannot be expired. Acceptable forms of ID include: Government issued driver's license (including temporary licenses), valid current driver's license issued by the US Dept. of State, passport (issued by either US or international government), military ID, alien registration card (green card, permanent resident visa), National/State/Country ID card, credit card that has a photo and a signature, debit/ATM card that has a photo and a signature and employee ID. A credit card with signature only, a current (not expired) school ID with photo and signature, and military ID with signature only are acceptable as a secondary form of ID (or use any primary ID as a secondary ID).
- ☐ Passport-size photo of dental assistant and/or interpreter AND completed Chairside Dental Assisting Form/Interpreter Form (if applicable for Patient-based Examination)
- ☐ Assigned testing site, time, and 3-digit sequential number (available for printing from your CDCA online profile under the *Registration* tab)
- ☐ A ballpoint pen to be used on the *Progress Forms* only
- ☐ All necessary materials, forms, and instruments
- ☐ Patient-based exam manual and/or Manikin-based manual (*highly recommended, but not required)
- ☐ All required documents (see the Patient-based and Manikin-based Examination manuals for additional required documents)

Central Regional Dental Testing Services, Inc.

Simulated Patient Examinations Outline

The Central Regional Dental Testing Service (CRDTS) is an organization of State Boards of Dentistry who have joined forces to develop and conduct examinations to measure the level of applied knowledge and skills for clinical competency in dentistry and dental hygiene. Each State Board has equal authority and responsibility to participate in the development and administration of the examination program. CRDTS' exams have been developed and administered on a national basis within the framework of its regional governing structure.

CRDTS has spent the last few years developing simulated patient examination procedures as an option for the procedures traditionally administered on a patient. These are in addition to the current manikin procedures utilized for the Endodontic and Prosthodontic sections of our Dental Examination.

These Simulated Patient Examinations are now an option and can be administered for licensure, if needed in your state. CRDTS has administered excellent, psychometrically sound examinations for the profession of dentistry for over 45 years. We have the most comprehensive and long-standing post exam analysis processes in the country.

1. The content, criteria and scoring rubric for these procedures are identical to those administered in the current CRDTS Examinations. The exam procedures have been administered and psychometrically documented since 2006. Please see CRDTS Technical Reports at www.crdts.org > Home Page > Announcements
    a. Please note the Periodontal procedures ranked very high in importance and frequency in the 2018 Practice Analysis
2. Unlike the limitations of computer simulation, the exam procedures will be administered in a clinical environment using simulated patients and requiring appropriate infection control procedures, proper PPE and certain aspects of dental patient management. Candidates will be required to demonstrate their clinical judgment and hand skills utilizing appropriate dental instruments and handpieces.
3. It is up to State Boards to determine what is acceptable for licensure, these exams are an additional resource for their consideration.
4. Scores for the Manikin Examinations: Scores will be reported within 1-2 days after the candidate's respective examination is completed. Manikin exams evaluated off-site will be reported 1-2 days after grading.

SIMULATED PATIENT DENTAL EXAMINATION CONTENT

Examination Overview: The examination consists of individual, skill-specific parts. Each examination Part is listed below:

CONTENT
Manikin-Based Examination Part II: Endodontics Access opening & Obturation Part III: Prosthodontics Ceramic, Cast Gold, PFM Part IV: Periodontics Calculus detection/removal, probing depths, supragingival deposit removal, tissue & treatment management Part V: Restorative Class II and III Preparation/Restoration 3 preparations on teeth with simulated caries 3 restorations on pre-prepped teeth

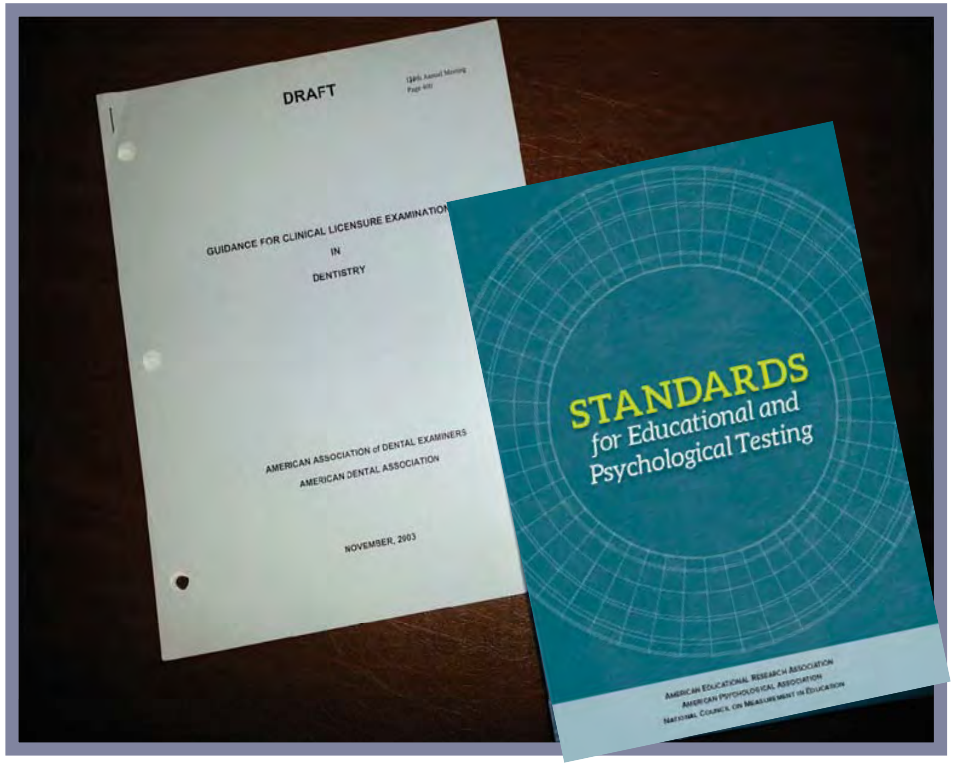
SIMULATED PATIENT DENTAL HYGIENE EXAMINATION CONTENT

CONTENT
Calculus detection Oral Assessment Probing Depth Measurements Subgingival Calculus Removal Tissue and Treatment Management (penalty)

CENTRAL REGIONAL DENTAL TESTING SERVICE, INC.

SIMULATED PATIENT EXAMINATIONS FOR DENTAL AND DENTAL HYGIENE

Clinical Licensure Exams: Examination Development



Reference book:
Standards for Educational & Psychological Testing (2014)

AADB used to develop:
Guidance for Clinical Licensure Examinations in Dentistry (2003)

Examination Development

Content

- Knowledge, Skills, Abilities and Judgments to be Evaluated

Performance Criteria

Scoring System

Administrative Format

Examiner Calibration

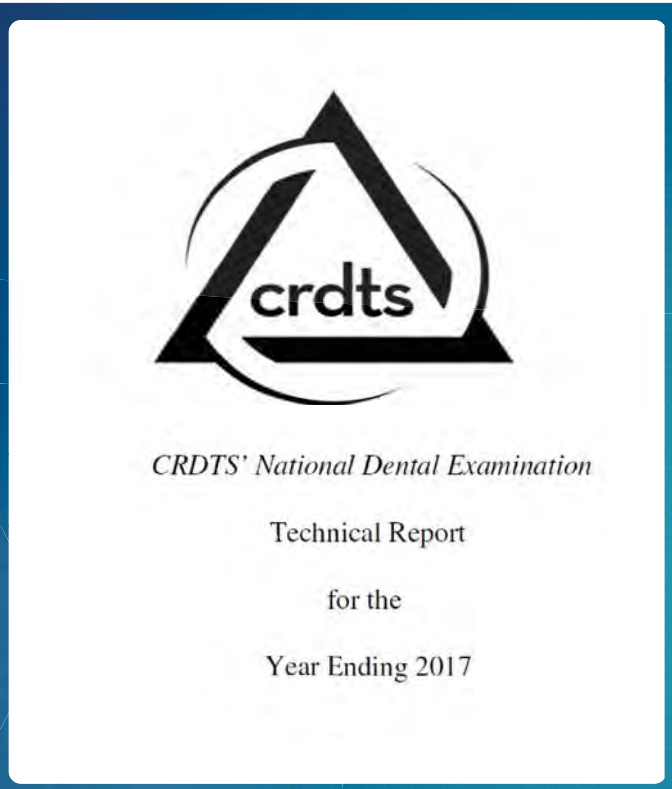
Occupational Analysis Conducted every 8-10 years – determines content

- 2018 Dental & Dental Hygiene Occupational Analysis
  - Joint project with Western Regional Examining Board (WREB)

OCCUPATIONAL ANALYSIS

As recommended by Dr. Thomas Haladyna in the 2010 Technical Reports, CRDTS has launched separate, simultaneous projects to complete an Occupational Analysis for both dentistry and dental hygiene. In a conference call meeting May 10, the Steering Committee approved a proposed budget, a contract with a measurement specialist and a list of nominees to serve as Subject Matter Experts (SME's). Dr. Gene Kramer, whom many may know as the former measurement specialist for the ADA Joint Commission on National Dental Examinations, has retired from the ADA and has been retained to serve as the measurement specialist for these projects.

Seven dental hygienists were approved to serve as SME's. They are Diann Bomkamp, Penny Fudally, Jane Lott, Denise Maus, Joan McKee, Marti Pollard and Liz Thompson. Dr. Kramer suggested that two SME's be selected to represent each of the disciplines in the dental exam. The eight dental SME's are *Endodontics:* Drs. Clyde Andrews and Bob Pattalochi; *Prosthodontics:* Drs. Steve Holcomb and Myron Pudwill; *Periodontics:* Drs. Gay Derderian and Joe Unger; *Restorative:* Drs. John Cosby and Tom Cavel. Both our professional and administrative staff will be providing support for the two groups.

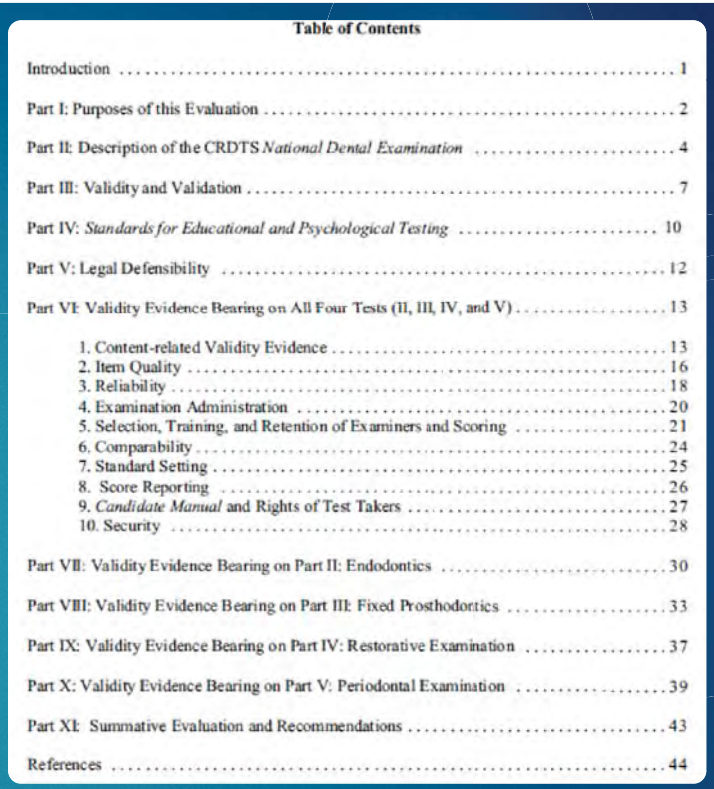


CRDTS' National Dental Examination

Technical Report

for the

Year Ending 2017



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Technical Report 3rd Party Evaluation of Examinations, CRDTS publishes online

Examiners

State Board Members from Member States

Deputy Examiners referred to CRDTS by Member State Boards

Exchange Examiners from other Regional Testing Agencies

Selection Criteria

- Experienced practitioners and/or educators w/ acceptable credentials
- Available and willing to participate in 2-3 exams/year
- Demonstrate the ability to be calibrated
- Understand and apply CRDTS criteria appropriately
- Accept critique feedback and adjust accordingly

3 examiners independently evaluate all candidate performance

Observers often present

Examiner Profiles

Electronic Scoring Devices (ESD's) capture and record every mark made by each and every examiner during an examination.

Every examiner's performance is analyzed and profiled each year to assess their reliability.

Examiner Assignment and Evaluation Committee reviews each individual profile every year before assigning examiners.

- May remediate, reassign or terminate an examiner.

Examiners receive their individual profiles at CRDTS' annual meeting and use them as a self-assessment.

Comprehensive Statistical Analysis

ERC ANALYSIS

- Evaluates each section of the exam
- Screens for Construct Irrelevant Variance

ANNUAL SCHOOLS' REPORT

- Failure Rates, Average Scores, Frequency of Specific Errors, Penalties

EXAMINER PROFILES

- Hygiene, Perio, Restorative, Manikin
- Pass/Fail Agreement, Error Detection, Peer Evaluations

TECHNICAL & OCCUPATIONAL REPORTS

CRDTS SIMULATED PATIENT EXAMINATIONS

History & Development

- Initially developed as a remediation/re-licensure resource for State Boards
- Content, criteria and scoring are identical to current dental examination components
- Psychometric data dating back to 2006
- Procedures supported by data from current Occupational Analysis

CRDTS SIMULATED PATIENT DENTAL EXAMINATION SECTIONS

PART II - ENDODONTIC PROCEDURES

PART III - PROSTHODONTIC PROCEDURES*

PART IV - PERIODONTAL PROCEDURES

PART V - RESTORATVE PROCEDURES

*Moving to all zirconia materials for 2021

Scoring System

Criterion based

Conjunctive Scoring System

4 Levels for Rating Restorative Competency

Periodontal – dichotomous scoring (Yes/No)

3 independent scorers

Competency Levels & Criteria

- Satisfactory
- Minimally Acceptable
- Marginally Substandard
- Critically Deficient

Objective, *measurable* criteria developed for each rating by a panel of experts consisting of examiners, practitioners, and educators

SCORING

Scoring methodologies were developed with consultation from various measurement specialists such as the Rand Corporation and with input from studies completed by testing specialists from the University of Chicago

- Continual review of these items is conducted independently as well

3 examiners conduct separate, independent evaluations & assign a score for each criteria rating

Corroboration by at least 2 of the 3 examiners before points deducted or zero/failing score assigned

- Median score is assigned in the absence of corroboration for Restorative Procedures

CRDTS SIMULATED PATIENT DENTAL EXAMINATION:

PART II - ENDODONTIC SECTION

- ANTERIOR ENDONDOTIC PROCEDURE
  - TOOTH # 8
- ACCESS OPENING
- INSTRUMENTATION
- OBTURATION

- POSTERIOR ENDODOTIC PROCEDURE
  - TOOTH #14
- ACCESS OPENING ONLY

- TREATMENT MANAGEMENT FOR ALL PROCEDURES
  - PENALTY ONLY

ENDODONTIC MODULES

TOOTH # 8 OPENING AND OBTURATION OF CANAL GRADED

ENDODONTIC TYPODONT

TOOTH # 3 OPENING AND DEBRIDMENT OF THE PULP CHAMBER GRADED

ANTERIOR ENDODONTIC CRITERIA CATEGORIES

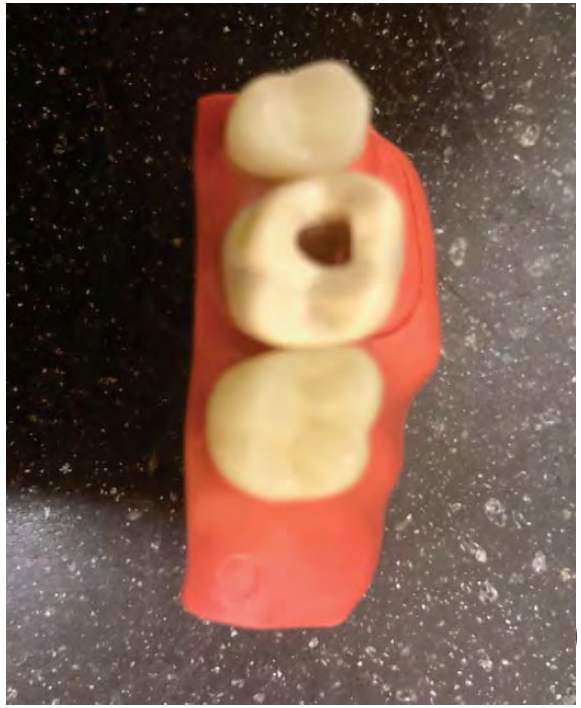
- ACCESS OPENING
  - PLACEMENT OF OPENING
  - SIZE OF OPENING
  - INTERNAL FORM
  - PULP HORN REMOVAL
- CANAL INSTRUMENTATION
  - CERVICAL PORTION
  - MID-ROOT PORTION
  - APICAL PORTION
- ROOT CANAL OBTURATION
  - OVERFIL/UNDERFIL
  - EXTRUDED SEALER
  - VOIDS IN GUTTA PERCHA
  - CORONAL FILL/APICAL TO CEJ
  - SEPARATED FILE

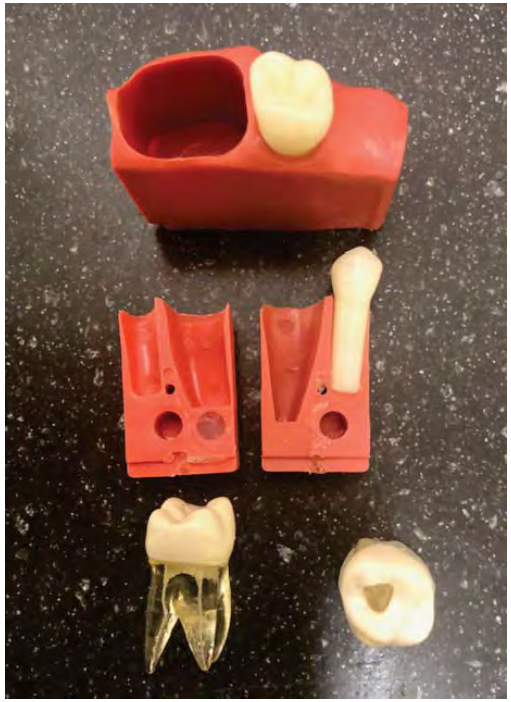
ANTERIOR ENDODONTIC MODULES TOOTH # 8

POSTERIOR ENDODONTIC CRITERIA CATEGORIES

- ACCESS OPENING ONLY
- PLACEMENT
- SIZE
- INTEGRITY OF OCCLUSAL ANATONY
- INTERNAL FROM
- PULP HORN REMOVAL

POSTERIOR ENDODONTIC MODULES TOOTH # 14





CRDTS SIMULATED PATIENT DENTAL EXAMINATION:

PART III - PROSTHODONTIC SECTION*

- CERAMIC CROWN PREPARATION
  - TOOTH # 9
- PORCELAIN FUSED TO METAL PREPARATION
  - TOOTH # 5
- CAST CROWN PREPARATION
  - TOOTH # 3
- BRIDGE DRAW FACTOR
  - TEETH # 3 - # 5
- TREATMENT MANAGEMENT FOR ALL PROCEDURES
  - PENALTY ONLY

*Moving to all zirconia materials in 2021

CRDTS SIMULATED PATIENT DENTAL EXAMINATION:
PART III - PROSTHODONTIC SECTION MODULES

CERAMIC CROWN # 9 CRITERIA CATEGORIES

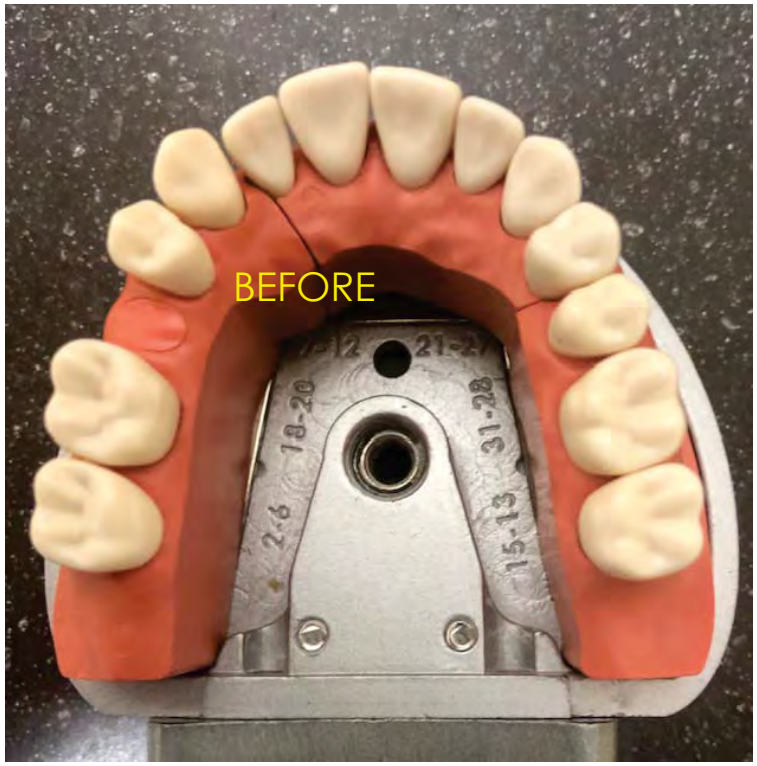
- MARGIN EXTENTION
- MARGIN DEFINITION
- LINE OF DRAW
- AXIAL WALLS – SMOOTHNESS/UNDERCUTS
- TAPER
- CERVICAL MARGIN WIDTH
- INCISAL REDUCTION
- LINGUAL FOSSA REDUCTION
- LINGUAL WALL HEIGHT
- FACIAL AXIAL REDUCTION
- EXTERNAL/INTERNAL LINE ANGLES

ALL CERAMIC CROWN #9

PORCELAIN FUSED TO METAL CRITERIA CATEGORIES

- MARGIN EXTENTION
- MARGIN DEFINITION
- LINE OF DRAW
- AXIAL WALLS – SMOOTHNESS/UNDERCUT
- TAPER
- FACIAL SHOULDERWIDTH
- FACIAL AXIAL REDUCTION
- OCCULSAL AXIAL REDUCTION
- INTERNAL LINE ANGLES
- OCCLUSAL ANATOMY
- MARGIN EXTENTION
- MARGINDEFINITION
- LINE OF DRAW

PORCELAIN FUSED TO METAL PREPARATION TOOTH # 5



CAST GOLD CROWN # 3 CRITERIA CATEGORIES

- MARGIN EXTENTION
- MARGIN DEFINITION
- LINE OF DRAW
- AXIAL WALLS – SMOOTHNESS/UNDERCUT
- TAPER
- CERVICAL FINISH LINE
- OCCLUSAL/AXIAL REDUCTION
- INTERNAL LINE ANGLES
- OCCLUSAL ANATOMY

CAST GOLD CROWN
TOOTH # 3

BRIDGE FRACTOR CRITERIA CATEGORIES

BRIDGE DRAW FACTOR

BRIDGE WILL DRAW

BRIDGE WILL DRAW WITH ALTERED PATH

OF INSERTION

BRIDGE WILL NOT DRAW DUE TO UNDERCUTS

OR ANY ALTERED PATH OF INSERTION - 100 Point Deduction

BRIDGE FACTOR
TEETH # 3 - # 5

CRDTS SIMULATED PATIENT DENTAL EXAMINATION
PART IV - PERIODONTAL SECTION

PART IV - PERIODONTAL SECTION CONTENT

- CALCULUS DETECTION
- PROBING DEPTHS
- CALCULUS REMOVAL
- SUPRAGINGIVAL DEPOSIT REMOVAL
- TISSUE AND TREATMENT MANAGEMENT

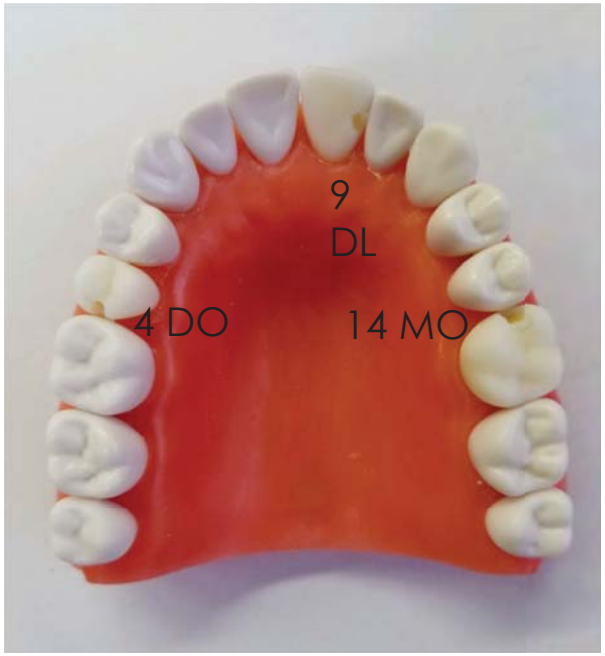
CRDTS SIMULATED PATIENT DENTAL EXAMINATION:

PART V - RESTORATIVE SECTION

- CLASS II PREPARATION DO #4 WITH SIMULATED DECAY
- CLASS II PREPARATION MO # 14 WITH SIMULATED DECAY
- CLASS III PREPARATION DL # 9 TOOTH WITH SIMULATED DECAY
- CLASS II RESTORATION MO #18 STANDARDIZED PREPARATION
- CLASS II RESTORATION DO # 28 STANDARDIZED PREPARATION
- CLASS III RESTORATION DL # 23 STANDARDIZED PREPARATION
- TREATMENT MANAGEMENT FOR ALL PROCEDURES
  - PENALTY ONLY

CRDTS RESTORATIVE ACADENTAL
ModuPro TYPODONT

UNPREPARED MAXILLARY TYPODONT



PREPS TO BE GRADED

STANARDIZED PREPS TO BE RESTORED WITH AMALGAM OR COMPOSITE AND GRADED

RESTORATIVE MANIKIN PREPARATIONS

- TOOTH # 4 MESIAL OCCUSAL
- TOOTH # 9 DISTAL LINGUAL
- TOOTH #14 MESIAL OCCUSAL

UNPREPARED TOOTH

PREPARED TOOTH

UNPREPARED TOOTH

PREPARED TOOTH

UNPREPAREED TOOTH

PREPARED TOOTH

Candidates are informed that decay extends to or beyond DEJ radiographically

CLASS II PREPARATION CRITERIA CATEGORIES

- PROXIMAL CLEARANCE
- GINGIVAL CLEARENCE
- OUTLINE SHAPE/CONTINUITY/EXTENTION
- ISTHMUS
- CAVOSURFACE MARGIN
- SOUND MARGINAL TOOTH STRUCTURE
- INTERPROXIMAL CONTACT
- ANATOMY/CONTOUR
- AXIAL WALLS
- PULPAL FLOOR
- CARIES REMAINING
- PROXIMAL BOX WALLS
- PREPARED SURFACES

CLASS III PREPARATION CRITERIA CATEGORIES

- OUTLINE EXTENTION
- GINGIVAL CONTACT
- MARGIN SMOOTHNESS/CONTINUITY/BEVELS
- SOUND MARGINAL TOOTH STRUCTURE
- AXIAL WALLS
- INTERNAL RESISTANCE
- CARIES REMAINING

MANDIBULAR MANIKIN RESTORATIONS PLACED ON PRE-PREPARED TEETH

TOOTH # 18
MESIAL OCCUSAL
AMALGAM OR COMPOSITE

TOOTH # 29
DISTAL OCCUSAL
AMALGAM OR COMPOSITE

TOOTH # 23
DISTAL LINGUAL
COMPOSITE

CLASS II RESTORATION CRITERIA CATEGORIES

- MARGIN DEFICIENCY
- MARGIN EXCESS
- GINGIVAL OVERHANG
- SURFACE FINISH
- CONTIGUOUS TOOTH STRUCTURE
- INTERPROXIMAL CONTACT
- CENTRIC/EXCURSIVE CONTACTS
- ANATOMY/CONTOUR

CLASS III RESTORATION CRITERIA CATEGORIES

- MARGIN DEFICIENCY
- MARGIN EXCESS
- GINGIVAL OVERHANG
- SURFACE FINISH
- CONTIGIOUS TOOTH STRUCTURE
- SHADE SELECTION
- INTERPROXIMAL CONTACT
- CENTRIC/EXCURSIVE CONTACTS
- ANATOMY/CONTOUR

SIMULATED PATIENT DENTAL EXAMINATION SCHEDULE

- PART II – ENDODONTIC PROCEDURES
  - 3 HOURS
- PART III – PROSTHODONTIC PROCEDURES
  - 4 HOURS
- PART IV – PERIODONTAL PROCEDURES
- PART V – RESTORATIVE PROCEDURES
  - Open Schedule Format 8-5 PM
- PERIODONTAL ONLY – 3 HOURS
- RESTORATIVE ONLY – 6 HOURS

CRDTS SIMULATED PATIENT DENTAL HYGIENE EXAMINATION

CRDTS SIMULATED PATIENT DH EXAM CONTENT

- EXTRA/INTRA-ORAL ASSESSMENT
- CALCULUS DETECTION
- PROBING DEPTHS
- CALCULUS REMOVAL
- TISSUE AND TREATMENT MANAGEMENT

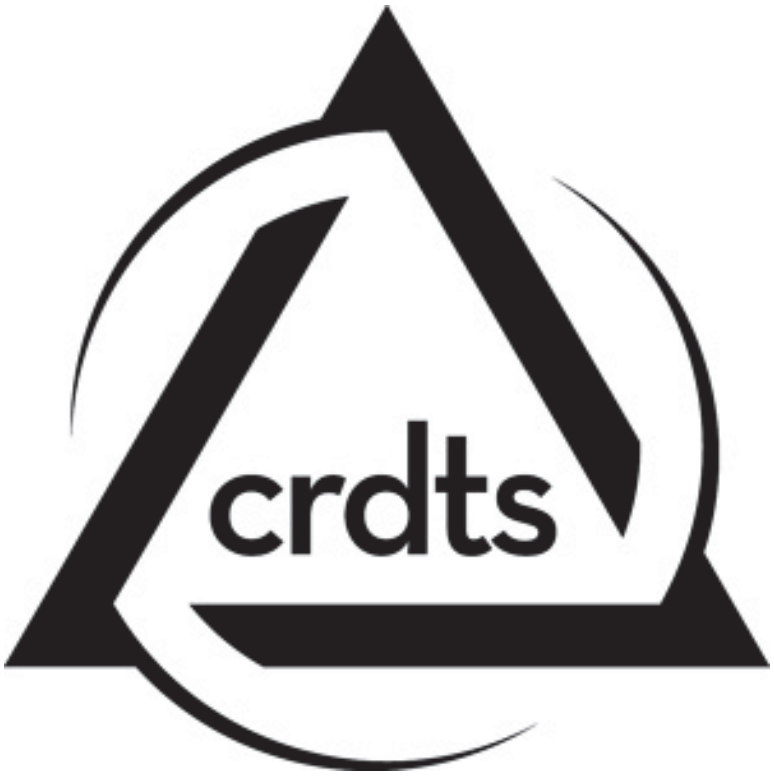
CENTRAL REGIONAL DENTAL TESTING SERVICE ALL MANIKIN DENTAL EXAMINATION

QUESTIONS?

Kimber Cobb, Executive Director
info@crdts.org
www.crdts.org

ALL MANIKIN DENTAL EXAMINATION CANDIDATE MANUAL

Class of 2020



A National Dental Examination
As administered by:

Central Regional Dental Testing Service, Inc.
1725 SW Gage Blvd.
Topeka, Kansas 66604
(785) 273-0380
www.crdts.org

Please read this candidate manual prior to attending the candidate orientation and bring it with you to the orientation and the examination.

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CRDTS Curriculum Integrated Format Examination

Class of 2020 – AT A GLANCE

SCHEDULED EXAMINATION DATES

Manikin-Based	First Opportunity (Max of 3 attempts)	September/November (at Candidate's School)
Part II: Endodontics Exam Part III: Fixed Prosthodontics Exam Part IV: Periodontal Exam Part V: Restorative Exam	First Retest Opportunity	December-April
	Second Retest Opportunity	May/June (at select schools only)

Visit our website: www.crdts.org for specific examination/deadline date(s)

Complete applications and fees must be **received** on or before deadline dates in order to be processed.

FEES

Initial Examinations Package Parts II – IV: $2,350
Individual Retest Examination(s): As outlined within this Manual

RELEASE OF SCORE REPORTS

Manikin Examinations: Scores will be reported within 1-2 days after the **candidate's respective examination is completed. Manikin exams evaluated off-site will be reported 1-2 days *after* grading.**

CENTRAL REGIONAL DENTAL TESTING SERVICE

DENTAL CANDIDATE MANUAL

This manual has been designed to assist in your preparation to be a participant in a clinical examination. Outlined below are general directives and information for the conduct of the examination.

Purpose: The purpose of this examination is to assess the candidate's professional knowledge, skills, abilities and judgment (KSAJ's) as applied in clinical treatment procedures that are a representative sample of the services that are provided in the practice of general dentistry, based on the criticality of the procedure to the patient's systemic and oral health and the frequency with which that service is provided in general practice.

CRDTS: The Central Regional Dental Testing Service, Inc. (hereinafter abbreviated as CRDTS) is an independent testing agency which administers clinical competency examinations in dentistry and dental hygiene in behalf of its member and participating states. Regional testing agencies contract with individual state boards of dentistry to administer the clinical examination required for licensure in those states. Regional testing agencies do not have the authority to license individuals or to implement policy that goes beyond the laws of its member states. Regional testing agencies should not be confused with state boards of dentistry.

CRDTS Member States: The States of Alabama, Arkansas, California*, Georgia, Hawaii*, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Oklahoma, South Carolina, South Dakota, Texas (Hygiene), Washington, West Virginia, Wisconsin and Wyoming have joined in the formation of CRDTS as member states. *Accepts CRDTS Hygiene Only

Jurisdictional Authority: State Boards of Dentistry are each established by state law as the regulatory agencies of the dental profession, accountable to the state legislature and charged with protection of the public. Although all state laws are somewhat different, there are commonalities in their responsibilities to regulate the profession through licensure requirements, to interpret and enforce the dental practice act, to discipline those licensees who practice unethically or illegally, and to assess the competence of applicants for licensure in their jurisdictions through theoretical and clinical examinations. In order to fulfill their mandate to evaluate competence, the CRDTS' member State Boards have joined together to develop and administer fair, valid and reliable clinical examinations in dentistry and dental hygiene.

CRDTS Recognizing Jurisdictions: In addition to the member states listed above, several non-member states also recognize the results of the CRDTS examination. There are often restrictions, limitations or additional requirements so candidates are encouraged to contact the State Board where they wish to seek licensure in order to verify the correct licensure requirements at the time of their application, because licensing requirements and recognizing jurisdictions may have changed.

Results from the CRDTS examination are automatically distributed to the secretaries of all the member State Boards which are listed above, as well as those non-member states which recognize CRDTS' results and have requested routine receipt of examination results. As the testing agency responsible for administering the examination, CRDTS has provided to the Boards of the recognizing states information sufficient to establish that a score of 75 or more on each part of the examination may represent an acceptable demonstration of competence to practice dentistry. However, each State Board of Dentistry is responsible for determining whether a candidate has fulfilled its standards and requirements for licensure. The State Boards' determinations are controlled by state law; the requirements may not be uniform. Each licensing jurisdiction may use the examination results to the extent authorized by its statutes.

Mission Statement: To provide the dental examination community with test construction and administrative standardization for national uniform dental and dental hygiene clinical licensure examinations. The schedule of these examinations, when delivered in the Curriculum Integrated Format, allows for early identification of deficiencies or weaknesses within clinical skill sets and provides

opportunities for remediation in an educational environment. These examinations will demonstrate integrity and fairness in order to assist State Boards with their mission to protect the health, safety and welfare of the public by assuring that only competent and qualified individuals are allowed to practice dentistry and dental hygiene.

Ethical Responsibilities: Licensure as a dental health professional, and the public trust, respect and status that accompanies it, is both a privilege and a responsibility. Implicit in a State Board's charge to protect the public is the responsibility to ensure that practitioners are not only competent, but also ethical. In addition to the American Dental Association's *Code of Ethics*, there are codes of professional conduct within state laws, and the requirements of many State Boards for periodic continuing education courses in ethics for maintenance and renewal of licenses.

During the examination process, there are policies, rules and standards of conduct that are part of the candidate's responsibility; the candidate is expected to read the entire Candidate's Manual, and comply with all those rules and requirements.

CRDTS Status: "CRDTS Status" is achieved when a candidate has successfully completed all parts to this examination with a score of 75 or more. Candidates achieving "CRDTS Status" enjoy the privilege of being considered eligible for licensure in any of the CRDTS recognizing jurisdictions listed in this manual.

Examination Completion and Obtaining Licensure: There are three agencies with which applicants are involved in the process of completing their CRDTS' examination and obtaining licensure.

1. Central Regional Dental Testing Service, Inc. (CRDTS) - a testing service as described above; the results of a CRDTS examination can be submitted to any recognizing state when applying for licensure. COMPLETION OF THE CRDTS' EXAMINATION ALONE WILL NOT QUALIFY ANY CANDIDATE FOR LICENSURE. OTHER REQUIREMENTS WITHIN EACH OF THE STATES MUST BE MET.
2. Testing Site - a school which makes its clinical facility available for a CRDTS examination. The site may have its own forms or specific procedures which may be required of the candidate in order to participate in an examination at that site. In addition, the candidate must have cash or check as required by the respective institution, payable to that testing center (not CRDTS) for materials and equipment used during the examination. Payment must be made before the examination; and proof of payment must be provided at the conclusion of the exam. No scores will be released without satisfactory payment.
3. State Board of Dentistry - the agency to which a candidate must individually apply for licensure in a jurisdiction. Candidates must inform themselves of the requirements of the state(s) in which they wish to be licensed and complete an application with the individual jurisdiction(s).

The candidate should address questions to the appropriate agency.

The CRDTS Administrative Office in Topeka, KS will provide all information relevant to the examination requirements and procedures.

The testing site can respond to questions regarding facilities, equipment and testing site fees. (The testing site is not responsible for making their facilities available on any days other than examination dates.)

Questions regarding licensure or state requirements should be addressed to the appropriate State Board of Dentistry.

Test Development: In all aspects of test development, administrative protocol and evaluation methodologies, CRDTS strives to be aligned with and guided by:

- *Standards for Educational and Psychological Testing*, published jointly by the American Educational Research Association, the American Psychological Association and the National Council on Measurement in Education
- *AADB's Guidance for Clinical Licensure Examinations in Dentistry*
- Annual Statistical Analysis of each section of the exam along with summary statistics of candidate performance by school of graduation

- Statistical profiles for examiners' self-assessment
- Technical Reports by measurement specialists
- Periodic Occupational Analyses

In particular, the dental examination is developed and revised by the CRDTS Dental Examination Review Committee (ERC). The Dental ERC is comprised of representatives from each of CRDTS' Member States, as well as dental educators and special consultants. With both practitioners and educators involved, the Committee has considerable content expertise from which to draw. The Committee also relies on practice surveys, current curricula, and standards of competency to assure that the content and protocol of the examination is current and relevant to practice. Determining the examination content is also guided by such considerations as logistical constraints and the potential to ensure that a skill can be evaluated reliably.

Examination Overview: The examination consists of individual, skill-specific parts. Each examination part is listed below:

Part I: National Dental Board Examination – Parts I & II*
Manikin-Based Examination
Part II: Endodontics
Part III: Prosthodontics
Part IV: Periodontics
Part V: Restorative

*CRDTS will not require additional documentation for these scores.

Examiners: Candidates will be evaluated by examiners from the jurisdictions which comprise CRDTS. These examiners may be members of their State Board of Dentistry, or may have been selected by their Board to serve as examiners. There may also be examiners from other states. In addition, there are frequently observers at CRDTS' exams who may be faculty members from other schools, new CRDTS' examiners or examiners from other states. Such observers are authorized to participate in calibration and monitor all portions of the examination and may evaluate from time to time; however, they do not assign grades or participate in the grading process.

Curriculum Integrated Format (CIF): This format is the pre-graduation licensure examination offered to senior dental students and graduate students of record. The Curriculum Integrated Format affords candidates the opportunity to successfully demonstrate critical clinical competence in basic clinical procedures required by CRDTS' recognizing jurisdictions for licensure. The progressive sequencing of this format provides the opportunity, when necessary, for students to have easy access to remediation within the dental school curriculum as well as for timely issuance of licenses upon graduation.

Curriculum Integrated Format versus Traditional Format: Both of these examination formats are identical in content, criteria and scoring. The major difference between the two formats is in the time-sequencing of how the examination is administered. The Traditional Format examination is administered in its entirety over the course of three days to all eligible candidates near the end of the academic year. The Curriculum Integrated Format examination is administered in segments over the course of several months to eligible dental students during their senior year or graduate program in dental school. If you are a dental student of record (Seniors, Juniors – limited basis, graduate student) and have verified that your dental school is participating in the Curriculum Integrated Format, then you are considered an Integrated Candidate. Dental students of record from other schools or from schools choosing not to participate in the Curriculum Integrated Format as well as practitioners seeking licensure are considered Traditional Candidates. There are separate application policies and deadlines for each format so please review those portions carefully to be sure you've received the correct information and documents.

Examination Dates: Specific examination and deadline dates for participating dental schools can be found on the CRDTS website (www.crdts.org) and are also available through the Site Coordinator at each school.

Administrative/Application Policies and Rules are located online at www.crdts.org and at the end of this Manual.

CONTENT, CRITERIA & SCORING SYSTEM - OVERVIEW

CONTENT: PARTS I, II, III, IV & V

PART I: NATIONAL DENTAL BOARD EXAMINATION – PARTS I & II *

*CRDTS does not require any additional documentation for Part I

PART II: ENDODONTICS EXAMINATION – 100 POINTS

CONTENT	FORMAT
1. Endodontic access opening only on tooth #14, a multi-rooted artificial tooth. 2. Endodontic access, canal instrumentation and obturation on tooth #8, a single-canal artificial tooth.	- Performed on a Manikin - Time: 3.0 hours

PART III: FIXED PROSTHODONTICS EXAMINATION – 100 POINTS

CONTENT	FORMAT
1. Preparation of tooth #5, a single-layered artificial tooth, for a porcelain fused to metal crown as one abutment for a 3-unit bridge. (The bridge is not fabricated for this examination.) 2. Preparation of tooth #3, a single-layered artificial tooth, for a cast gold metal crown as the other abutment for the same 3-unit bridge. Both preparations must be parallel to each other. 3. Preparation of tooth #9, a single-layered artificial tooth for a full ceramic crown.	- Performed on a Manikin - Time: 4.0 hours

PART IV: PERIODONTAL EXAMINATION - 100 POINTS

CONTENT	FORMAT
1. Calculus detection 2. Probing Depth Measurements 3. Subgingival Calculus Removal 4. Supragingival Deposit Removal 5. Tissue and Treatment Management	- Performed on a Manikin

PART V: RESTORATIVE EXAMINATION - 100 POINTS

CONTENT	FORMAT
The Restorative Clinical Examination consists of six procedures: Place restorations in 3 pre-prepped teeth on 29 DO, 18 MO, 23DL and prepare 3 teeth with simulated decay on 9DL, 14 MO, 4 DO. For the posterior procedures, candidates may choose to prepare/place a Class II Amalgam, or a Class II Composite: 1. Class II Amalgam –Preparation 2. Class II Amalgam – Restoration OR 1. Class II Composite –Preparation 2. Class II Composite – Restoration AND 1. Class III Composite –Preparation 2. Class III Composite - Restoration	- Performed on a Manikin

***Information from this point forward will be included for Parts II – V only.**

SCORING SYSTEM

The examination scoring system was developed in consultation with three different measurement specialists; the scoring system is criterion-based and was developed using an analytical model. The examination is conjunctive in that its content is divided into separate Parts containing related skill sets and competence must be demonstrated in each one of the Parts. A compensatory scoring system is used within each Part to compute the final score for each Part, as explained below.

Only State Boards of Dentistry are legally authorized to determine standards of competence for licensure in their respective jurisdictions. However, in developing the examination, CRDTS has recommended a score of 75 to be a demonstration of sufficient competence; and participating State Boards of Dentistry have agreed to accept that standard. In order to achieve "CRDTS status" and be eligible for licensure in a participating state, candidates must achieve a score of 75 or more in each Part of the examination.

Each examination score is based on 100 points. **If all sections of an examination are not taken, a score of "0" will be recorded for that specific examination.**

PARTS II – V: SCORING SYSTEM FOR RESTORATIVE PROCEDURES

CRDTS and other testing agencies have worked together on a national level to draft and refine the performance criteria for each procedure in this examination. For the majority of those criteria, gradations of competence are described across a 4-level rating scale. Those criteria appear in this manual and are the basis of the scoring system. Those four rating levels may be generally described as follows:

SATISFACTORY
The treatment is of good to excellent quality, demonstrating competence in clinical judgment, knowledge and skill. The treatment adheres to accepted mechanical and physiological principles permitting the restoration of the tooth to normal health, form and function.

MINIMALLY ACCEPTABLE
The treatment is of acceptable quality, demonstrating competence in clinical judgment, knowledge and skill to be acceptable; however, slight deviations from the mechanical and physiological principles of the satisfactory level exist which do not cause damage nor significantly shorten the expected life of the restoration.

MARGINALLY SUBSTANDARD
The treatment is of poor quality, demonstrating a significant degree of incompetence in clinical judgment, knowledge or skill of the mechanical and physiological principles of restorative dentistry, which if left unmodified, will cause damage or substantially shorten the life of the restoration.

CRITICALLY DEFICIENT
The treatment is of unacceptable quality, demonstrating critical areas of incompetence in clinical judgment, knowledge or skill of the mechanical and physiological principles of restorative dentistry. The treatment plan must be altered and additional care provided, possibly temporization in order to sustain the function of the tooth and the manikin patient's oral health and well-being.

In Parts II, III and V, a rating is assigned for each criterion in every procedure by three different examiners evaluating independently. Based on the level at which a criterion is rated by at least two of the three examiners, points may be awarded to the candidate. In any instance that none of the three examiners' ratings are in agreement, the median score is assigned. However, if any criterion is assigned a rating of ***critically deficient*** by two or more of the examiners***, no points are awarded for that procedure or for the Examination Part***, even though other criteria within that procedure may have been rated as satisfactory. A description of Parts II, III and V and the number of criteria that are evaluated for the procedures in each of those Parts appears below:

Part II: ENDODONTICS EXAMINATION – 100 Points

The Endodontics Examination is a manikin-based examination which consists of two procedures: an access opening on an artificial posterior tooth and an access opening, canal instrumentation and obturation on an artificial anterior tooth. The criteria for these procedures are combined and scored in total:

Anterior Endodontics/Posterior Access Opening	17 Criteria

Part III: FIXED PROSTHODONTICS – 100 Points

The Prosthodontics Examination is a manikin-based examination which consists of three procedures completed on artificial teeth: a cast gold crown preparation as a terminal abutment for a 3-unit bridge, a porcelain-fused-to-metal crown preparation as an abutment for a bridge, plus an evaluation of the line of draw for the bridge abutment preparations, and an all ceramic crown preparation on an anterior central incisor.

Cast Gold Crown	10 Criteria
Porcelain-Fused-to-Metal Crown Preparation	10 Criteria
Ceramic Crown Preparation	11 Criteria

Part V: RESTORATIVE EXAMINATION – 100 Points

The Restorative Clinical Examination consists of six procedures: Place restorations in 3 pre-prepped teeth on 29 DO, 18 MO, 23DL and prepare 3 teeth with simulated decay on 9DL, 14 MO, 4 DO. For the posterior procedures, candidates may choose to prepare/place a Class II Amalgam or a Class II Composite:

Class II Amalgam Preparation	12 Criteria
Class II Amalgam Finished Restoration	8 Criteria*
OR	
Class II Composite Preparation	11 Criteria
Class II Composite Finished Restoration	8 Criteria*
AND	
Class III Composite Preparation	7 Criteria
Class III Composite Finished Restoration	9 Criteria*

* 1 category split into 2 for clarity; scored as 1 criteria

To compute the score for each individual procedure, the number of points the candidate has earned for each criterion is totaled, divided by the maximum number of possible points for that procedure and the results are multiplied by 100. This computation converts scores for each procedure to a basis of 100 points. Any penalties that may have been assessed during the treatment process are deducted ***after*** the total score for the Examination Part has been converted to a basis of 100 points.

If no ***critical deficiency*** has been confirmed by the examiners, the total score for each of Parts II, III and V is computed by adding the number of points that the candidate has earned ***across all procedures in that Part,*** and that sum is divided by the number of possible points for all procedures in that Part. If a ***critical deficiency*** has been confirmed by the examiners, an automatic failure is recorded for both the procedure and the Examination Part. An example for computing scores that include no critical deficiency is shown below for Part III:

PROCEDURE	# CRITERIA	POINTS EARNED	POINTS POSSIBLE	COMPUTED SCORE
Cast Gold Crown Preparation	10 Criteria	30	40	75.00
Porcelain-Fused-to-Metal Crown	10 Criteria	34	40	85.00
Ceramic Crown Preparation	11 Criteria	38	44	86.36
TOTALS for PART III	31 Criteria	**102**	**124**	**82.25**

Although there are three Parts that are scored separately for restorative clinical skills, ***within each Part a compensatory system*** is used to compute the final score for that Part, as long as there is no ***critical deficiency.*** For Parts III and V, the computed score for each procedure is ***not averaged,*** but instead is numerically weighted by the ratio of its number of scorable criteria to the total number of scorable criteria in the Part. For example, the Cast Gold Crown Preparation has a total of 10 scorable criteria which represents 40 possible points out of the total of 124 possible points for Part III. As shown in the example above, the candidate earned 102 out of 124 possible points for the three procedures in Part III for a final score of 82.25 points. If any penalties were assessed, the points would be deducted as percentage points from the final score for Part III.

PART IV: PERIODONTAL EXAMINATION – 100 Points

1. Calculus Detection-8 Points
    - 4 items
    - 2 points awarded for each surface of correctly identified calculus

2. Periodontal Measurements– 12 Points
    - 12 probing depths evaluated on two teeth
    - 1.0 points for each correctly measured probing depth

3. Scaling/Subgingival Calculus Removal – 66 Points
    - 12 subgingival surfaces
    - 5.5 points awarded for each of the 12 required surfaces that are acceptably debrided of subgingival calculus

4. Supragingival Deposit Removal – 12 Points
    1. Evaluation of all teeth chosen for evaluation; max of 6 errors
    2. 2 points awarded for each of the teeth that are free of all supragingival accretions

PENALTY DEDUCTIONS

Throughout the examination, not only clinical performance will be evaluated, but also the candidate's professional demeanor will be evaluated by Clinic Floor Examiners. A number of considerations will weigh in determining the candidate's final grades and penalties may be assessed for violation of examination standards, as defined within this manual, or for certain procedural errors as described below:

Any of the following may result in a deduction of points from the score of the entire examination Part or dismissal from the exam in any of the clinical procedures:

1. Violation of universal precautions or infection control; gross asepsis; operating area is grossly unclean, unsanitary or offensive in appearance; failure to dispose of potentially infectious material and clean the operatory after individual examinations
2. Poor Professional Demeanor--unkempt, unclean, or unprofessional appearance; inconsiderate or uncooperative with other candidates, examiners or testing site personnel
3. Poor Clinical Management--disregard for manikin patient welfare or comfort
4. Inappropriate request for extension or modification
5. Unsatisfactory completion of required modifications
6. Improper Operator/Manikin position
7. Improper record keeping
8. Improper liner placement
9. Inadequate isolation - The isolation dam is inappropriately applied, torn and/or leaking, resulting in debris, saliva and/or hemorrhagic leakage in the preparation, rendering the preparation unsuitable for evaluation or the subsequent manipulation of the restorative material.
10. Corroborated errors for Tissue Management on all Periodontal procedures – Penalty points are assessed for any unwarranted areas of tissue trauma caused by the candidate to extra/intra oral tissues resulting in injury which are inconsistent with the procedures performed.
    a. 5 points for each area
    b. Critical Error: A tissue trauma critical error, resulting in failure of the examination, will be assessed if any of the following exist:
        i. Damage to 3 or more areas of gingival tissue, lips or oral mucosa located anywhere within or near the Treatment Selection
        ii. An amputated papillae
        iii. An exposure of the alveolar process
        iv. A laceration or damage that requires suturing or perio packing
        v. An unreported broken instrument tip found in the sulcus
        vi. One or more ultrasonic burns requiring follow-up treatment
11. Corroborated errors for Treatment Management criteria on all Restorative procedures

The following infractions will result in a loss of ***all*** points for the entire examination Part:

1. Failure to complete a finished restoration
2. Violation of Examination Standards, Rules or Guidelines
3. Treatment of teeth or surfaces other than those approved or assigned by examiners
4. Gross damage to an adjacent tooth
5. Failure to recognize an exposure
6. Unavoidable mechanical exposure which is poorly managed or irreparable
7. Unjustified or irreparable mechanical exposure
8. Critical Lack of Diagnostic/Clinical Judgment Skills – This penalty would be applied when the prognosis of the treatment and/or the manikin patient's well-being is seriously jeopardized. Examples include but are not limited to:
    a. Inability to differentiate between caries and a pulpal exposure
    b. Inability to carry out instructions for modifications that any competent practitioner should be able to complete
    c. Failure to recognize the need for a critical alteration of the preparation beyond the assigned surfaces, such as a fracture or defect that must be eliminated by the extension of the preparation

The penalties or deficiencies listed above do not imply limitations, since obviously some procedures will be classified as unsatisfactory for other reasons, or for a **combination** of several deficiencies. Corroborated errors for the treatment management criteria for each Restorative procedure –will be deducted as penalty points. If any restorative procedure is unacceptable for completion during the examination, a "Follow-up Form" must be completed.

Professional Conduct – All substantiated evidence of falsification or intentional misrepresentation of application requirements, collusion, dishonesty, or use of unwarranted assistance during the course of the examination shall automatically result in failure of the entire examination by any candidate.

In addition, there will be no refund of examination fees and that candidate cannot apply for re-examination for one full year from the time of the infraction. Any of the following will result in failure of the entire examination:

a. Falsification or intentional misrepresentation of application requirements
b. Cheating (Candidate will be dismissed immediately)
c. Any candidate demonstrating complete disregard for the oral structures, welfare of the manikin patient and/or complete lack of skill and dexterity to perform the required clinical procedures
d. Misappropriation of equipment (theft)
e. Receiving unwarranted assistance
f. Alteration of examination records

SCHEDULE & DATES —CURRICULUM INTEGRATED FORMAT EXAM

Parts II & III: Manikin-based Endodontics & Fixed Prosthodontics Exams – 1 Day Initial Offering: Flexible: (Initial offering of the Endodontics and Fixed Prosthodontics Examinations are at the candidate's school of attendance on a specified date(s) agreed to by CRDTS and the Dean of the testing dental school)

Retest opportunities allowed: Two
Retest Date: Flexible
(See complete examination/deadline dates on the cover of this manual and at *www.crdts.org)*

Candidates will be informed as to the date on which they are to complete the Endodontics Examination and the Fixed Prosthodontics Examination. In the event that these examinations are administered on a number of different days at a specific examination site, candidates may be assigned to groups to indicate which day they are to perform these examinations. Should this be the case, candidates will be informed of their group assignment in advance of the examination date. The examination schedule follows:

Candidate Question & Answer Session
Candidates are expected to review the appropriate Candidate Orientation online at www.crdts.org. There will be a question and answer session the day before the examination begins. Please review your confirmation materials for this schedule. Candidates must bring a government-issued photo ID and this Candidate's Manual. Check-in will begin 15 minutes prior to the scheduled Q & A session.

Parts II - V: Curriculum Integrated Format Schedule

FIRST PHASE PARTS II & III		SECOND PHASE PARTS IV & V		
TIME	MANIKIN	TIME	RESTORATIVE	PERIO
8:00	Group A (B) Setup	8:00	Group B	Group A
8:30	8:30 – 12:30 Prosthodontics			
1:00	1:00 – 4:00 Endodontics			
4:00	EXAM STOPS	5:00 EXAM COMPLETED		

FIRST PHASE

CANDIDATES	TIME	ASSIGNMENT
Group A		**Part III: Fixed Prosthodontic Examination**
	8:00 A.M. to 8:30 A.M.	Set-Up and Starting Checks
	8:30 A.M. to 12:30 P.M.	Fixed Prosthodontic Procedures (4.0 hours)
	12:30 P.M. to 12:45 P.M.	Dismantle and turn in fixed prosthodontic modules
		Part II: Endodontic Examination
	1:00 P.M. to 4:00 P.M.	Endodontic Examination Procedures (3.0 hours)
	4:00 P.M. to 4:15 P.M.	Dismantle and turn in endodontic modules

SECOND DAY (if necessary)

To accommodate additional candidates, it may be necessary to add a second day to the schedule. Candidates assigned to this day will be assigned to Group B and will follow the same time schedule as Group A listed above. Candidates are informed of their group assignment in advance of the examination date.

FLEX-TIME SCHEDULE: Time blocks have been designated for each portion of the manikin procedures. Every candidate is allowed a maximum of 4 hours for the Prosthodontic Exam and 3 hours for the Endodontic Exam. Should candidates complete their prosthodontic procedures early, prior to 12:30 pm, they can take a short break and then begin their endodontic procedures by checking in with the Clinic Floor Examiner who will assign a three-hour start and finish time. This Flex-time schedule will only be available prior to 12:30 pm. Beginning endodontic procedures early does NOT increase the maximum time allowed as indicated above.

When utilizing the Flex-Time Schedule, candidates will adhere to the required procedures as outlined in this manual regarding completion of the Part III – Prosthodontic Exam and initiating Part II – Endodontic Exam.

Parts IV & V: Periodontal & Restorative Exams – 1 Day

Initial Offering: (Initial offering of the Periodontal and Restorative Examinations at the candidate's school of attendance on a specified date(s) agreed to by CRDTS and the Dean of the testing dental school.)

Retest opportunities allowed: Two
Retest Dates: Flexible (at designated schools only)

Candidate Question & Answer Session

Candidates are expected to review the appropriate Candidate Orientation online at www.crdts.org. There will be a question and answer session the day before the examination begins. Please review your confirmation materials for this schedule. Candidates must bring a government-issued photo ID and this Candidate's Manual. Check-in will begin 15 minutes prior to the scheduled Q & A session.

FIRST DAY

Candidates will have from 8-5 P.M. to complete the 6 Restorative and all Periodontal Treatment procedures. Group A will begin their Periodontal procedures at 8:00 AM and Group B will begin their Restorative procedures at 8:00 AM as outlined below:

CANDIDATE	TIME	ASSIGNMENT
Group A	8:00 A.M.	Begin Periodontal Examination Restorative Examination
Group B	8:00 A.M.	Begin Restorative Examination Periodontal Examination

SECOND DAY (if necessary)

To accommodate additional candidates, it may be necessary to add a second day to the schedule. Candidates assigned to this day will be assigned to Groups C & D and will follow the same time schedule as listed above for Groups A & B listed above. Candidates are informed of their group assignment in advance of the examination date.

SCHEDULE & DATES —TRADITIONAL FORMAT EXAM

Parts II - V: Traditional Format

Date(s): From Application Confirmation as scheduled by candidate
Retest opportunities allowed: Two as scheduled by candidate

Parts II - V: Traditional Format Schedule

Candidate Question & Answer Session

Candidates are expected to review the appropriate Candidate Orientation online at www.crdts.org. There will be a question and answer session the day before the examination begins. Please review your confirmation materials for this schedule. Candidates must bring a government-issued photo ID and this Candidate's Manual. Check-in will begin 15 minutes prior to the scheduled Q & A session.

Candidates will be informed of their group assignment in advance of the examination date. The examination schedule follows:

FIRST DAY				SECOND DAY			
TIME	RESTORATIVE	PERIO	MANIKIN	TIME	RESTORATIVE	PERIO	MANIKIN
8:00	Group D	Group C	Groups A, B Setup **8:30 – 12:30** Prosthodontics **1:00 – 4:00** Endodontics	**8:00**	Group B	Group A	Groups C, D Setup **8:30 – 12:30** Prosthodontics **1:00 – 4:00** Endodontics
4:00	Groups A, B— EXAM STOPS			**4:00**	Groups C, D—EXAM COMPLETED		
5:00	Groups C, D— EXAM STOPS			**5:00**	Groups A, B—EXAM COMPLETED		

Parts II & III: Manikin-based Endodontics & Fixed Prosthodontics Exams

CANDIDATES	TIME	ASSIGNMENT
		Part III: Fixed Prosthodontic Examination
Day 1: Groups A & B Day 2: Groups C & D	8:00 A.M. to 8:30 A.M. 8:30 A.M. to 12:30 P.M.	Set-Up and Starting Checks Fixed Prosthodontic Procedures (4.0 hours)

	12:30 P.M. to 12:45 P.M.	Dismantle and turn in fixed prosthodontic modules
		Part II: Endodontic Examination
	1:00 P.M. to 4:00 P.M. 4:00 P.M. to 4:15 P.M.	Endodontic Examination Procedures (3.0 hours) Dismantle and turn in endodontic modules

FLEX-TIME SCHEDULE: Time blocks have been designated for each portion of the manikin procedures. Every candidate is allowed a maximum of 4 hours for the Prosthodontic Exam and 3 hours for the Endodontic Exam. Should candidates complete their prosthodontic procedures early, prior to 12:30 pm, they can take a short break and then begin their endodontic procedures by checking in with the Clinic Floor Examiner who will assign a three-hour start and finish time. This Flex-time schedule will only be available prior to 12:30 pm. Beginning endodontic procedures early does NOT increase the maximum time allowed as indicated above.

When utilizing the Flex-Time Schedule, candidates will adhere to the required procedures as outlined in this manual regarding completion of the Part III – Prosthodontic Exam and initiating Part II – Endodontic Exam.

Parts IV & V: Periodontal & Restorative Exams

Candidates will have from 8AM - 5 P.M. to complete the two Restorative and Periodontal Treatment procedures. Designated groups will begin their Periodontal and Restorative procedures as outlined below:

CANDIDATE	*TIME*	*ASSIGNMENT*	
Day 1: Group C	Day 2: Group A	8:00 A.M.	Begin Periodontal Examination Restorative Examination
Day 1: Group D	Day 2: Group B	8:00 A.M	Begin Restorative Examination Periodontal Examination

Daily Time Schedule

Each candidate must adhere to the published time schedule.

1. **Q & A and Admission. All candidates will check in for Admission and a Q & A session the day before the examination for specific instruction and distribution of examination materials** by the Chief Examiner.

   In order to receive an examination packet and be admitted to the orientation, the candidate **must** present a government-issued **photo ID** (ex: driver's license or student ID). Candidates who are retaking one or more examination(s) on one specific day must attend the session or check-in with a CFE on the day of the exam and adhere to the appropriate time schedules outlined later in this manual. Candidates who do not have the required identification will **not** be admitted to the examination.

2. **The Fixed Prosthodontics Examination** begins at 8:00 A.M. on the assigned day. Between 8:00 to 8:30 A.M. the Clinic Floor Examiner (CFE) must verify that the manikin head is properly assembled, and any defective equipment or materials identified and corrected or replaced. At 8:30 A.M. treatment begins for all candidates. There is no extension of time due to starting treatment after 8:30 A.M. Candidates will have until 12:30 P.M. (4.0 hours) to complete the required prosthodontic procedures, at which time they must dismantle and turn in their prosthodontic modules and examination forms.

3. **The Endodontics Examination** begins at 1:00 PM on the assigned day. There is no extension of time due to starting treatment after 1:00 P.M. The Clinic Floor Examiner must verify that the tooth for the endodontic fill has been measured and the CFE has secured in the typodont, the manikin head is properly assembled. Candidates will have until 4:00 P.M. (3.0 hours) to complete the

required endodontic procedures, at which time they must dismantle and turn in their endodontic modules and examination forms.

4. **The Periodontal and Restorative Examinations:** Candidates will have from 8AM – 5 P.M. to complete the 6 Restorative and all Periodontal Treatment procedures. For Candidates taking only one procedure or exam part, the following time allotments apply: Periodontal procedures- 3 hours; One Restorative procedure-3 hours; Two Restorative procedures- 6 hours.

Please refer to ADMINISTRATIVE POLICY SECTION for schedules/deadlines that apply to retake examinations.

STANDARDS FOR THE CONDUCT OF THE EXAMINATION

As a participant in an examination to assess professional competency, each candidate is expected to maintain professional standards. The candidate's conduct and treatment standards will be observed during the examination and failure to maintain appropriate conduct and/or standards may result in point penalties and/or dismissal from the exam.

Each candidate will be expected to conduct himself/herself in an ethical, professional manner and maintain a professional appearance at all times. Candidates are prohibited from using any study or reference materials during the examination. Any substantiated evidence of dishonesty; such as collusion, use of unauthorized assistance or intentional misrepresentation during application, pre-examination or during the course of the examinations shall automatically result in dismissal from and failure of the entire examination and forfeiture of all examination fees for the current examination.

DISHONESTY CLAUSE: Candidates failed for dishonesty shall be denied re-examination for one full year from the time of the infraction. Additionally, all State Boards will be notified of the situation. In some states, candidates failed for dishonesty may be permanently ineligible for licensure. Therefore, candidates should address these matters with the state(s) where they desire licensure prior to retaking the examination.

The standards itemized below apply to all relevant portions of the examination. Failure to adhere to these standards will result in failure of the procedure in progress and/or the entire examination.

Standards for Parts II – V: Manikin Examinations

1. **Anonymity.** The anonymous testing procedures for the examination shall exclude the possibility that any person who is involved with the grading of the examination may know, learn of, or establish the identity of a candidate, work-product graded or to be graded to a particular candidate. The candidate's name and school information should not appear on any examination forms, materials, or instruments. All examination forms and materials are identified by the candidates' identification number which is assigned prior to the examination.

2. **Approved Communication.** All approved communication must be in English and communication between candidates and Examination Officials must be in English.

3. **Assigned Operatories.** The candidate shall work only in the assigned clinic, operatory or laboratory spaces.

4. **Assigned Procedures.** The candidate must perform only the treatment and/or procedures assigned. Performing other treatment or procedures is strictly prohibited.

5. **Auxiliary Personnel: Use of Assistants.** *Auxiliary personnel are <u>not</u> permitted to assist at chairside during the manikin examinations.*

6. **Check-Out Procedures.** The items specified below should be enclosed in the original Candidate packet envelope and provided to the examination representative at the completion of the examination:
   - Identification badge

- Progress Forms with labels placed

7. **Clinic Attire.** Clinic attire that meets CDC and OSHA standards must be worn in clinic areas. No bare arms or legs, or open-toed shoes are allowed in the clinic areas. Lab coats, lab jackets, and/or long-sleeved protective garments are all acceptable. Color and style are not restricted. There must be no personal or school identification on clinic attire other than the candidate identification badge.

8. **Electronic Equipment.** The use of cellular telephones, pagers, CD's, radios (with or without earphones) and other electronic equipment by candidates is prohibited within the clinic and scoring areas. All cellular telephones must be off and stored with personal belongings. In addition, the use of electronic recording devices by the candidate or an auxiliary during any part of the examination; or the taking of photographs during the evaluation or treatment procedures is prohibited.

9. **Equipment Failure.** In case of equipment failure, the Chief Examiner must be notified immediately so the malfunction may be corrected.

10. **Equipment: Use/Misappropriation/Damage.** No equipment, instruments, or materials shall be removed from the examination site without written permission of the owner. Nonpayment of fees for rental of space or equipment will be treated as misappropriation of equipment. Willful or careless damage of typodonts, manikins or shrouds may result in failure and any repair or replacement costs must be paid by the candidate before examination results will be released.

11. **Evaluation Procedures.** Candidate performance will be evaluated by three independent examiners. Candidates are not assigned specific examiners.

12. **Examination Completion and Start/Finish Times.** All procedures of the examination shall be completed within the specified time frame in order for the examination to be considered complete. Any examination procedures performed outside the assigned time schedule will be cause for the examination to be considered incomplete and will result in failure. Treatment procedures may not be initiated prior to the established starting time(s) and must be completed by the established finish time(s). Violation of this Standard will result in failure of the examination.

13. **Examination Guidelines.** Violation of the published standards, guidelines and requirements for the examination will result in failure.

14. **Examination Materials.** CRDTS examination materials distributed by the testing agency may NOT be removed from the examining area, nor may the forms be reviewed by unauthorized personnel.

15. **Extraneous materials.** Only those materials distributed or authorized by CRDTS may be brought to the examining area. Authorized materials include <u>only</u> your Candidate's Manual which may include hand- written notes on the pages provided; additional pages, texts or documents are prohibited. Impressions, registrations, overlays, stents, or clear plastic shells of any kind as well as models or pre-preparations are not permitted to be brought to the examination site. Use of unauthorized materials will result in failure of the entire examination.

16. **Failure to Follow Directions.** Failure to follow directions and instructions from examiners will be considered unprofessional conduct. Unprofessional conduct and improper behavior is cause for dismissal from the examination and will result in failure of the examination. Additionally, the candidate shall be denied re-examination by CRDTS for one full year from the time of the infraction.

17. **Feedback Forms:** Candidates have an opportunity to provide input about the examination. In an effort to continually improve our examination, feedback from the perspective of the candidates is one of the best ways to gather this information. The Feedback Form for candidates will be included in the candidate's packet. It is not required but will be collected separately from the candidate's packet to ensure that the candidate's examination results will in no way be affected by any feedback the candidate might have. Candidates are encouraged to complete the form honestly and thoughtfully before checking out.

18. **Identification Badges.** During the examinations, candidate ID badges must be worn at all times.

19. **Infection Control Standards.** During all *manikin clinical procedures,* the candidate must follow the most current recommended infection control procedures as published by the CDC. The operatory and/or operating field must remain clean and sanitary in appearance.
(www.cdc.gov/oralhealth/infectioncontrol/guidelines)

20. **Instruments and Equipment.** All necessary materials and instruments for the clinical procedures, other than the operating chair, light and dental unit must be provided by the candidate. All equipment must be compatible with the testing site attachments. Arrangements for rental handpieces and/or other equipment may be made through the testing site. Sonic/ultrasonic instruments are permissible, but they must be furnished by the candidate along with the appropriate connection mechanisms. Air-abrasive polishers are NOT permissible. It is the responsibility of the candidate to arrange for his/her own handpiece, sonic/ultrasonic and all other equipment necessary to complete the clinical examination. It is suggested that all candidates check well in advance with the Site Coordinator of the school selected for the equipment requirements at the testing site.

    The following instruments and equipment are specifically required and must be provided by the candidate for this examination: -
    Unscratched, clear, front-surface, non-disposable, #4 or #5 mouth mirror
    - Metal periodontal probe – 1mm marks
    - #11/12 explorer for the Periodontal Examination
    - a sharp #23 explorer OR other similar Shepherd's Hook-type explorer
    - Acadental ModuPRO™
    - Instrument tray for transporting instruments

    Candidates are expected to provide the required instruments, in good condition. A penalty (10 points) may be applied for any instruments submitted in poor condition after 1 request by the Clinic Floor examiners to provide adequate instrument(s) i.e., clouded, scratched mirrors, excessively dull or bent explorers, etc. Clinic Floor Examiners will approve any instrument submissions thereafter, no further penalty will apply, only loss of time.

21. **New Technology.** New and innovative technologies are constantly being developed and marketed in dentistry. However, until such time as these innovations become the standard of care and are readily available to all candidates at all testing sites, the use of such innovative technologies will not be allowed in this examination unless expressly written as allowed elsewhere in this manual.

22. **Submission of Examination Records.** All required records must be turned in at the Examiner Desk before the examination is considered complete.

23. **Test Site Fees.** Schools may charge a rental fee for use of instruments, clinic facilities, supplies and disposables. This fee is independent of the examination fee and is not collected by the testing agency. Testing site fees vary from school to school. If not paid in advance, candidates should have cash or a check, as may be required by the respective testing site, for materials and equipment used during the examination. Specific information regarding site fees will be included in the candidate's Confirmation email.

24. **Tissue Management.** There shall be no unwarranted damage to simulated hard or soft tissues during manikin-based procedures. Incompetent or careless management of tissue will result in a score reduction.

25. **Tooth Identification.** The tooth numbering system 1-32 will be used throughout the examination. In this system, the maxillary right third molar is number 1 and mandibular left third molar is number 17.

    Standards that are specific to each examination (Parts II – V) are listed under each of the appropriate examination sections listed below.

GENERAL GUIDELINES FOR CLINICAL EXERCISES

1. **Progress Forms:** At the examination, color-coded Progress Forms will be issued which will contain a record of the treatment, examiner signatures for all completed portions of the examination, and progress notes from the candidate to examiner as appropriate to the course of treatment. A ***black ball-point pen*** shall be used for all notations on the Progress Forms.

2. **Unauthorized Personnel:** Only authorized personnel will be allowed in the examining and clinic areas. Only the candidate is allowed in the operatory during treatment sections. No visitors are allowed.

3. **Performance Standards:** The candidate's clinical performance on all sections will be rated according to specific criteria. The performance criteria and the standards by which the examination is conducted are provided to the candidate within this manual.

4. **Penalty Deductions:** Throughout the examination, the candidate's professional conduct and clinical performance will be evaluated. A number of considerations will weigh in determining the candidate's final grades and penalties may be assessed for violation of examination standards and/or for certain procedural errors, as defined and described within this manual.

6. **Reasons for Dismissal**: In addition to the standards of conduct expectations, the following list is provided as a quick reference guide for candidates. While the following is not an all-inclusive listing, it does provide examples of behaviors that may result in dismissal/failure of the examination:
   - Using unauthorized equipment at any time during the examination process.
   - Altering records.
   - Performing required examination procedures outside the allotted examination time.
   - Failure to follow the published time limits and/or complete the examination within the allotted time.
   - Receiving assistance from another practitioner including but not limited to; another candidate, dentist, University/School representative(s), etc.
   - Exhibiting dishonesty.
   - Failure to recognize or respond to systemic conditions that potentially jeopardize the health of the manikin patient and/or total disregard for manikin patient welfare, comfort and safety.
   - Unprofessional, rude, abusive, uncooperative, or disruptive behavior to other candidates, or exam personnel.
   - Misappropriation or thievery during the examination.
   - Noncompliance with anonymity requirements.
   - Noncompliance with established guidelines for asepsis and/or infection control.
   - Use of unauthorized documents or materials in treatment or evaluation areas.
   - Use of cellular telephones, pagers or other electronic equipment in treatment areas.
   - Use of electronic recording devices by the candidate or an auxiliary during any part of the examination; or the taking of photographs during the evaluation or treatment procedures.

7. **Authorized Photography:** At some selected test sites, oral photographs may be taken randomly during the examination by an authorized photographer retained by CRDTS. The purpose is to capture a broad representation of actual procedures which can be used for examiner calibration exercises. The photographs will include no identification of candidates. An announcement will be made or a notice will be distributed to inform candidates when photographs are authorized at a site.

PART II: ENDODONTICS EXAM – 100 Points
PART III: FIXED PROSTHODONTICS EXAM – 100 Points

The Endodontics Examination and Fixed Prosthodontics Examination are each stand alone examinations that will be administered on the same day. The Endodontics Examination consists of two procedures and the Fixed Prosthodontics Examination consists of three procedures, as follows:

PART II: ENDODONTICS EXAMINATION

1. Endodontic access opening only on tooth #14, a multi-rooted artificial tooth
2. Endodontic access, canal instrumentation and obturation on tooth #8, a single-canal artificial tooth

PART III: FIXED PROSTHODONTICS EXAMINATION

1. Preparation of tooth #5, a single-layered artificial tooth, for a porcelain fused to metal crown as one abutment for a 3 unit bridge. (The bridge is not fabricated for this examination)
2. Preparation of tooth #3, a single-layered artificial tooth, for a cast gold metal crown as the other abutment for the same 3-unit bridge. Both preparations must be parallel to each other
3. Preparation of tooth #9, a single-layered artificial tooth for a full ceramic crown

GENERAL REQUIREMENTS

1. **Typodont Requirements:** The manikin examination may be completed ***only*** on an Acadental ModuPRO™ (Integrated Modular Typodont), using magnetic endodontic modules and prosthodontic modules. It is the candidate's responsibility to provide the required ModuPRO™ items (listed below) for the manikin section of the examination. This includes the articulating hinge if the typodont is going to be chair-mounted, Carrier Trays, modules for endodontic procedures and modules for the fixed prosthodontics procedures.

   The ModuPRO™ typodont and other required ModuPRO™ supplies may be purchased by the candidate at any time prior to the examination through the school or through Acadental directly at www.acadental.com.

   In order to have the modules properly interlocked and stabilized, it is required that six modules—three mandibular and three maxillary—be mounted in the carrier trays at all times the candidate is operating. For the endodontic procedures, the four modules that do **NOT** contain the endodontic teeth (#8 and #14) may be either endodontic or prosthodontic modules. For the prosthodontic procedures, ***all six modules must be*** prosthodontic modules in order to ensure consistent contact.
2. **Manikin Requirements and Mounting:** A mounted manikin with full facial shroud should be provided by the testing site for insertion of the typodont. The manikin heads must accommodate the Acadental ModuPRO™ which can be adapted to a chair-mounted post or a high-tech simulation lab unit. If the typodonts are to be chair-mounted, they ***must have an articulating hinge*** attached. If a simulation lab is being used, the typodonts must be adapted with appropriate connectors. Please check with the site regarding equipment provided.
3. **Putty Matrix:**
   Candidates will fabricate polyvinyl siloxane (PVS) putty matrices during the exam, prior to the crown preparations. These matrices should extend gingivally to cover the gingival shroud on both buccal (posterior) / facial (anterior) and lingual surfaces. Matrices must include one complete tooth mesial and distal to the prepared teeth. Putty matrices can be fabricated using prefabricated plastic full or sectional trays or by hand provided the end result is 5 separate pieces sectioned bucco- (posterior) /facio- (anterior) lingually over the center of each prepared tooth and also sectioned over #7 if using one-piece original matrix. All five matrices pieces must have the candidate's number recorded on

them and must be returned with the submitted examination modules. Examiners use these five matrices pieces to determine occlusal/buccal/incisal/lingual/facial reductions during evaluation.

a. **Fabrication of the matrices are done with typodonts mounted and are fabricated during the allotted four hours of preparation time.**
b. **When the five matrices pieces are completed, they must be checked and approved by the CFE prior to beginning the crown preparations.**

NOTE: Please review fabrication options online at www.crdts.org > Dental tab > Candidate Orientations > Fabrication of Putty Matrices for CRDTS Prosthodontic Exam

4. **Patient Simulation:** The correct patient/operator position must be maintained while operating. Throughout the manikin procedures, the treatment process will be observed by Clinic Floor Examiners and evaluated as if the manikin were an actual patient. With the exception of having the manikin wear protective eyewear, the manikin is subject to the same treatment standards as any patient. The facial shroud may not be displaced other than with those retraction methods which would be reasonable for a patient's facial tissue. Some modifications in the treatment procedure are imposed due to the mechanical simulation conditions. For example, since the tooth length on #8 is directly measured prior to the procedure, no radiographs are utilized before or after treatment. For the Restorative procedures, simulated decay is assumed to extend at least to the DEJ radiographically & it may go further so no pre-op radiographs are required

   The Candidate should use only air but may use both air and water spray when preparing manikin teeth. For tooth #8, when performing the complete endodontic procedure, the use of water irrigation is preferred when cleaning and filing the canal. If water spray is utilized, a mechanism to collect and remove the water must be in place during the use of the water spray. Models or pre-preparations are not permitted to be brought to the examination site.

5. **Security Requirements:** No written materials may be in the operating area other than this Candidate Manual and CRDTS forms.

6. **Infection Control:** The candidate must follow the most current recommended infection control procedures as published by the CDC during all manikin clinical procedures. The only exception to standard infection control precautions is that the candidate is ***not*** required to maintain protective eyewear on the manikin during manikin procedures. Infection control will be monitored by Clinic Floor Examiners. .(www.cdc.gov/oralhealth/infectioncontrol/guidelines)

7. **Assigned Teeth:** Once a procedure has been started, the procedure must be carried to completion on the assigned tooth/teeth with no substitutions permitted. Substitution of teeth or preparation of the wrong tooth/teeth during the Endodontic Examination or the Fixed Prosthodontic Examination will result in failure of the specific examination.

8. **Assistants:** Auxiliary personnel are not permitted to assist at chairside or in a laboratory during the manikin examination. Candidates may not assist each other, critique or discuss one another's work.

9. **Adjacent Damage:** The candidate's score will be penalized for any unwarranted damage to adjacent teeth or to the simulated gingival area during manikin-based procedures.

   a. The modules candidates provide must have undamaged teeth in place for the manikin procedures. Should CFE's confirm adjacent damage is present, on A(13-15) module for the Prosthodontic Procedures or A(2-6) module for the Endodontic Procedures, the module in question will be confiscated and CRDTS will provide the candidate with another module.

10. **Examination Sequence**: The candidate must set up the manikin for the prosthodontic procedures and obtain the approval of a Clinic Floor Examiner between 8:00 and 8:30 A.M. The prosthodontic procedures must be completed between 8:30 and 12:30 P.M. No later than 12:30 P.M., the typodonts must be dismantled and the prosthodontic modules turned in to the examiner; candidates who utilize the maximum time allowed must then leave the clinic area for a brief period of time. At 1:00 P.M. candidates must mount their endodontic modules and the Clinic Floor Examiner must check the mounting of the endodontic typodont and authorize the candidate to proceed. The endodontic procedures must be completed between 1:00 and 4:00 P.M. During all manikin procedures, the typodont may *not be disassembled* without the permission of a Clinic Floor Examiner. Between 4:00 and 4:15, the candidate will dismantle the typodont and submit the endodontic modules.

Requirements Specific to the Endodontic Examination

1. **Endodontic Typodont Modules:** Endodontic treatment must be completed on two artificial endodontic teeth, one multi-rooted endodontic first maxillary molar (#14) and one single-canal endodontic incisor (#8). Both #8 and #14 will be mounted in ModuPRO™ endodontic modules. The endodontic modules need to be inserted in Carrier Trays and must be attached to a typodont. The typodont may be mounted on a post and strapped to an operatory chair or mounted in a simulation laboratory. Post-mounted typodonts will require an ***articulating hinge.***

   CRDTS will provide the following:
   a. Module AE13-15 WP for the #14 posterior endodontic insert
   b. #14 endodontic insert AE401 14 WI which includes tooth #14 already mounted
   c. Module AE 7-12 for the anterior endodontic procedure
   d. The #8 artificial tooth which will be mounted in the AE7-12 module at the exam.

   The candidate must provide the following modules with undamaged teeth:
   a. A2-6 or N2-6
   b. A18-20 or N18-20
   c. A21-27 or N21-27
   d. A28-31 or N28-31

2. **Required Materials:**
   Accessories:
   1. Articulating Hinge for chair mounted typodonts
   2. Carrier Trays

   Note: Carrier Trays and articulators are interchangeable between the endodontic modules and the prosthodontic modules.

3. **Preparation of Teeth:** Tooth #8 must be used to complete the access opening, canal instrumentation and obturation. Tooth #8 is considered to have a normal size pulp chamber for a 21 year old. The size, shape and extent of the prepared access opening should reflect such anatomy and will be graded accordingly. The #14 artificial endodontic tooth must be used to complete access opening to the canals.

   a. Use a bur to ***inscribe your 3-digit candidate number on the lingual surface of each modular section*** so it is visible when the modules are inserted in the carrier tray.
   b. Your manikin modules will be delivered to your cubicle in a module storage box prior to your scheduled time block. A CFE must be notified prior to disassembly of the typodont. The modules will be returned to the module storage box until they are graded and all grade forms/Progress Forms will be collected by the Clinic Floor Examiners.

4. **Endodontic Module:** The endodontic modules (module AE7-12 to accommodate the #8 endodontic tooth and the module AE13-15 WP for #14) will be inserted in an Acadental ModuPRO™ and mounted in a manikin with a shroud to be provided by the testing site. The typodont may be mounted on a post and strapped to an operatory chair or mounted in a simulation laboratory. Post-mounted typodonts will require an ***articulating hinge.*** Once the typodont is mounted in the manikin, request a Start Check from a Clinic Floor Examiner.

5. **Dismantling Manikin:** During both the endodontic and the prosthodontic procedures, **the candidate**

may *not* disassemble the manikin without permission of the Clinic Floor Examiner. Removal of the manikin, typodont or teeth during the examination without permission of the Clinic Floor Examiner will result in failure.

6. **Isolation dam:** Both the endodontic procedures must be performed under two separate isolation dams. In order to avoid evulsion, ***no clamps should be placed on the teeth to be treated;*** clamps should be placed on nearby artificial teeth. All work must be done with the isolation dam in place. The dams must be removed at the completion of the procedures.

7. **Instruments**: Other than the instruments and materials provided by the testing site, the candidates are responsible for providing the instruments, files and materials of their choice. Rotary instruments are permissible during the endodontic procedure.

8. **Treatment**: On the anterior tooth, any form of gutta-percha filling technique may be used, including any warm gutta-percha or carrier-based, thermoplasticized gutta-percha techniques. Instrumentation technique, either mechanical or manual is at the candidate's discretion.
    a. On the posterior tooth, access opening to all canals must be completed.
    b. If either of the teeth fractures during treatment, the procedure should be completed. If a crown fractures during treatment, place the fractured pieces in a sealable plastic bag and turn them in with the treated tooth.
    c. No occlusal reduction of clinical crowns may be done, other than the normal access preparation. Any other alteration will result in a deduction of points.

9. **Reference Point:** The cemento-enamel junction (CEJ) on the facial surface should be used as the reference point to determine the fill depth.

10. **No Temporaries:** No temporary material may be placed over the obturation material.

11. **Evaluation:** As soon as the endodontic procedure is complete, a Clinic Floor Examiner must authorize dismantling the typodont. If candidates have completed the endodontic portion of the examination before time is called, they may contact a Clinic Floor Examiner and request permission to dismantle the typodont, submit their procedures and leave the clinic area.
    a. The endodontic modules must be removed from the carrier trays and must be inserted into the module storage box. The candidate's Progress Form must accompany the module box when turned in to the examiners.
    b. The treated endodontic modular sections will be maintained by CRDTS as part of the candidate's examination record.

Requirements Specific to the Fixed Prosthodontics Examination

1. **Fixed Prosthodontic Typodont Modules:** The typodont must be articulated by being attached to either an articulator in a simulation laboratory, or fitted with an articulating hinge and post-mounted to an operatory chair. No endodontic modules are allowed in the Fixed Prosthodontic examination.

   CRDTS will provide the following prosthodontic modules:
   a. Module A7-12
   b. Module A2-6

   These modules will be distributed to the candidate in a box before the Fixed Prosthodontic Examination begins. Inside the box, there will also be an extra label with the candidate's number on it; this label will be attached to the typodont when it is submitted for evaluation. Use a bur to ***inscribe your candidate number in the lingual area of each modular section*** so that when the ModuPRO™ is disassembled, your modules can be readily identified.

   The candidate must provide the following prosthodontic modules with undamaged teeth:
   a. A28-31
   b. A13-15
   c. A18-20
   d. A21-27

2. **Required Materials:**
   Accessories:
   a. Articulating Hinge for chaired mounted typodonts

b. Carrier Trays
Note: Carrier Trays and articulators are interchangeable between the endodontic modules and the prosthodontic modules.

3. **Mounting Check-In:** When the six prosthodontic modules are mounted in the typodont carrier trays and the typodont is mounted in the manikin, a Clinic Floor Examiner must check the mounting, and identification numbers and authorize the candidate to begin. The tooth preparations will require all six prosthodontic modules mounted on the Carrier Trays. Each module is number coded to indicate correct placement in the Carrier Trays.

4. **Crown Preparations**: The preparation for a full-cast (CGC) crown is completed on tooth #3; the preparation for a porcelain-fused-to-metal (PFM) crown is completed on tooth #5; and the preparation for a full-ceramic crown is completed on tooth #9. The crown preparations on teeth #3 and #5 must be prepared as abutments for a 3-unit bridge. The teeth must be prepared for full crowns with supragingival margins. The assigned teeth will be single layer teeth. The teeth should be prepared in the appropriate proportions, taper and depths as defined in the criteria. No isolation dam is required for the crown preparations.

5. **Margins**: Cut the margins to within 0.5 mm of the gingival shroud. For the ceramic crown preparation, due to the fact that margins are placed .5 mm above the simulated gingival, the criteria have been adjusted accordingly. The lingual margin for the porcelain-fused-to-metal crown should be prepared for a metal margin, 0.5 mm. The transition from the facial 1.0 mm width to the lingual 0.5mm with should be placed mid-proximal.

6. **Occlusal Reduction**: The tooth for the porcelain-fused-to-metal (PFM) crown should be prepared for a porcelain occlusal surface with an optimal occlusal reduction of 2 mm. For the full-cast gold crown preparation, the occlusal reduction is optimally 1.5 mm.

   Only the matrix will be used to evaluate occlusal reduction so it is recommended that candidates utilize a periodontal probe at the locations illustrated by these arrows to accurately determine the correct occlusal reduction, including two plane reduction.

7. **Equilibration Prohibited**: No equilibration will be permitted on the typodont prior to or subsequent to either crown preparation.

8. **Dismantling the Manikin**: During the prosthodontic procedures, t**he candidate may *not* disassemble the manikin without permission of the Clinic Floor Examiner.** Removal of the manikin, typodont or teeth during the prosthodontic examination without permission of the Clinic Floor Examiner will result in failure.

9. **Evaluation:** When the crown preparations are complete, the candidate must request permission from the Clinic Floor Examiner to dismantle the manikin and remove the prosthodontic modules from the carrier trays. Put the two modules with the crown preparations and occlusal index in the labeled box provided by CRDTS and be sure the Prosthodontic Progress Form for the crown preparations are collected by the Clinic Floor Examiner. The Prosthodontic Progress Form and must be submitted with the modules.

10. **Returning the Typodont**: The prosthodontic modules (A7-12 and A2-6) containing the crown preparations will be maintained by CRDTS as part of the candidate's examination record. The other four modules, along with the articulator and carrier trays, may be retained by the candidate or returned to the school, depending upon to whom they belong.

ANTERIOR ENDONDONTIC PROCEDURE

Access Opening – Artificial Anterior #8

PLACEMENT

SAT	The placement of the access opening reflects the position of the pulp chamber and straight-line access to the root canal system.
ACC	The placement of the access opening is not directly over the pulp chamber but would allow for straight-line access to the root canal system.
SUB	The placement of the access opening is not over the pulp chamber and would not allow straight-line access to the root canal system.
DEF	The placement of the access opening is not over the pulp chamber and would not allow access to the root canal system.

SIZE

SAT	The access opening incorporates the middle one-third of the lingual surface mesiodistally and inciso-gingivally and allows for complete debridement of the pulp chamber.
ACC	The access opening is not less than ¼ or greater than ½ of the lingual surface, and does not weaken the marginal ridges or incisal edge.
SUB	The access opening is [_] less than ¼ and allows for partial debridement of the pulp chamber or [_] greater than ½ the width of the lingual surface, or [_] the access opening weakens the marginal ridge(s). [_] The access encroaches on, but does not include, the incisal edge.
DEF	The access opening includes the marginal ridge(s) and/or the incisal edge. The access opening is so small that debridement of the pulp chamber is impossible. The canal orifice is not accessed. The anterior crown is fractured due to excessive access preparation.

INTERNAL FORM

SAT	From the lingual surface to the cervical portion, the internal form tapers to the canal opening with no ledges.
ACC	From the lingual surface to the cervical portion, the internal form tapers to the canal opening with slight ledges.
SUB	The internal form lacks taper to the canal orifice(s), gouges are present that do not affect access to the canal orifice.
DEF	The internal form exhibits excessive ledging or gouges that do not allow access to the canal orifices and/or perforation.

PULP HORN REMOVAL

SAT	All pulp horns are removed through the access opening.
ACC	Pulp horns are not fully removed through the access opening.
SUB	Pulp horns are not entered.

ANTERIOR ENDODONTIC PROCEDURE

Canal Instrumentation – Artificial Anterior #8

CERVICAL PORTION

SAT	The cervical portion of the canal is enlarged facial-lingually and mesio-distally to allow access to the apical portion of the canal.
ACC	The cervical portion of the canal is too small and makes access to the apical portion of the canal difficult.
SUB	In the cervical portion, the canal is over or under prepared.
DEF	The cervical portion of the canal is grossly over prepared and/or perforated.

MID-ROOT PORTION

SAT	The mid-root portion of the canal blends with the cervical portion and no ledges or shoulders are present.
ACC	The mid-root portion of the canal does not blend smoothly with the cervical portion, but no ledges or shoulders exist.
SUB	The mid-root portion of the canal does not blend with the cervical region of the canal and/or ledging or shoulders are present that will inhibit canal obturation. The mid-root portion of the canal is transported.
DEF	The mid-root portion of the canal is perforated and/or has gross shoulders or ledges that will prevent canal obturation.

APICAL PORTION

SAT	The apical portion is instrumented to within 0.5 to 1.0 mm of the anatomical apex.
SUB	The apical portion of the canal is prepared more than 1.0 mm but less than 2.0 mm short of the anatomical apex. The apical portion is transported, but the apical portion still blends with the anatomical apex.
DEF	The apical portion of the canal is over prepared and instrumented beyond the anatomical apex, or is under prepared more than 2.0 mm from the anatomical apex. The apical portion of the canal is transported and does not blend with the anatomical apex and/or there is a perforation of the root.

Root Canal Obturation – Artificial Anterior #8

OVERFILL/UNDERFILL

SAT	The root canal is obturated with gutta percha to the apex or up to 1.0 mm or less from the apical foramen.
ACC	The root canal is obturated with gutta percha or extruded file up to 0.5 mm beyond the apical foramen.
SUB	The root canal is obturated with gutta percha more than 1.0 mm up to 2.0 mm short of the apical foramen. The root canal is obturated with gutta percha or extruded file greater than 0.5 mm to 1.0 mm beyond the apical foramen.
DEF	The root canal is obturated with gutta percha more than 2.0 mm short of the apical foramen. The root canal is obturated with gutta percha or a file extruded greater than 1.0 mm beyond the apical foramen.

EXTRUDED SEALER

SAT	There is 1.0 mm or less of sealer extruded beyond the apical foramen, measured in any direction.
SUB	There is more than 1.0 mm of sealer extruded, beyond the apical foramen, measured in any direction.

VOIDS IN GUTTA PERCHA

SAT	There are no voids in the gutta percha from the CEJ to the apical foramen.
ACC	The apical 1/3 of the gutta percha in the root canal is dense and without voids.
SUB	There are voids present throughout the obturation of the root canal.
DEF	There are large voids throughout the obturation of the root canal, there is no gutta percha present in the root canal, or a material other than gutta percha was used to obturate the canal.

FILLED CORONAL/APICAL TO CEJ

SAT	There is no gutta percha, restorative material, or sealer in the pulp chamber.
ACC	The gutta percha in the root canal is 1.0 mm to 2.0 mm short of the CEJ..Gutta percha and/or sealer is evident in the pulp chamber extending up to 1 mm coronal to the CEJ.
SUB	The gutta percha in the root canal is more than 2.0 mm but less than 3.0 mm short of the CEJ. Gutta percha and/or sealer is evident in the pulp chamber extending greater than 1.0 mm, but no more than 2.0 mm coronal to the CEJ.
DEF	The gutta percha in the root canal is more than 3.0 mm short of the CEJ. Gutta percha and/or sealer is evident in the pulp chamber extending more than 2.0 mm coronal to the CEJ. There is restorative material in the pulp chamber.

SEPARATED FILE

SAT	There is no evidence of a separated file.
ACC	A file is separated in the root canal, but does not prevent the obturation of the root canal.
DEF	A file is separated in the root canal, and prevents the obturation of the root canal.

POSTERIOR ENDONDONTIC PROCEDURE
Access Opening ONLY – Artificial Posterior #14

PLACEMENT

SAT	The placement of the access opening is the mesial triangular pit and central fossa of the tooth and would allow for straight-line access to the root canal system.
ACC	The placement of the access opening is not directly over the pulp chamber, but would allow for straight-line access to the root canal system.
SUB	The placement of the access opening is not over the pulp chamber and would not allow straight-line access to the root canal system.
DEF	The placement of the access opening is not over the pulp chamber, and would not allow access to the root canal system.

SIZE

SAT	The access opening is of optimal size and allows for complete debridement of the pulp chamber.
SUB	The access opening is underextended allowing for partial debridement of the pulp chamber.
DEF	The access opening is underextended so that debridement of the pulp chamber or access to one or more canal orifices is impossible.

INTEGRITY OF OCCLUSAL ANATOMY

SAT	The access opening preserves 2mm or more of the mesial marginal ridge, oblique ridge, and all cusp tips.
SUB	The access opening is overextended but preserves at least 1mm but less than 2mm of the mesial marginal ridge, oblique ridge, and/or any cusp tip.
DEF	The access opening is overextended but preserves less than 1mm of the mesial marginal ridge, oblique ridge, and/or any cusp tip or extends over the occlusal table.

INTERNAL FORM

SAT	The internal form tapers to the canal opening with no ledges.
SUB	The internal form lacks taper to the canal orfice(s), gouges are present that do not affect access to the canal orifice and/or there is incomplete removal of the pulp chamber roof.
DEF	The internal form exhibits excessive ledging or gouges that do not allow access to the canal orifices and/or the pulp chamber is not entered and/or there is a perforation of the crown or the floor of the pulp chamber.

PULP HORN REMOVAL

SAT	All pulp horns are removed through the access opening.
SUB	Pulp horns are not fully removed through the access opening.
DEF	Pulp horns are not entered.

ENDODONTIC PROCEDURES
Treatment Management
Critical Errors
Penalty Points ONLY

CONDITION OF ADJACENT TEETH

SAT	The adjacent teeth and/or restorations are free from damage.
ACC	Damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires recontouring which changes the shape and/or position of the contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.

CONDITION OF SOFT TISSUE

SAT	The simulated gingiva and/or typodont is/are free from damage.
ACC	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.
SUB	There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

CRITICAL ERRORS

1. Wrong Tooth/Surface Treated
2. ANTERIOR ENDODONTIC PROCEDURE - Root is fractured

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION
Tooth #5 - Cervical Margin and Draw

MARGIN/EXTENSION

SAT	The margins should be 0.5 mm occlusal to the simulated free gingival margin.
ACC	The cervical margin is at the level of or no more than 1.0 mm occlusal to the simulated free gingival margin.
SUB	The cervical margin is overextended 0.5 mm apical to the CEJ or the crest of the simulated free gingival margin, whichever is most occlusal. The cervical margin is underextended, more than 1.0 mm but no more than 1.5 mm occlusal to the crest of the simulated free gingival margin.
DEF	The cervical margin is overextended more than 0.5 mm apical to the simulated free gingival margin causing visual damage to the typodont. The cervical margin is underextended more than 1.5 mm occlusal to the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.

MARGIN/DEFINITION

SAT	The cervical margin is smooth, continuous, well defined.
ACC	The cervical margin is continuous but slightly rough and lacks some definition. The cervical bevel, when used, is greater than 1.0 mm but does not exceed 1.5 mm, and lacks some definition.
SUB	The cervical margin has some continuity, is significantly rough and is poorly defined.
DEF	The cervical margin has no continuity and/or definition or exhibits an indication of a lip or “J” design.

LINE OF DRAW

SAT	The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces and a line of draw is established.
ACC	The path of insertion / line of draw deviates 10° to less than 20° from the long axis of the tooth.
SUB	The path of insertion / line of draw deviates 20° to less than 30° from the long axis of the tooth.
DEF	The path of insertion / line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION
Tooth #5 - Walls, Taper and Finish Line

AXIAL WALLS – SMOOTHNESS/UNDERCUT

SAT	Walls are smooth and well-defined, no undercuts.
ACC	The walls are slightly rough and lack some definition.
SUB	The axial walls are rough.
DEF	There is an undercut.

TAPER

SAT	There is full visual taper (6° - 16°).
ACC	Taper is present, but nearly parallel (less than 6°) or slightly excessive (> 16°, but < 24°).
SUB	There is no taper or excessive taper (greater than 24°).
DEF	The taper is grossly over-reduced (greater than 30°).

FACIAL SHOULDER WIDTH

SAT	The facial shoulder is optimally 1.0 mm wide.
ACC	The facial shoulder varies slightly in width, but deviates no more than +/-0.5 mm from optimal.
DEF	The facial shoulder is wider than 1.5 mm or less than 0.5 mm.

FACIAL AXIAL REDUCTION

SAT	The facial reduction follows the facial planes of contour and is optimally 1.5 mm when measured at any point between the original height of contour and the facial-occlusal line angle.
ACC	The facial reduction follows the facial planes of contour and is no < 1.0 mm and no > 2 mm.
SUB	The facial reduction no longer follows the facial/ planes of contour and is no < 0.5 mm and no > 3.0 mm.
DEF	The facial axial reduction is less than .5mm or greater than 3 mm.

OCCLUSAL/AXIAL REDUCTION

SAT	Reduction of the occlusal wall, which includes secondary planes, is optimally 2.0 mm.
ACC	Reduction of the occlusal wall, which includes secondary planes, deviates no more than ± 0.5 mm from optimal.
SUB	Reduction of the occlusal wall, which includes secondary planes, deviates no more than ± 1.0 mm from optimal.
DEF	Reduction of the occlusal wall, which includes secondary planes, is grossly over-reduced, > 3.0 mm, encroaching on the pulp and impacting resistance and retention form; or grossly under-reduced, < 1.0 mm, resulting in insufficient occlusal clearance for adequate porcelain restorative material.

INTERNAL LINE ANGLES

SAT	Internal line angles and cusp tips are rounded.
ACC	Internal line angles and cusp tip areas not completely rounded and show a slight tendency of being sharp.
SUB	The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.
DEF	The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.

OCCLUSAL ANATOMY

SAT	Internal line angles and cusp tips are rounded.
SUB	The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.

CAST GOLD CROWN PREPARATION
Tooth #3 - Cervical Margin and Draw

MARGIN/EXTENSION

SAT	The margins should be 0.5 mm occlusal to the simulated free gingival margin.
ACC	The cervical margin is at the level of or no more than 1.0 mm occlusal to the simulated free gingival margin.
SUB	The cervical margin is overextended 0.5 mm apical to the crest of the simulated free gingival margin. The cervical margin is under-extended, more than 1.0 mm but no more than 1.5 mm occlusal to the crest of the simulated free gingival margin.
DEF	The cervical margin is overextended more than 0.5 mm apical to the simulated free gingival margin causing visual damage to the typodont. The cervical margin is under-extended more than 1.5 mm occlusal to the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.

MARGIN DEFINITION

SAT	The cervical margin is smooth, continuous, well defined.
ACC	The cervical margin is continuous but slightly rough and lacks some definition.
SUB	The cervical margin has some continuity, is significantly rough and is poorly defined.
DEF	The cervical margin has no continuity and/or definition or exhibits an indication of a lip or “J” design.

LINE OF DRAW

SAT	The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces and a line of draw is established.
ACC	The path of insertion/line of draw deviates 10° to less than 20° from the long axis of the tooth.
SUB	The path of insertion/line of draw deviates 20° to less than 30° from the long axis of the tooth.
DEF	The path of insertion/line of draw deviates 30° or more from the long axis of the tooth.

CAST GOLD CROWN PREPARATION
Tooth #3 - Walls, Taper and Finish Line

AXIAL WALL-SMOOTHNESS/UNDERCUT

SAT	Walls are smooth and well-defined, no undercuts.
ACC	The walls are slightly rough and lack some definition.
SUB	The axial walls are rough.
DEF	There is an undercut.

TAPER

SAT	There is full visual taper (6°- 16°).
ACC	Taper is present, but nearly parallel (less than 6°) or slightly excessive (greater than 16°, but less than 24°).
SUB	There is no taper or excessive taper (greater than 24°).
DEF	The taper is grossly over-reduced (greater than 30°).

CERVICAL FINISH LINE

SAT	The margin (includes knife-edge, chamfer, and bevel) is optimally 0.5 mm or less.
ACC	The margin varies slightly in width, but is no greater than 1.0 mm.
SUB	The margin varies significantly in width and deviates no more than 1.5 mm or exhibits inappropriate design.
DEF	The margin is greater than 1.5 mm.

OCCLUSAL/AXIAL REDUCTION

SAT	Reduction of the occlusal wall, which includes secondary planes, is optimally 1.5 mm.
ACC	Reduction of the occlusal wall, which includes secondary planes, deviates no more than ± 0.5 mm from optimal.
SUB	Reduction of the occlusal wall, which includes secondary planes, deviates no more than ± 1.0 mm from optimal.
DEF	Reduction of the occlusal wall, which includes secondary planes, is grossly over-reduced, greater than 2.5 mm; or grossly under-reduced, less than 0.5 mm, resulting in insufficient occlusal clearance for adequate restorative material and/or any axial surface on the preparation is in contact with the matrix.

INTERNAL LINE ANGLES

SAT	Internal line angles and cusp tips are rounded.
ACC	Internal line angles and cusp tip areas are not completely rounded and show a slight tendency of being sharp.
SUB	The internal line angles and cusp tip areas show only minimal evidence of rounding with a greater tendency of being sharp.
DEF	The internal line angles or cusp tip areas are excessively sharp with no evidence of rounding.

OCCLUSAL ANATOMY

SAT	The general occlusal anatomy is maintained.
SUB	The occlusal anatomy is flat.

BRIDGE FACTOR

PATH OF INSERTION/LINE OF DRAW

SAT	A line of draw or path of insertion that would allow for the full seating of a fixed prosthesis in a direct vertical plane without rotation either mesio-distally or bucco-lingually.
ACC	A line of draw or path of insertion that, due to angulations of the surface of the preparations, would require altering the path of insertion both mesio-distally and/or bucco-lingually from a direct vertical axis to allow full seating.
DEF	No line of draw or path of insertion exists through any plane of rotation without the removal of additional tooth structure of either/both of the preparations.

CERAMIC CROWN PREPARATION
Tooth #9 - Cervical Margin and Draw

MARGIN/EXTENSION

SAT	The cervical margin is placed 0.5 mm incisal to the simulated free gingival margin.
ACC	The cervical margin is at the level of or no more than 1.0 mm incisal to the simulated free gingival margin.
SUB	The cervical margin is overextended 0.5 mm apical to the crest of the simulated free gingival margin. The cervical margin is under-extended, more than 1.0 mm but no more than 1.5 mm incisal to the crest of the simulated free gingival margin.
DEF	The cervical margin is overextended more than 0.5 mm apical to the simulated free gingival margin causing visual damage to the typodont. The cervical margin is under-extended more than 1.5 mm incisal to the simulated free gingival margin, thereby compromising esthetics, resistance and retention form.

MARGIN/DEFINITION

SAT	The cervical margin is smooth, continuous, well-defined on all axial surfaces, and meets the external axial surface at approximately a right angle. The cervical margin exhibits no bevel.
ACC	The cervical margin is continuous but slightly rough and lacks some definition.
SUB	The cervical margin has some continuity, is significantly rough and is poorly defined.
DEF	The cervical margin is beveled, or exhibits an indication of a lip or “J” design or exhibits an external axial surface of 135º or greater (sloping shoulder).

LINE OF DRAW

SAT	The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces and a line of draw is established.
ACC	The path of insertion / line of draw deviates 10° to less than 20° from the long axis of the tooth.
SUB	The path of insertion / line of draw deviates 20° to less than 30º from the long axis of the tooth.
DEF	The path of insertion / line of draw is grossly unacceptable, deviating 30° or more from the long axis of the tooth.

CERAMIC CROWN PREPARATION
Tooth #9 - Walls, Taper and Finish Line

AXIAL WALLS – SMOOTHNESS/UNDERCUT

SAT	Walls are smooth and well-defined, no undercuts.
ACC	The walls are slightly rough and lack some definition.
SUB	The axial walls are rough.
DEF	There is an undercut.

TAPER

SAT	There is full visual taper (6° - 16°).
ACC	Taper is present, but nearly parallel (less than 6°) or slightly excessive (greater than 16°, but less than 24°).
SUB	There is no taper or excessive taper (greater than 24°).
DEF	The taper is grossly over-reduced (greater than 30°).

CERVICAL MARGIN WIDTH

SAT	The cervical margin is optimally 1.0 mm in width.
ACC	The cervical margin is greater than 1.0 mm, but not more than 1.5 mm in width.
SUB	The cervical margin is 0.5 mm to less than 1.0 mm or overextended to > 1.5 mm not to exceed 2.0mm in width.
DEF	The cervical margin is less than 0.5 mm or more than 2.0 mm in width.

INCISAL REDUCTION

SAT	The optimal incisal reduction is 2.0 mm.
ACC	The incisal reduction is not less than 1.5 mm or not more than 2.5 mm.
SUB	The incisal reduction is less than 1.5 mm or up to 3.0 mm.
DEF	The incisal reduction is less than 1.0 mm or more than 3.0 mm.

LINGUAL FOSSA REDUCTION

SAT	The lingual reduction is ideally 1.0 mm.
ACC	The lingual reduction is 0.5 mm to 1.0
SUB	The lingual reduction is greater than 1.0 mm but less than 2.0 mm.
DEF	The lingual reduction is less than .5mm or 2.0 mm or greater.

LINGUAL WALL HEIGHT

SAT	The lingual wall height is optimally 1.5 mm or more.
ACC	The lingual wall height is 1.0 to less than 1.5 mm.
SUB	The lingual wall height is 0.5 to less than 1.0 mm.
DEF	The lingual wall height is less than 0.5 mm.

FACIAL AXIAL REDUCTION

SAT	The facial reduction follows the facial planes of contour and is optimally 1.5 mm when measured at any point between the original height of contour and the incisal edge.
ACC	The facial reduction follows the facial planes of contour and is no less than 1.0 mm and no greater than 2 mm.
SUB	The facial reduction no longer follows the facial planes of contour and is no < 0.5 mm and no > 3.0 mm.
DEF	The facial axial reduction is less than 0.5mm or greater than 3 mm.

EXTERNAL/INTERNAL LINE ANGLES

SAT	Internal line angles and external line angles are rounded and smooth.
ACC	External and/or internal line angles are rounded, but irregular.
SUB	External and internal line angles are sharp.
DEF	The external and/or internal line angles are excessively sharp with no evidence of rounding.

PROSTHODONTIC MANIKIN PROCEDURES
Treatment Management
Penalty Points ONLY

CONDITION OF ADJACENT TEETH

SAT	The adjacent teeth and/or restorations are free from damage.
ACC	Damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires recontouring which changes the shape and/or position of the contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.

CONDITION OF SOFT TISSUE

SAT	The simulated gingiva and/or typodont is/are free from damage.
ACC	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.
SUB	There is iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.

CRITICAL ERRORS

1. Wrong Tooth/Surface Treated

PART IV: PERIODONTAL EXAMINATION – 100 Points
PART V: RESTORATIVE EXAMINATION – 100 Points

CONTENT

The Periodontal Examination and Restorative Examination are each stand alone examinations that will be administered on the same day. The Periodontal Examination consists of six sections and the Restorative Examination consists of four sections, as follows:

PART IV: PERIODONTAL EXAMINATION

Calculus Detection
Subgingival Calculus Detection/Removal
Supragingival Deposit Removal
Probing Depth Measurements/Gingival Recession
Tissue and Treatment Management

PART V: RESTORATIVE EXAMINATION

The Restorative Clinical Examination consists of six procedures: Place restorations in 3 pre-prepped teeth on 29 DO, 18 MO, 23DL and prepare 3 teeth with simulated decay on 9DL, 14 MO, 4 DO. For the posterior procedures, candidates may choose to prepare/place a Class II Amalgam or a Class II Composite:

Class II Amalgam –Preparation
Class II Amalgam – Restoration
OR
Class II Composite –Preparation
Class II Composite – Restoration
AND
Class III Composite –Preparation
Class III Composite - Restoration

GENERAL REQUIREMENTS

1. **Communications from Examiners:** Clinic Floor Examiners are available for your benefit and to help facilitate the examination process. If you have any questions about any part of exam, ***please do not hesitate*** to confer with a Clinic Floor Examiner.

   Candidates may receive written instructions ("Instructions to the Candidate" form) from the Restorative Examiners to modify their treatment. If so, the candidate must ***immediately*** summon a Clinic Floor Examiner **prior to** carrying out any of the instructions. Candidates should not make the assumption that they have failed. The procedure may be acceptable even though modification is indicated. Conversely, candidates who receive no instructions to modify procedures may not necessarily assume their performance is totally satisfactory or will result in a passing grade. It is possible to have a deficient preparation which cannot be modified for the purposes of the examination. Such a preparation, while deficient in terms of CRDTS evaluation criteria, may still support a finished restoration without seriously jeopardizing the immediate prognosis of the treatment. In every instance, each procedure is evaluated as it is presented rather than as it may be modified. The examiner ratings are not converted to scores until after the examination is completed and all records are processed by computer. Examiners at the examination site do not know and cannot provide information on whether a candidate has passed or failed a specific Examination.

2. **Infection Control:** Candidates must follow all infection control guidelines required by the state where the examination is taking place and must follow the CDC's *Guidelines for Infection Control in Dental Health-Care Settings* The current recommended infection control procedures as published by the CDC must be followed for the Endodontics, Fixed Prosthodontics, Periodontal and Restorative Examinations. These procedures must begin with the initial setting up of the unit, continue throughout the examinations and include the final cleanup of the operatory. It is the candidate's responsibility to assure that both the candidate and his/her auxiliary fully comply with these procedures. Failure to comply will result in loss of points and any violation that could lead to direct harm will result in termination of the examination and loss of all points.

PART IV: PERIODONTAL PROCEDURES

Periodontal Examination Procedural and Clinical Management Guidelines:

1. **Periodontal Typodont Modules:** Periodontal treatment must be completed on an assigned quadrant. The typodont may be mounted on a post and strapped to an operatory chair or mounted in a simulation laboratory. Post-mounted typodonts will require an ***articulating hinge.***

   CRDTS will provide the following:
   a. CRDTS ModuPRO One Typodont

2. **Required Materials:**
   Accessories:
   a. Articulating Hinge for chair mounted typodonts

b. **Disclosing Solution:** The use of disclosing solution by candidates and examiners is prohibited.

c. **Periodontal Instruments:** Instruments required for the periodontal examination are a new unscratched, untinted front-surface, non-disposable, #4 or #5 mouth mirror (mouth mirrors that are clouded, tinted, or unclear will be rejected), a periodontal probe with 1 mm increments, 2x2 gauze and a #11/12 explorer. These instruments must be provided by the candidate and the candidate's performance will not be evaluated without the proper instruments. Sonic/ultrasonic instruments are permissible for scaling, but they must be furnished by the candidate along with appropriate connection mechanisms. Air-abrasive polishers are NOT permissible.

d. The procedures, instruments and materials used are the choice of the candidate, as long as they are currently accepted and taught by accredited dental schools and the candidate has been trained in their use. It is the responsibility of the candidate to provide the instruments used in this examination and listed in this Manual unless such instruments are furnished by the school.

e. During the Periodontal Examination, a Clinic Floor Examiner (CFE) is responsible for checking the candidate's identification badge and to proctor the adherence to infection control protocols and proper clinical management. If any problems arise during the examination, the candidate should immediately notify a CFE. The CFE is also present to aid in any emergencies which may occur.

PERIODONTAL EXAMINATION CRITERIA

PERFORMANCE REQUIREMENTS: FINAL EVALUATION

The following criteria will be used by examiners to evaluate candidate performance.

CALCULUS DETECTION

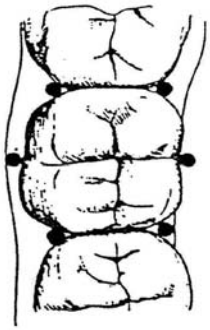
The candidate must correctly indicate the presence or absence of subgingival calculus on 4 assigned surfaces. The candidate must record a Y or N (Yes or No) below each surface assigned.

PERIODONAL MEASUREMENTS

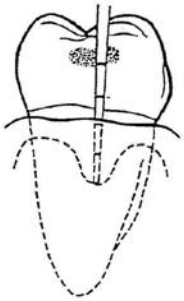
Periodontal Measurements

The candidate must chart the depth of the gingival sulcus within **one millimeter** on six aspects of 2 assigned teeth. The examiners will assign two (2) teeth; one posterior tooth and one anterior tooth from the teeth submitted in the candidate's Treatment Selection. The candidate must record the depth of each sulcus to the nearest millimeter on six aspects only (MF, F, DF, ML, L, DL) of each assigned tooth.

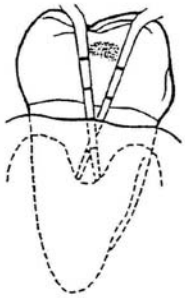
Interproximally, the probe must be positioned with the shank against the contact point and the tip angled slightly into the col so it is directly beneath the contact area. If a tooth has no contact, the probe should be placed at the midpoint of the proximal surface and the same measurement recorded for both facial and lingual aspects. The facial and lingual measurements should be made at the midpoint of the tooth (See illustration below). Record every measurement for the assigned teeth to the nearest millimeter. The following illustrations depict the proper placement of the probe, from the occlusal and interproximal perspectives:



Probe Positions from Occlusal



Probing When No Contact



Interproximal Angulation

CALCULUS/SUPRAGINGIVAL DEPOSIT REMOVAL & TISSUE MANAGEMENT

The candidate must complete a thorough scaling and calculus/plaque/stain removal on all teeth in the Treatment Selection.

Scaling/Subgingival Calculus Removal

The assigned subgingival surfaces must be smooth, with none of the selected deposits detectable with an 11/12 explorer. Air may be used to deflect the tissue to locate areas for tactile confirmation. All subgingival surfaces in the treatment selection must be scaled but only the selected surfaces will be evaluated.

Supragingival Deposit Removal

The candidate must effectively remove all supragingival deposits (hard and soft) and extrinsic stains from ***all the coronal surfaces*** of the treatment selection teeth submitted so that all non-decalcified surfaces are:

(a) Visually clean and smooth.

(b) Tactilely smooth upon examination with an 11/12 explorer

(c) Free of all supragingival accretions.

Disclosing solution must not be utilized by candidates or by the examiners; and air- powered polishing is prohibited.

Tissue Management

Soft tissue adjacent to all teeth in the selected Treatment Selection and surrounding areas will be evaluated. In addition, trauma to the lips or oral mucosa will be considered tissue trauma (see Glossary). The candidate must effectively utilize sonic/ultrasonic or hand instruments, polishing cups, and dental floss so that no unwarranted soft tissue trauma (abrasions, lacerations or ultrasonic burns) occurs as a result of the prophylaxis procedure. Acceptable performance will have been demonstrated if 100% of all tissue surfaces exhibit no unusual mechanical damage and tissues are well managed.

PART V: RESTORATIVE PROCEDURES

Restorative Examination Procedural and Clinical Management Guidelines:

Requirements Specific to the Restorative Examinations

General

Required Procedures: Candidates may choose to place either a Class II Amalgam or Class II Composite in addition to the Class III Composite Preparation. The Class II Composite must be ***placed*** under a rubber dam.

Restorative Instruments: A clear, unscratched, front-surface, non-disposable, #4 or #5 mouth mirror (mouth mirrors that are clouded, tinted, or unclear will be rejected), a ***sharp*** traditional Shepherd's Hook-type explorer and a periodontal probe with 1mm markings are required for the restorative examination and must be provided by the candidate.

Recontouring: No recontouring of adjacent teeth or restorations will be permitted without prior approval. Candidates may request to recontour restorations on adjacent teeth from the CFE. The CFE will initial the progress form if recontouring is approved. Candidates are not permitted to request to recontour until ***after*** the preparation has been evaluated. Once recontouring is completed, the candidate will request the same CFE evaluate the finished procedure.

Standardized Floss: CRDTS will provide standardized, approved floss for evaluation of the interproximal contact on the Class III Composite Restoration:

POH LiteWax Percept 630 Black Floss sachets
Go to www.oralhealthproducts.com for more information.

Modification Requests

If during the preparation the tooth indicates a need for a significant change from the criteria outlined for Satisfactory, the candidate should make modification request(s) ***prior to performing them.*** The preparation ***must*** be prepared to the Satisfactory criteria and all pre-existing restorative material must be removed before submitting the first Modification Request. Requests to extend the preparation to an MOD or to place different material than the approved Treatment Selection must be made utilizing the Modification Request process. Exceptions include: modification to extend the proximal box because of tooth rotation or position. These do not require a request for modification but are listed in the Notes to Examiners area at the bottom of the Progress Form and must be initialed by a CFE. Each modification needs to be numbered and listed separately with the time noted and a brief explanation of the proposed modifications.

The request to modify should include:

What: (Type of modification)
Where: (gingival axial line angle, mesial box) *See Illustration below*
Why: (due to caries, decalcification)
How much: (reference back to either ideal or to the start)

The request should be shown to a Clinic Floor Examiner who will direct the candidate through the authorization process for modifications. If the candidate feels a finger extension is appropriate and/or necessary to eliminate marginal decalcification, such a modification should also be submitted for approval. ***If the candidate anticipates or actually experiences a pulpal exposure, the Clinic Floor Examiner should be notified at once***.

Example Modification Request

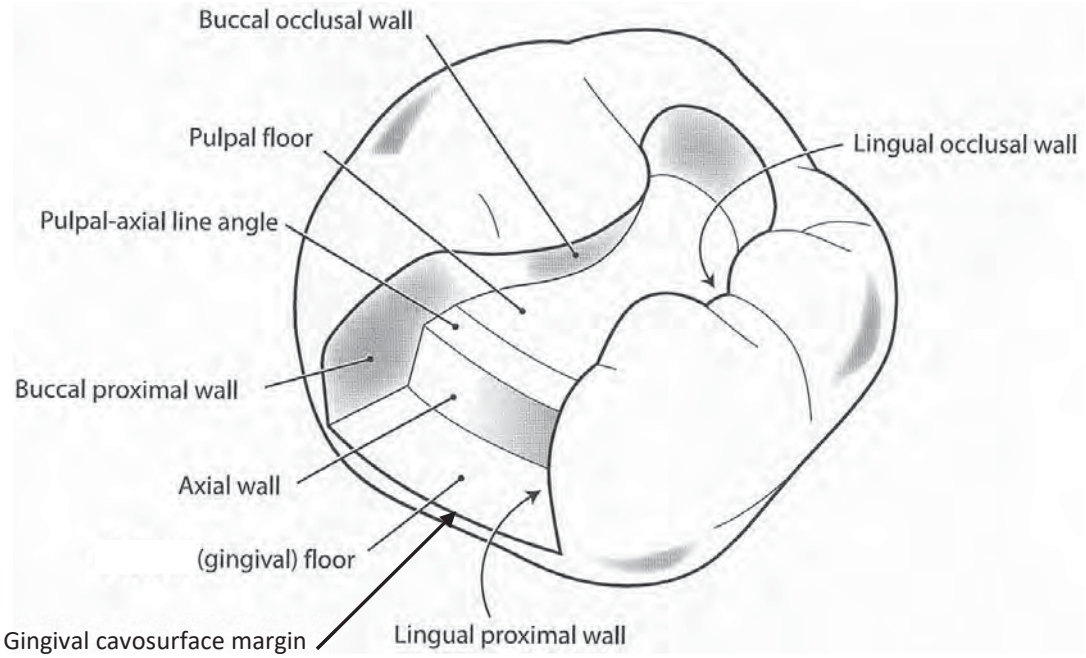
Modification Request # 1
What: Extend
Where: axial wall
Why: remove caries
How Much: .5 mm
☐ **Granted** ☐ **Not Granted**

Isolation dams are required and the Posterior Composite must be ***placed*** under an isolation dam.

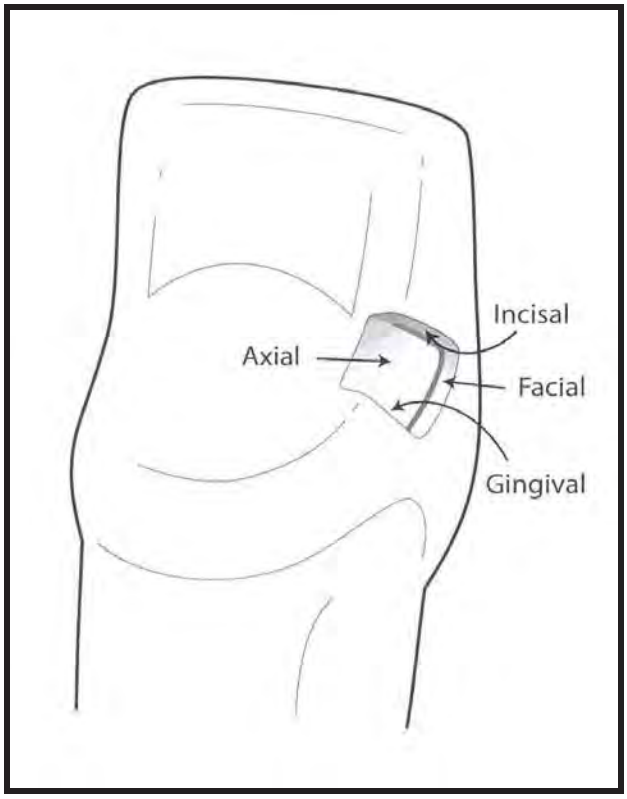
Carefully review the criteria for modification requests. Inappropriate requests for modification(s) will result in a small penalty for each modification not granted. Requests for a modification for removal of caries when no stain, caries or decalcification exists will receive a larger penalty. Modifications that have been approved and appropriately accomplished will not result in any penalties.

If more than one modification is anticipated at any time, it is to the candidate's advantage to submit them on the same form as no additional time is provided for evaluation of modification requests and multiple submissions may significantly decrease treatment time. Candidates will submit their copy of the Modification Request Form with their Finished Restoration Forms.

Terminology for Modification Requests
Amalgam & Posterior Composite Preparations



Composite Preparation



Requirements Specific to the Restorative Examination

1. **Restorative Typodont Modules:** Restorative treatment must be completed on the assigned teeth. The typodont may be mounted on a post and strapped to an operatory chair or mounted in a simulation laboratory. Post-mounted typodonts will require an ***articulating hinge.***

   CRDTS will provide the following:
   a. CRDTS ModuPro One Typodont

2. **Required Materials:**
   Accessories:
   a. Articulating Hinge for chair mounted typodonts

Class II Procedures- Amalgam and Composite

1. Proximal contact is a critical part of the evaluation and the candidate should be aware that the examiners will be checking the contact visually and with approved, standardized dental floss. For either procedure, the candidate should be familiar with the properties of the material being used.

Requirements Specific to the Restorative Examination- Class III Composite Procedure

1. Proximal contact is a critical part of the evaluation and the candidate should be aware that the examiners will be checking the contact with approved standardized dental floss provided by CRDTS.

AMALGAM PREPARATION
External Outline Form

PROXIMAL CLEARANCE

SAT	Contact is visibly open proximally.
ACC	Proximal contact is visibly open, and proximal clearance at the height of contour extends beyond 0.5 mm but not more than 1.0 mm on either one or both proximal walls.
SUB	Proximal contact is [_] not visually open; or proximal clearance at the height of contour [_] extends beyond 1.0 mm but not more than 2.0 mm on either one or both proximal walls.
DEF	The proximal clearance at the height of contour extends beyond 2.0 mm on either one or both proximal walls.

GINGIVAL CLEARANCE

SAT	Contact is open gingivally up to 0.5 mm.
ACC	The gingival clearance is greater than 0.5 mm but not greater than 2.0 mm.
SUB	The gingival clearance is greater than 2.0 mm but not more than 3.0 mm, or is not open.
DEF	The gingival clearance is greater than 3.0 mm.

OUTLINE SHAPE/CONTINUITY/EXTENSION

SAT	The outline form includes all carious and non-coalesced fissures.
SUB	The outline form is inappropriately overextended so that it compromises the remaining marginal ridge and/or cusp(s). The outline form is underextended and non-coalesced fissure(s) remain which extend to the DEJ and are contiguous with the outline form.
DEF	The outline form is overextended so that it compromises, undermines and leaves unsupported the remaining marginal ridge to the extent that the pulpal-occlusal wall is unsupported by dentin or the width of the marginal ridge is 1 mm or less.

ISTHMUS

SAT	The isthmus must be 1-2 mm wide, but not more than ¼ the intercuspal width of the tooth.
ACC	The isthmus is more than ¼ and not more than 1/3 the intercuspal width.
SUB	The isthmus is more than 1/3 and not more than ½ the intercuspal width.
DEF	The isthmus is greater than ½ the intercuspal width or less than 1 mm.

CAVOSURFACE MARGIN

SAT	The external cavosurface margin meets the enamel at 90°. There are no gingival bevels. The proximal gingival point angles may be rounded or sharp.
ACC	The proximal cavosurface margin deviates from 90°, but is unlikely to jeopardize the longevity of the tooth or restoration; this would include small areas of unsupported enamel.
SUB	The proximal cavosurface margin deviates from 90° and is likely to jeopardize the longevity of the tooth or restoration. This would include unsupported enamel and/or excessive bevel(s).

SOUND MARGINAL TOOTH STRUCTURE

SAT	The cavosurface margin terminates in sound natural tooth structure. There is no previous restorative material , including sealants, at the cavosurface margin. There is no decalcification on the gingival margin.
SUB	The cavosurface margin does not terminate in sound natural tooth structure; or, there is explorer penetrable decalcification remaining on any cavosurface margin, or the cavosurface margin terminates in a previously placed pit and fissure sealant.

AMALGAM PREPARATION

Internal Form

AXIAL WALLS

SAT	The axial wall follows the external contours of the tooth, and is entirely in dentin, .5 mm from the DEJ.
ACC	The depth of the axial wall is .5 mm to 1.5 mm beyond the DEJ.
SUB	The axial wall is more than 1.5 mm beyond the DEJ, but no more than 2.5 mm or the axial wall depth does not include the DEJ.
DEF	The axial wall is [_] more than 2.5 mm beyond the DEJ or [_] there is no gingival floor.

PULPAL FLOOR

SAT	The pulpal floor is optimally 1.5 to 2.0 mm from the cavosurface margin at its shallowest point.
SUB	The pulpal floor is less than 1.5 mm at its shallowest point or greater than 2.0 mm but not greater than 3.0 mm from the cavosurface margin.
DEF	The pulpal floor is more than 3.0 mm from the cavosurface margin or is 0.5 mm or less at its shallowest point.

PULPAL-AXIAL LINE ANGLE

SAT	The pulpal-axial line angle is rounded.
SUB	The pulpal-axial line angle is sharp.

CARIES/REMAINING MATERIAL

SAT	All caries and/or previous restorative material are removed.
DEF	Caries or previous restorative material remains in the preparation or preparation is not extended to include caries.

PROXIMAL BOX WALLS

SAT	The walls of the proximal box should be convergent occlusally and meet the external surface at a 90º angle.
ACC	The walls of the proximal box are parallel, but appropriate internal retention is present.
DEF	The walls of the proximal box diverge occlusally which offers no retention and will jeopardize the longevity of the tooth or restoration.

PREPARED SURFACES

SAT	All prepared surfaces are smooth and well-defined, and the gingival floor is perpendicular to the long axis of the tooth.
SUB	The prepared surfaces are irregular or ill-defined.

AMALGAM PREPARATION

Critical Errors

Wrong Tooth/Surface Treated
Retention, when used, grossly compromises the tooth or restoration
Unrecognized Exposure
Critical Lack of Clinical Judgment/Diagnostic Skills

AMALGAM FINISHED RESTORATION
Margin Integrity and Surface Finish

MARGIN DEFICIENCY

SAT	There is no marginal deficiency. There is no evidence of voids or open margins.
ACC	There is a detectable marginal deficiency at the restoration-tooth interface either visually or with the tine of an explorer, but it is less than .5 mm.
SUB	The restoration-tooth interface is detectable visually or with the tine of an explorer. There is evidence of marginal deficiency, 0.5 mm up to 1 mm, which can include pits and voids at the cavosurface margin
DEF	There is evidence of marginal deficiency of more than 1 mm, to include pits and voids at the cavosurface margin, and/or there is an open margin.

MARGIN EXCESS

SAT	There is no detectable excess at the cavosurface margin either visually or with the tine of an explorer.
ACC	There is a detectable marginal excess at the cavosurface margin either visually or with the tine of an explorer, but it is no greater than 1.0 mm.
SUB	The cavosurface margin is detectable visually or with the tine of an explorer. There is evidence of marginal excess of more than 1.0 mm and up to 2.0 mm.
DEF	There is evidence of marginal excess at the cavosurface margin of more than 2.0 mm.

GINGIVAL OVERHANG

SAT	The restoration exhibits no gingival overhang.
ACC	The restoration exhibits a slight gingival overhang but would not be expected to adversely affect the tissue health.
DEF	The restoration exhibits a significant gingival overhang and would be expected to adversely affect the tissue health.

SURFACE FINISH

SAT	The surface of the restoration is uniformly smooth and free of pits and voids.
ACC	The surface of the restoration is slightly grainy or rough, but it is free of significant pits and voids.
SUB	The surface of the restoration is rough and exhibits surface significant irregularities, pits or voids.

CONTIGUOUS TOOTH STRUCTURE

SAT	There is no evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure contiguous to the restoration.
ACC	There is minimal evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure contiguous to the restoration. (Enameloplasty)
SUB	There is evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure contiguous to the restoration. (Enameloplasty)
DEF	There is gross enameloplasty resulting in the exposure of dentin.

AMALGAM FINISHED RESTORATION
Contour, Contact and Occlusion

INTERPROXIMAL CONTACT

SAT	Interproximal contact is present, the contact is visually closed and is properly shaped and positioned; and there is definite, but not excessive, resistance to dental floss when passed through the interproximal contact area.
ACC	Interproximal contact is visually closed, and the contact is adequate in size, shape, or position but demonstrates little resistance to dental floss.
SUB	Interproximal contact is visually closed, but the contact is deficient in size, shape, or position and demonstrates little resistance to dental floss or shreds the floss.
DEF	The interproximal contact is visually open or will not allow floss to pass through the contact area.

CENTRIC/EXCURSIVE CONTACTS

SAT	When checked with articulating ribbon or paper, all centric and excursive contacts on the restoration are consistent in size, shape and intensity with such contacts on other teeth, in that quadrant.
SUB	When checked with articulating ribbon or paper, the restoration is in hyper-occlusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth, and requires adjustment.
DEF	There is gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant.

ANATOMY/CONTOUR

SAT	The restoration reproduces the normal physiological proximal contours of the tooth, occlusal and marginal ridge anatomy.
ACC	The restoration does not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy, but would not be expected to adversely affect the tissue health.
DEF	The restoration does not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy, and would be expected to adversely affect the tissue health.

AMALGAM FINISHED RESTORATION
Critical Errors

Fractured Restoration

POSTERIOR COMPOSITE PREPARATION

External Outline Form

PROXIMAL CLEARANCE

SAT	Proximal contact is visibly open up to 0.5 mm.
ACC	Proximal contact is visibly open, and proximal clearance at the height of contour extends beyond 0.5 mm but not more than 1.0 mm on either one or both proximal walls.
SUB	Proximal contact is [_] not visually open; or proximal clearance at the height of contour [_] extends beyond 1.0 mm but not more than 2.0 mm on either one or both proximal walls.
DEF	The proximal clearance at the height of contour extends beyond 2.0 mm on either one or both proximal walls.

GINGIVAL CLEARANCE

SAT	Contact is open gingivally up to 0.5 mm.
ACC	The gingival clearance is greater than 0.5 mm but not greater than 2.0 mm.
SUB	The gingival clearance is greater than 2.0 mm but not more than 3.0 mm, or is not open.
DEF	The gingival clearance is greater than 3.0 mm.

OUTLINE SHAPE/CONTINUITY/EXTENSION

SAT	The outline form includes all carious and non-coalesced fissures, and is smooth, rounded and flowing with no sharp curves or angles.
SUB	The outline form is inappropriately overextended so that it compromises the remaining marginal ridge and/or cusp(s). The outline form is underextended and non-coalesced fissure(s) remain which extend to the DEJ and are contiguous with the outline form.
DEF	The outline form is overextended so that it compromises, undermines and leaves unsupported the remaining marginal ridge to the extent that the cavosurface margin is unsupported by dentin or the width of the marginal ridge is 1.0 mm or less.

ISTHMUS

SAT	The isthmus may be up to 2 mm wide, but not more than ¼ the intercuspal width of the tooth.
ACC	The isthmus is more than ¼ and not more than 1/3 the intercuspal width.
SUB	The isthmus is more than 1/3 and not more than ½ the intercuspal width
DEF	The isthmus is greater than ½ the intercuspal width.

CAVOSURFACE MARGIN

SAT	The external cavosurface margin meets the enamel at 90o.
SUB	The proximal cavosurface margin deviates from 90o and is likely to jeopardize the longevity of the tooth or restoration. This would include unsupported enamel and/or excessive bevel(s).

SOUND MARGINAL TOOTH STRUCTURE

SAT	The cavosurface margin terminates in sound natural tooth structure. There is no previous restorative material , including sealants, at the cavosurface margin. There is no decalcification on the gingival margin.
SUB	The cavosurface margin does not terminate in sound natural tooth structure; or, there is explorer penetrable decalcification remaining on any cavosurface margin, or the cavosurface margin terminates in a previously placed pit and fissure sealant.

POSTERIOR COMPOSITE PREPARATION

Internal Form

AXIAL WALLS

SAT	The axial wall follows the external contours of the tooth, and is entirely in dentin, .5 mm from the DEJ.
ACC	The depth of the axial wall is .5 mm to 1.5 mm beyond the DEJ.
SUB	The axial wall is [_] more than 1.5 mm beyond the DEJ, but no more than 2.5 mm or the axial wall depth does not include the DEJ.
DEF	The axial wall is more than 2.5 mm beyond the DEJ or [_] there is no gingival floor.

PULPAL FLOOR

SAT	The pulpal floor depth must be at 1.5—2.0 mm in all areas; there may be remaining enamel.
SUB	The pulpal floor depth is greater than 0.5 mm but less than 1.5 mm or up to 3.0 mm.
DEF	The pulpal floor is [_] less than 0.5 mm or [_] is more than 3.0 mm from the cavosurface margin.

CARIES/REMAINING MATERIAL

SAT	All caries and/or previous restorative material are removed.
DEF	Caries or previous restorative material remains in the preparation or preparation is not extended to include caries.

PROXIMAL BOX WALLS

SAT	The walls of the proximal box should be parallel or converge occlusally.
SUB	The walls of the proximal box are divergent.
DEF	The walls of the proximal box are grossly [_] convergent so that the buccal-lingual gingival floor width is > than 2 times the buccal-lingual width of the occlusal access or [_] divergent so that the occlusal access is > two times the width of the buccal-lingual gingival floor.

PREPARED SURFACES

SAT	All prepared surfaces are smooth and well-defined, and the gingival floor is perpendicular to the long axis of the tooth.
SUB	The prepared surfaces are irregular or ill-defined.

POSTERIOR COMPOSITE PREPARATION

Critical Errors

Wrong Tooth/Surface Treated
Unrecognized Exposure
Critical Lack of Clinical Judgment/Diagnostic Skills

POSTERIOR COMPOSITE FINISHED RESTORATION
Margin Integrity and Surface Finish

MARGIN DEFICIENCY

SAT	There is no marginal deficiency. There is no evidence of voids or open margins.
ACC	There is a detectable marginal deficiency at the restoration-tooth interface either visually or with the tine of an explorer, but it is less than .5 mm.
SUB	The restoration-tooth interface is detectable visually or with the tine of an explorer. There is evidence of marginal deficiency, 0.5 mm up to 1 mm, which can include pits and voids at the cavosurface margin
DEF	There is evidence of marginal deficiency of more than 1 mm, to include pits and voids at the cavosurface margin, and/or there is an open margin.

MARGIN EXCESS

SAT	There is no detectable marginal excess at the cavosurface margin either visually or with the tine of an explorer.
ACC	There is a detectable marginal excess at the cavosurface margin either visually or with the tine of an explorer, but it is no greater than 1.0 mm.
SUB	The cavosurface margin is detectable visually or with the tine of an explorer. There is evidence of marginal excess of more than 1.0 mm and up to 2.0 mm.
DEF	There is evidence of marginal excess at the cavosurface margin of more than 2.0 mm.

GINGIVAL OVERHANG

SAT	The restoration exhibits no gingival overhang.
ACC	The restoration exhibits a slight gingival overhang but would not be expected to adversely affect the tissue health.
DEF	The restoration exhibits a significant gingival overhang and would be expected to adversely affect the tissue health.

SURFACE FINISH

SAT	The surface of the restoration is uniformly smooth and free of pits and voids.
ACC	The surface of the restoration is slightly grainy or rough, but it is free of significant pits and voids.
SUB	The surface of the restoration is rough and exhibits surface significant irregularities, pits or voids.

CONTIGUOUS TOOTH STRUCTURE

SAT	There is no evidence of unwarranted or unnecessary removal or recontouring of tooth structure contiguous to the restoration. There is no excess restorative material present that is not contiguous with the restoration.
ACC	There is minimal evidence of unwarranted or unnecessary removal, or recontouring of tooth structure contiguous to the restoration. (Enameloplasty) Excess present that is not contiguous with the restoration no greater than 0.5mm.
SUB	There is evidence of unwarranted or unnecessary removal or recontouring of tooth structure contiguous to the restoration. (Enameloplasty) Excess present that is not contiguous with the restoration greater than 0.5mm.
DEF	There is gross enameloplasty resulting in the exposure of dentin.

POSTERIOR COMPOSITE FINISHED RESTORATION
Contour, Contact and Occlusion

INTERPROXIMAL CONTACT

SAT	Interproximal contact is present, the contact is visually closed and is properly shaped and positioned; and there is definite, but not excessive, resistance to dental floss when passed through the interproximal contact area.
ACC	Interproximal contact is visually closed, and the contact is adequate in size, shape, or position but demonstrates little resistance to dental floss.
SUB	Interproximal contact is visually closed, but the contact is deficient in size, shape, or position and demonstrates little resistance to dental floss or shreds the floss.
DEF	The interproximal contact is visually open or will not allow floss to pass through the contact area.

CENTRIC/EXCURSIVE CONTACTS

SAT	When checked with articulating ribbon or paper, all centric and excursive contacts on the restoration are consistent in size, shape and intensity with such contacts on other teeth, in that quadrant.
SUB	When checked with articulating ribbon or paper, the restoration is in hyper-occlusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth, and requires adjustment.
DEF	There is gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant.

ANATOMY/CONTOUR

SAT	The restoration reproduces the normal physiological proximal contours of the tooth, occlusal and marginal ridge anatomy.
ACC	The restoration does not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy, but would not be expected to adversely affect the tissue health.
DEF	The restoration does not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy, and would be expected to adversely affect the tissue health.

POSTERIOR COMPOSITE FINISHED RESTORATION
Critical Errors

Fractured Restoration
The restoration is debonded and/or movable in the preparation.

ANTERIOR CLASS III COMPOSITE PREPARATION
External Outline Form

OUTLINE EXTENSION

SAT	Outline form provides adequate access for complete removal of caries and/or previous restorative material and insertion of composite resin. Access entry is appropriate to the location of caries and tooth position. If a lingual approach is initiated, facial contact may or may not be broken as long as the margin terminates in sound tooth structure.
ACC	The wall opposite the access, if broken, may extend no more than 1.0 mm beyond the contact area. The outline form is overextended mesiodistally 0.5-1 mm beyond what is necessary for complete removal of caries and/or previous restorative material.
SUB	The outline form is underextended making caries removal or insertion of restorative material questionable. The outline form is overextended mesiodistally more than 1mm, but no more than 2 mm beyond what is necessary for complete removal of caries and/or previous restorative material. The incisal cavosurface margin is overextended so that the integrity of the incisal angle is compromised. The wall opposite the access opening extends more than 1 mm beyond the contact area.
DEF	The outline form is underextended making it impossible to manipulate and finish the restorative material. The outline form is overextended mesiodistally more than 2.0 mm beyond what is necessary for complete removal of caries and/or previous restorative material. The incisal cavosurface margin is overextended so that the incisal angle is removed or fractured. A Class IV restoration is now necessary without justification. The wall opposite the access opening extends more than 2.5 mm beyond the contact area.

GINGIVAL CONTACT BROKEN

SAT	The gingival contact must be broken. The incisal contact need not be broken, unless indicated by the location of the caries. If a lingual approach is initiated, facial contact may or may not be broken as long as the margin terminates in sound tooth structure.
ACC	The gingival clearance does not exceed 1.5 mm.
SUB	The gingival clearance is greater than 1.5 mm. The gingival contact is not visibly broken.
DEF	The gingival clearance is greater than 2.0 mm.

MARGIN SMOOTHNESS/CONTINUITY/BEVELS

SAT	Cavosurface margins form a smooth continuous curve with no sharp angles. Enamel cavosurface margins may be beveled.
ACC	The cavosurface margins are slightly irregular. Enamel cavosurface margin bevels, if present, do not exceed 1.0 mm in width.
SUB	The cavosurface margin is rough and severely irregular. Enamel cavosurface margin bevels, if present, exceed 1.0 mm in width, are not uniform or are inappropriate for the size of the restoration.

SOUND MARGINAL TOOTH STRUCTURE

SAT	The cavosurface margin terminates in sound natural tooth structure. There is no previous restorative material, including sealants, at the cavosurface margin. All unsupported enamel is removed unless it compromises facial esthetics.
ACC	There is a small area of unsupported enamel which is not necessary to preserve facial esthetics.
SUB	There are large or multiple areas of unsupported enamel which are not necessary to preserve facial esthetics. The cavosurface margin does not terminate in sound natural tooth structure; or, the cavosurface margin terminates in previous restorative material.

ANTERIOR CLASS III COMPOSITE PREPARATION

Internal Form

AXIAL WALLS

SAT	The axial wall follows the external contours of the tooth and the depth does not exceed .5 mm beyond the DEJ.
ACC	The depth of the axial wall is no more than 1.5 mm beyond the DEJ.
SUB	The axial wall is more than 1.5 mm beyond the DEJ.
DEF	The axial wall is more than 2.5 mm beyond the DEJ.

INTERNAL RETENTION

SAT	If used, rounded internal retention is placed in the dentin of the gingival and incisal walls just axial to the DEJ as dictated by cavity form. Retention is tactilely and visually present.
SUB	When used, retention is excessive and undermines enamel or jeopardizes the incisal angle or encroaches on the pulp.

CARIES/REMAINING MATERIAL

SAT	All caries and/or previous restorative material are removed.
DEF	Caries or previous restorative material remains in the preparation or preparation is not extended to include caries.

ANTERIOR COMPOSITE PREPARATION

Critical Errors

Wrong Tooth/Surface Treated
Unrecognized Exposure
Critical Lack of Clinical Judgment/Diagnostic Skills

ANTERIOR CLASS III COMPOSITE RESTORATION
Margin Integrity and Surface Finish

MARGIN DEFICIENCY

SAT	There is no marginal deficiency. No marginal deficiency is detectable at the restoration-tooth interface either visually or with the tine of an explorer. There is no evidence of voids or open margins.
ACC	There is a detectable marginal deficiency at the facial or lingual restoration-tooth interface either visually or with the tine of an explorer, but it is less than .5 mm.
SUB	The restoration-tooth interface is detectable visually or with the tine of an explorer. There is evidence of marginal deficiency, 0.5 mm up to 1 mm, which can include pits and voids at the cavosurface margin
DEF	There is evidence of marginal deficiency of more than 1 mm, to include pits and voids at the cavosurface margin, and/or there is an open margin.

MARGIN EXCESS

SAT	No marginal excess is detectable at the cavosurface margin either visually or with the tine of an explorer.
ACC	There is a detectable marginal excess at the cavosurface margin either visually or with the tine of an explorer, but it is no greater than 1.0 mm..
SUB	The cavosurface margin is detectable visually or with the tine of an explorer. There is evidence of lingual marginal excess, more than 1.0 mm and up to 2 mm. There is facial and/or lingual flash with contamination underneath, but it is not internal to the cavosurface margin, and could be removed by polishing or finishing.
DEF	There is evidence of marginal excess at the cavosurface margin of more than 2 mm, and/or there is internal contamination at the facial and/or lingual interface between the restoration and the tooth.

GINGIVAL OVERHANG

SAT	The restoration exhibits no gingival overhang.
ACC	The restoration exhibits a slight gingival overhang but would not be expected to adversely affect the tissue health.
DEF	The restoration exhibits a significant gingival overhang and would be expected to adversely affect the tissue health.

SURFACE FINISH

SAT	The surface of the restoration is uniformly smooth and free of pits and voids.
ACC	The surface of the restoration is slightly grainy or rough, but it is free of significant pits and voids.
SUB	The surface of the restoration is rough and exhibits surface significant irregularities, pits or voids.

CONTIGUOUS TOOTH STRUCTURE

SAT	There is no evidence of unwarranted or unnecessary removal or recontouring of tooth structure contiguous to the restoration. There is no excess restorative material present that is not contiguous with the restoration.
ACC	There is minimal evidence of unwarranted or unnecessary removal, modification, or recontouring of tooth structure contiguous to the restoration. (Enameloplasty) Excess present that is not contiguous with the restoration no greater than 0.5mm.
SUB	There is evidence of unwarranted or unnecessary removal or recontouring of tooth structure contiguous to the restoration. (Enameloplasty) Excess present that is not contiguous with the restoration greater than 0.5mm.
DEF	There is gross enameloplasty resulting in the exposure of dentin.

SHADE SELECTION

SAT	The shade of the restoration blends with the surrounding tooth structure.
SUB	The shade of the restoration contrasts markedly with the surrounding tooth structure.

ANTERIOR CLASS III COMPOSITE FINISHED RESTORATION
Contour, Contact and Occlusion

INTERPROXIMAL CONTACT

SAT	Interproximal contact is present, the contact is visually closed and is properly shaped and positioned; and there is definite, but not excessive, resistance to dental floss when passed through the interproximal contact area.
ACC	Interproximal contact is visually closed, and the contact is adequate in size, shape, or position but demonstrates little resistance to dental floss.
SUB	Interproximal contact is visually closed, but the contact is deficient in size, shape, or position and/or demonstrates little resistance to dental floss, shreds the floss or is visually open but deflects floss.
DEF	The interproximal contact allows standardized dental floss to pass without deflection or resistance or will not allow dental floss to pass through the contact area.

CENTRIC/EXCURSIVE CONTACTS

SAT	When checked with articulating ribbon or paper, all centric and excursive contacts on the restoration are consistent in size, shape and intensity with such contacts on other teeth, in that quadrant.
SUB	When checked with articulating ribbon or paper, the restoration is in hyper-occlusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth, and requires adjustment.
DEF	There is gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant.

ANATOMY/CONTOUR

SAT	The restoration reproduces the normal anatomical contours of the tooth, including facial, lingual, proximal and marginal ridge anatomy when compared to contiguous tooth structure.
ACC	The restoration deviates slightly from the normal anatomical contours of the tooth, when compared to contiguous tooth structure but would not be expected to adversely affect the tissue health.
DEF	The restoration deviates significantly from the normal anatomical contours of the tooth, including facial, lingual, proximal or marginal ridge anatomy, and/or would be expected to adversely affect the tissue health.

ANTERIOR COMPOSITE RESTORATION
Critical Errors

Restoration is debonded.

RESTORATIVE PROCEDURES
Treatment Management
Penalty Points Only

CONDITION OF ADJACENT TEETH

SAT	The adjacent teeth and/or restorations are free from damage.
ACC	Damage to adjacent tooth/teeth can be removed with polishing without adversely altering the shape of the contour and/or contact.
SUB	Damage to adjacent tooth/teeth requires recontouring which changes the shape and/or position of the contact.
DEF	There is gross damage to adjacent tooth/teeth which requires a restoration.

CONDITION OF SOFT TISSUE

SAT	The soft tissue is free from damage or there is tissue damage that is consistent with the procedure.
SUB	There is iatrogenic soft tissue damage that is inconsistent with the procedure.
DEF	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and pre-existing condition of the soft tissue.

EXAMINATION CHECK-OUT

Candidate Feedback Forms

Candidates have an opportunity to provide input to CRDTS about the examination. CRDTS wishes to continually improve its examination program, and feedback from the perspective of candidates is one of the best ways for CRDTS to gather ideas on how to do this. The Feedback Form for candidates has been included in the candidate's packets. It is not required and will be collected separately from the candidate's packet to ensure that the candidate's examination results will in no way be affected by any feedback the candidate might have. Therefore, CRDTS encourages candidates to complete this form honestly and thoughtfully before checking out.

Check-Out Procedure

When the candidates are ready to check out, they must go to the examiners' desk and get a clearance check that all procedures are completed or accounted for. The packets may be collected at the desk. The following items must be enclosed **in the candidate's packet envelope:**

1. Completed Progress Forms
2. Identification badge
4. Testing Site Fee Receipt

EXAMINATION APPLICATION POLICIES

Qualified candidates may apply to take the examination by submitting an application ***online*** at www.crdts.org. Once an application is completed online, it is considered a contract with CRDTS. If a candidate fails to fulfill all requirements of the application, or is unable to take the exam, the policies below will apply. Additional portions of the application must be submitted by mail. Detailed information regarding required documents/fees, test sites and examination dates/deadlines are outlined on the CRDTS website and in this Manual. A fully executed application complete with the appropriate documentation and fee is required to take the examination.

Read the entire application form before submitting any information. Be accurate and complete. If directions are not followed, the application may not be accepted.

1. **Application Deadline:** The application deadline is approximately 40 days before the date of the examination. Applications and all documentation/fees must be received on or before the published application deadline date. (See www.crdts.org or inside cover of Manual for exam/deadline dates.)

2. **Social Security Number:** Candidates must enter their US government-issued social security number when applying online. Candidates without a social security number must contact CRDTS Central Office. The social security number will remain a part of the candidate's secure record. A 10-digit CRDTS ID number will be assigned, appear on all the candidate's examination forms and become the Username for login to CRDTS website. When logged-in, candidates will be able manage their information and view application documents, examination results. This 10-digit CRDTS ID number will connect the results back to the candidate's permanent record.

3. **Photographs:** Candidates must submit a digital photograph. The photograph MUST BE RECENT, passport quality, it may be in black & white or color, JPG/JPEG, FIG, or PNG formats, square and have minimal resolution of 200x200 and max resolution of 500x500.

4. **Signature of Candidate:** The candidate will sign the online application electronically. The electronic signature is legally binding and has the full validity and meaning as the applicant's handwritten signature. With the signature the applicant acknowledges that he/she has read and understood the application and the CRDTS Dental Candidate Manual and agrees to abide by all terms and conditions contained therein.

5. **Initial Examination/Application Fee**: The appropriate examination fee must be paid at the time of application. ***Payment submitted must be for the exact amount and can be paid online via VISA or Mastercard or by cashier's check or money order with the applicant's CRDTS ID number written in the lower left-hand corner.*** PERSONAL CHECKS WILL NOT BE ACCEPTED AND WILL BE RETURNED TOGETHER WITH THE APPLICATION TO THE APPLICANT.

   The examination fee is $2350 and includes application for one attempt at Parts II through V of the examination. Specifically, the initial offering of the manikin-based examinations- Part II Endodontic & Part III Prosthodontics, Part IV – Periodontal & Part V - Restorative.

   The examination fee for D3 dental students taking Parts II and III during their Junior year is $1175 and includes application for one attempt at the initial offering of the manikin-based examinations- Part II Endodontic & Part III Prosthodontics.

   The D4 dental students taking the procedures during their Senior year must have previously attempted the Manikin procedures (Parts II & III) and the examination fee is $1175. This fee includes application for one attempt at the initial offering of the Part IV – Periodontal & Part V - Restorative.

For candidates applying for only 1 Dental Examination Part or 1 Restorative Procedure, the fee is $1175.

6. **Administrative Fee:** An administration fee of $200 is included in all examination fees described herein. This administrative fee is non-refundable and deducted from all returned application fees. Under certain circumstances, an additional administrative fee may be imposed. In such cases the candidate will be notified accordingly.

7. **Site Fee:** The school may charge a site fee/rental fee for use of instruments, clinic facilities, manikin heads, supplies, and disposables. Some sites require that all instruments be supplied by the school. A rental charge or deposit imposed by the testing site must be remitted directly to the school.

   Candidates taking the examination at a dental school other than their own are encouraged to visit the site prior to the time of the examination to become familiar with the school. It is the responsibility of the candidate to make arrangements with the school for the provision of instruments, equipment and to ascertain whether the Acadental ModuPRO™ Typodont will be mounted in a lab or at the operatory chair so that the appropriate equipment for mounting can be available.

8. **Retest Examination Fee**: ***A new application and the appropriate fee*** must be filed for any retest of a failed or incomplete part or procedure. Candidates are permitted to apply for only one examination at a time and may not submit another application until after the results of the prior examination have been distributed. The retake fees are outlined below:

   Manikin-based Exams – 1 to 2 parts (including 1 Restorative procedure) $1175
   - Part II – Endodontics
   - Part III - Prosthodontics
   - Part IV – Periodontics
   - Part V - Restorative or 1 procedure

   Maximum ***initial retest*** fee, regardless of the number of Parts/procedures candidate is retaking: $2,350. Subsequent failures will require appropriate retest fees as specified above.

REQUIRED DOCUMENTATION

After fully executing the online application, the following items must be received in CRDTS Central Office prior to the Application Deadline:

1. **Proof of Graduation:**

   a. **Accredited Graduates:** If candidates are taking the examination for the first time, they must present proof of enrollment in or graduation from an accredited dental school. Candidates applying for the Curriculum Integrated Format must be currently enrolled in a participating program, as a rising junior or senior, in an educational program that leads to the successful completion of a DDS/DMD degree from an educational program accredited by the ADA Commission on Dental Accreditation, or have graduated from such a program and are currently enrolled in a post-graduate program or residency and must furnish proof of the above enrollment as a student of record. Candidates applying for the Traditional Format must furnish proof of graduation from an accredited dental school or provide a Letter of Certification (a form provided by CRDTS). The Letter of Certification must be completed by the Dean of the school to verify that the candidate has demonstrated sufficient clinical competence, is in good standing, and it is anticipated that all school requirements are current and up to date and the student will be recommended for graduation based on their current standing. Alterations to this letter or misrepresentation of any application requirements may result in elimination of the candidate's application.

   b. **Non-accredited graduates:** The results of the CRDTS examination for graduates of non-accredited dental schools are recognized only by states which allow licensure of such non-accredited graduates. Candidates with a degree from an educational program not accredited by the ADA

Commission on Dental Accreditation applying for examination must be authorized to take the examination by at least one state which accepts the results of the CRDTS' examination and are only eligible for the Traditional Examination Format.

i. Non-accredited graduates must furnish a letter indicating that they are eligible for licensure in that state upon successful completion of the CRDTS examination

ii. Equivalency/ECE certificates may not be substituted for this letter

iii. A copy of the candidate's dental diploma with an English translation must be provided

iv. Non-accredited graduates are not eligible for CRDTS Status and Dental Examination results will only be reported to the State providing the letter

ADMINISTRATIVE POLICIES

Once an application has been received or accepted for examination, the policies described in this section become effective.

1. **Candidates for Curriculum Integrated Format**

   a. **Site Selection:** The initial offering of the manikin-based examinations will be at the dental school at which the applicant is enrolled as a senior dental student. One of the objectives of the Curriculum Integrated Format is for candidates to take the initial offerings of the examinations at their own school.

   b. **Examination Completion:** All parts of the examination must be successfully completed by June 30th of the graduation year. There are 3 attempts possible for the Manikin procedures. If the parts to this examination are not successfully completed accordingly, regardless of the reason, all parts to this examination must be taken following the Spring graduation from dental school, utilizing the Traditional Format or in a subsequent academic year in which the candidate is recertified by the Dean as a senior student of record. A new application must be filed together with appropriate documentation, including a diploma or updated letter of certification, and applicable fees. This constitutes a new examination series and the rules for the respective format of that series shall apply.

   c. **Clinical Exam Schedule/Sequence:** The initial offering of the examinations for endodontic and fixed prosthodontic procedures will take place at the candidate's school of attendance on a specified date(s) in the Fall. A maximum of two retest opportunities for unsuccessful candidates will be available, the first on a specified date(s) December – April, and the second on a specified date(s) in May/June. The second and third retest opportunities will be administered at select dental schools that may or may not be the candidate's school of attendance.

   The initial offering of the examinations for restorative and periodontic procedures will take place at the candidate's school of attendance on a specified date(s) in February – early April. A maximum of two retest opportunities for unsuccessful candidates will be available on a specified date(s) in May/June. The retest opportunity will be administered at select dental schools that may or may not be the candidate's school of attendance.

   This requirement may be waived or accommodated due to extenuating circumstances not under the control of the candidate and subject to the full discretion of the testing agency. A request for waiver from this requirement will be considered on an individual basis when received by the testing agency no less than 30 days before the scheduled examination date for foreseeable circumstances and no later than 14 days after the scheduled examination date in instances of unforeseeable

situations. Requests must be made in writing to the testing agency and must include original documentation in support of the request. Notification will be sent immediately after determination is made. Should the waiver or accommodation be granted, the terms and conditions for future examinations will be included.

Candidates who do not complete the initial offering of the examinations or an accommodation recommended by the testing agency in lieu of a waiver, may be disqualified for the remainder of the Curriculum Integrated Format examination and will forfeit their fee.

2. **Traditional Candidates**

   a. **Site Selection:** The initial offering of these examinations, Parts II, III, IV & V is administered during the Spring testing period will be at select dental schools. Any exam having an insufficient number of candidates by the Application Deadline may be cancelled. If this happens, a candidate will receive a full refund of their examination fee(s).

   Unsuccessful candidates are allowed a maximum of two retest opportunities. Thereafter, appropriate remediation requirements apply and the candidate must retake the entire examination in the Traditional Format.

   b. **Examination Completion:** Candidates who are taking the Traditional Format must successfully complete all Parts of the Examination within 12 months of the date of their initial clinical examination. There are 3 attempts possible for all of the procedures outlined for the exam. Candidates who do not successfully complete the examination within these time/attempt limits must retake the entire examination in the Traditional Format.

3. **Retests - Parts II, III, IV & V:** A score is reported for each of the conjunctive Parts of the CRDTS dental examination. If one or more Parts are failed, all procedures in that Part must be retaken, ***not*** just the procedures with deficient performance with the exception of the Part V – Restorative Procedures. If the 2nd procedure is not completed successfully, candidates will only need to retake that particular procedure upon retest. Should the candidate fail the first Restorative Procedure, both procedures will need to be retaken at a later date. Traditional candidates applying for re-examination must provide documentation that all school requirements have been completed and the candidate has graduated.

   Retest opportunities for the Manikin Examinations will be administered at select dental schools that may or may not be the candidate's school of attendance. Applicants from the school where the examination is administered receive priority for assignment to that site.

   Candidates retaking Parts IV and V will adhere to the open schedule previously outlined. Candidates retaking Part IV or Part V **only** will have 3 hours to complete Part IV-Periodontal Examination and 6 hours to complete both procedures within the Part V-Restorative Examination; candidates retaking only 1 Restorative Procedure will have 3 hours to complete that procedure.

   Candidates who are *retaking* the examination must fulfill *current examination requirements* since the examination format is periodically redesigned. In every instance of re-examination, the candidate must complete a new application and remit the current examination fee.

4. **Remediation requirements:** It is the responsibility of each state or licensing jurisdiction to enforce its own remediation policy. There is no state which requires remediation after only one failure; some states may require remediation after two failures. Any candidate intending to seek licensure in one of the states that accepts the results of the CRDTS examination should check with the appropriate State Board regarding its remediation and re-examination requirements.

   It is the responsibility of the candidate to obtain and complete all requirements for remedial education in accordance with the requirements of the licensing jurisdictions in which they seek to obtain licensure. CRDTS does not assume any responsibility in providing this information or in monitoring the completion of such requirements prior to examination. After three or more failures, CRDTS requires that the candidate submit documentation from a state participating in the CRDTS examination

verifying that the candidate has completed the remediation requirements of the state and that the state will consider the results of the re-examination for licensure.

5. **Incomplete Applications:** It is the candidate's responsibility to ensure that all application requirements are met and that all required items are received in CRDTS Central Office **prior** to the Application Deadline. All applications with incorrect or missing information, documentation or fees will be assessed a $200 fee and held until the missing item(s) and/or fees are received in Central Office. Once an exam site has closed, no additional applications will be processed and forfeiture of fees may apply.

   It should be noted that for applications, fees ***and*** required documentation, the testing agency uses the ***date of receipt*** and assumes no responsibility for insufficient postage or delays caused by the post office or other delivery agencies. Applications will be processed on a first-come, first serve basis for candidates who are not students at the testing site.

   It is suggested that the application process be completed well in advance of the deadline date to assure adequate time to submit a returned application or submit incomplete documentation by the deadline date. The following items must be mailed in to CRDTS in order to complete the application:

   - Examination Fee payable to CRDTS (VISA/Mastercard online, Cashier's Check or MoneyOrder) Retake Fee: *See Retake Examination Fee*
   - Notarized copy of diploma or Certification letter for 1st time applicants
   - Non-accredited Graduates – Photocopy of diploma and letter from State board

6. **Disqualification:** A candidate may be disqualified by the Dean of the dental school that the candidate attends at any time after application is made in the event the candidate ceases to be a senior student of record or for any other reason within the discretion of the Dean after acceptance of application. Notification of disqualification by the Dean (or designated school official) must be received by the testing agency, in writing or by facsimile, IN ADVANCE OF THE START DATE OF A SCHEDULED EXAMINATION. Notification by any other source or in any other manner is not recognized or accepted. Facsimiles must be immediately followed by a letter to the testing agency with the required signature of the Dean (or designated school official). Acceptance of disqualification is considered final. Once disqualified, a candidate will not be reinstated for the Traditional Format examination during that academic year. Candidates who are disqualified shall receive a refund of the exam fee minus an administrative fee of $200. Candidates who are disqualified during the Curriculum Integrated Format examination schedule shall have access to the Traditional Format of the examination upon graduation and presentation of a diploma or in a subsequent academic year in which the candidate has been appropriately certified by the Dean (or designated school official) as a senior student of record. A new application must be submitted together with all required documentation and appropriate fee. All applicants will be notified by the testing agency when official notification of disqualification has been received and recorded.

7. **Schedule Changes:** The examination assignment schedule (Day 1 and Day 2 assignments) is considered final when issued and mailed to the candidate. Request for change will not be considered or made once the schedule has been distributed. School personnel do not have the authority to accept a candidate for examination at their site or to make assignment changes within an examination series. Such arrangements concluded between school personnel and candidate may preclude the candidate from being admitted to the examination as well as forfeiture of fee. The CRDTS Chief Examiner is the only authorized individual who may consider a request for schedule change. If unusual circumstances warrant such change and space is available, it is the decision of the CRDTS Chief Examiner to approve such a request. This decision is made on site, on the day of examination. Prior requests are not accepted or considered.

8. **Fee Deferral:** Under extenuating circumstances a request for the examination fee to be deferred to a later examination will be considered on an individual basis when **RECEIVED BEFORE THE SCHEDULED**

EXAMINATION DATE. Requests **must** be made in writing to the testing agency and **must** include original documentation in support of the request. Should a fee deferral be granted, the candidate will be informed of the terms and conditions for future examinations. Requests for fee deferral on or after the date of the scheduled examination will not be honored and the fee will be forfeited. A non-refundable administrative processing fee of $200 is applicable at all times and under all circumstances.

9. **Fee Refunds:** Refunds will be made, minus a $200 administrative fee, if notification of cancellation is received in the CRDTS Central Office 30 days prior to the ***first*** day of the examination. A 50% refund will be made if notification is made at least 6 business days prior to the first day of the examination. After that time, any cancellations will result in forfeiture of the entire examination fee. Once a candidate has paid the entire examination fee and has taken any Part of the examination, there will be no refund of fees for the Parts that have not yet been taken, should the candidate decide to cancel or withdraw from other Parts of the examination. In addition, failure to appear for the exam will result in a forfeiture of the entire examination fee. This policy applies to all cancellations, regardless of reason.

10. **Confirmation Notification:** Candidates will receive a notice confirming their examination schedule; this notice may be distributed or posted by the school. Candidates will receive an email approximately 30 days prior to the examination. This email will contain:

    1. A letter confirming the exam site to which you have been assigned, the date and the exam schedule.
    2. A letter from the clinical facility serving as a testing site providing general information about the site, its facilities, policies and usage fees. This letter may also contain information related to nearby hotels. *(Candidates that are current students at the exam site will not receive the site information letter)*
    3. Other information and/or forms which may be needed to take the examination.

    For candidates who are *not* attending the dental school where the examination is being administered, it will be necessary to make arrangements with the school for the provision of instruments, type of manikins, etc. Most schools charge a fee for the use of the clinic facilities, manikin heads, supplies and disposables. Any deposit or fee for the use of the testing site must be remitted to the school, NOT to the testing agency. No candidate should come to the examination unless confirmation containing the above information has been received.

11. **Release of Scores:** Scores are not released at any time other than to the candidate, the candidate's dental school and all CRDTS' member states. No scores will be released by telephone and calling the Administrative Office will only delay the release of scores. Any address changes since the time of original application should be provided to the CRDTS' Administrative Office immediately.

    a. Candidates: Scores will be reported to candidates online; upon successful completion of all parts, a results letter will be sent via mail to the candidate's permanent address. For online access to scores, candidates may Log-In at www.crdts.org using their assigned CRDTS ID and password. The 'Candidates' tab will allow access to scores. Scores will also be reported to the dental school of graduation if the candidate is a current graduate. For Parts II – V, candidates whose total score on any part is less than 75 can review their scores online, including an itemization of their deficiencies. The manikin-based examinations are reported within 1-2 days after the date of the candidate's examination. If the manikin procedures are evaluated off-site, results are reported 1-2 days after evaluation is completed. No actual examination papers or clinical evaluation forms will be released in order to maintain security of the examination.

    Current year graduates will receive a mailing containing a history of scores as well as a certified copy of the final results in a separate, sealed envelope to be mailed directly to the licensing state of their choice. DO NOT OPEN the 2nd sealed envelope.

    Member States: A Master Grade Sheet listing all scores will be automatically reported to all CRDTS member states AFTER candidates have attempted all parts in either format of the examination. Individual score reports are not automatically sent to member states/recognizing jurisdictions. It is the candidates' responsibility to provide a copy of their examination score report to any state in which they are seeking licensure so that State Board can verify the

candidates' scores against their master grade sheet received from CRDTS. Candidates are responsible for checking with State Boards to determine all requirements for licensure.

b. Duplicate Scores/Score Report Request: For non-member states and for duplicate scores: Scores will be reported upon receipt of a request made online, www.crdts.org (Score Report Request). Such requests must include the following:

   i. Candidate's name, mailing address and telephone number
   ii. Candidate's name at time of examination
   iii. Year in which the CRDTS clinical examination was completed
   iv. Address to which the results are to be sent
   v. $50 per each address to where the scores are to be forwarded

If the candidate wishes to have the Candidate's Manual sent along with the scores to provide an explanation of scores, the fee is an additional $25. An additional fee of $4 is charged to have the scores notarized. **A credit card must be used when requesting a duplicate score report online.** No personal checks will be accepted. Please access the CRDTS' website (www.crdts.org) or contact the CRDTS Administrative Office for more information.

COMPLAINT REVIEW PROCESS

CRDTS maintains a complaint review process whereby a candidate may submit a request for a review of documentation, concerns or protocols affecting his/her individual examination results. This is a formalized process conducted by a special committee whose charge is to review the facts to determine if the examiners' findings substantiate the results. Any request for such a review MUST BE FILED and received at CRDTS Central Office **no later than 14 days** following the official date on which the scores were provided to the candidate or the candidate's dental school. The Committee is required to complete its review within 60 days from the time of receiving a formal request; during that time, the candidate may apply for re-examination. If the candidate files a formal complaint, then retests and passes the examination before the complaint has been fully processed, the complaint review will be terminated. Forms may be obtained from CRDTS' Administrative Office or from the CRDTS website; documentation for the complaint must be typed or written on this form.

In determining whether to file a request to initiate the complaint review process, the candidate should be advised that all reviews are based on a reassessment of documentation of the candidate's performance on the examination. The review ***does not include a regrading*** of that performance; it is limited to a determination of whether or not there exists substantial evidence to support the judgment of the three calibrated examiners conducting independent evaluations at the time of the examination. The review will not take into consideration other documentation that is not part of the examination process, such as; post-treatment photographs, radiographs, models, character references or testimonials, dental school grades, faculty recommendations or the opinions of other "experts" solicited by the candidate. In addition, the review will be limited to consideration of the results of only one examination at a specific test site. If a candidate has completed more than one CRDTS' examination, the results of two or more examinations may **not** be selectively combined to achieve an acceptable final score.

Candidates who contact the Administrative Office regarding their examination results must clearly indicate whether they simply wish to express a concern relating to the examination or are interested in initiating a formal petition for review. A $250 filing fee will be charged by CRDTS to file and process a formal complaint review request.

POLICY FOR TESTING OF DISABLED CANDIDATES

Any candidate with a documented physical and/or learning disability that impairs sensory, manual or speaking skills which require a reasonable deviation from the normal administration of the examination may be

accommodated. All reasonable efforts will be used to administer the examination in a place and manner accessible to persons with disabilities or an attempt will be made to offer alternative accessible arrangements for such individuals. Efforts will be made to ensure that the examination results accurately reflect the individual's impaired sensory, manual or speaking skills, except where those skills are factors the examination purports to measure. Also, attempts will be made to provide appropriate auxiliary aids for such persons with impaired sensory, manual or speaking skills unless providing such auxiliary aids would fundamentally alter the measurement of the skills or knowledge the examination is intended to test or would result in an undue burden. To ensure that an auxiliary aid or other requested modification exists and can be provided, it is a requirement that any candidate with a disability requesting such modification or auxiliary aid must:

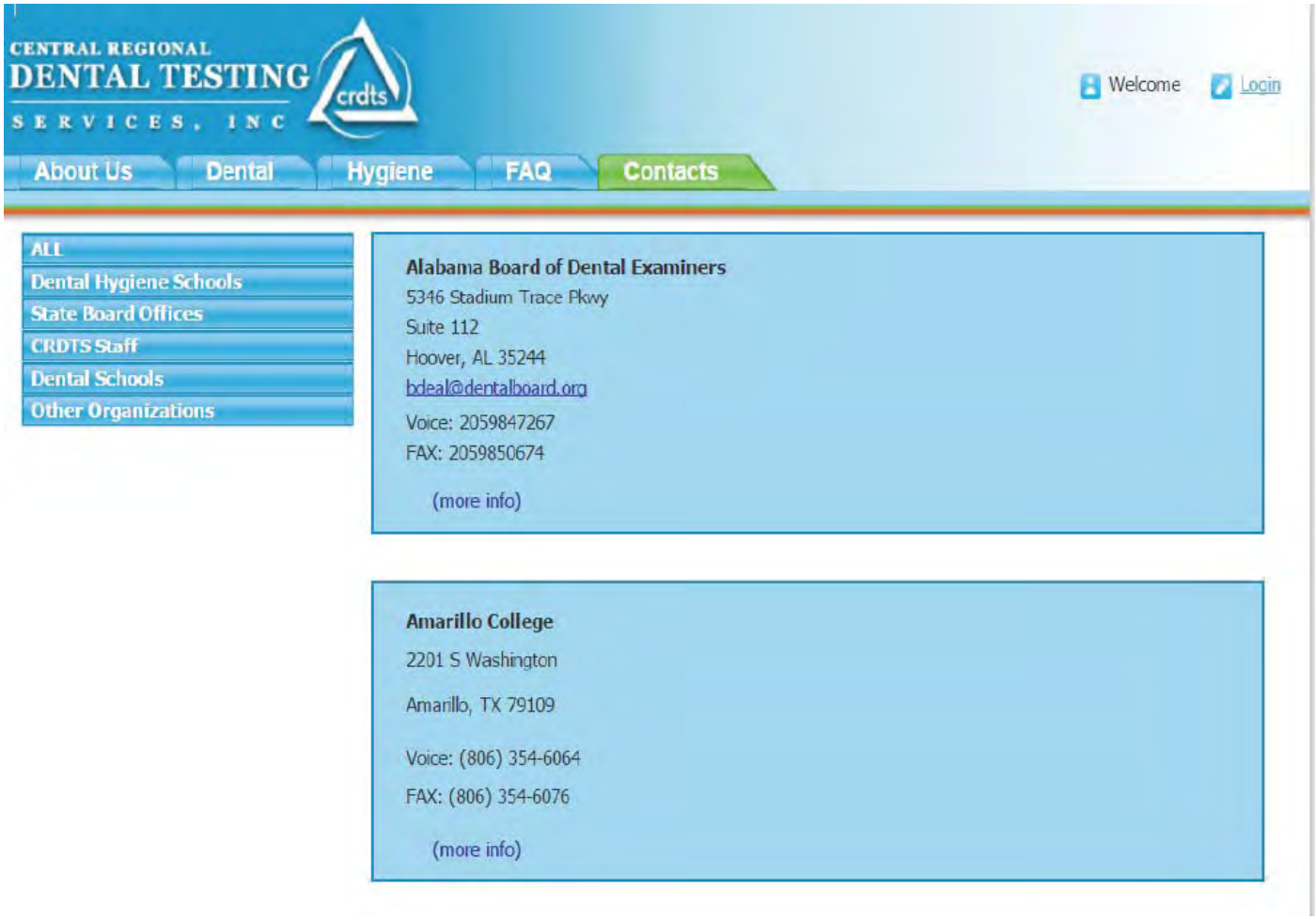
1. Timing of request: Submit, in writing together with the application, a request and all documentation for the auxiliary aid or modification. Requests received after the application date or retroactive requests will not be considered.
2. Documentation verifying disability: Provide documentation of the need for the auxiliary aid or modification. If the candidate is a student in an accredited school, a letter from a school official fulfills this requirement. Otherwise, a letter from the appropriate health care professional is required.
3. Modification(s) needed: Request in writing the exact auxiliary aids or modifications needed and indicate the exact portion(s) of the examination for which such auxiliary aid or modification will be needed.

In providing such auxiliary aids or modifications, the testing agency reserves the ultimate discretion to choose between effective auxiliary aids or modifications and reserves the right to maintain the security of the examination. All information obtained regarding any physical and/or learning disability of a candidate will be kept confidential with the following exceptions:

1. Authorized individuals administering the examination may be informed regarding any auxiliary aid or modification; and
2. First aid and safety personnel at the test site may be informed if the disability might require emergency treatment.

LOCATION OF TESTING SITES & LICENSURE INFORMATION

Contact information for the above can be found online at www.crdts.org >Contacts tab



CHECKLIST OF
REQUIRED MATERIALS AND INSTRUMENTS

ORIENTATION:

- ☐ Picture ID for admission to orientation
- ☐ This Candidate Manual

CLINICAL EXAMINATION:

- ☐ This Candidate Manual
- ☐ Progress forms
- ☐ #11/12 explorer
- ☐ Metal periodontal probe with 1 mm markings
- ☐ 2 x 2 Gauze
- ☐ Sharp traditional explorer for caries detection (such as a Shepherd's Hook)
- ☐ Dental mirror, clean unscratched
- ☐ Cotton Pliers
- ☐ Articulating paper and holder
- ☐ Handpiece compatible with testing site attachments
- ☐ Acadental ModuPRO™ Typodonts
- ☐ Operating instruments
- ☐ Instrument Tray

Glossary of Words, Terms and Phrases

Abfraction	The deep V-shaped groove usually noted at the CEJ which is caused by bruxism. This may be visible or apical to the gingival margin.
Abrasion	Abnormal wearing of tooth substance or restoration by mechanical factors other than tooth contact.
Abutment	A tooth used to provide support or anchorage for a fixed or removable prosthesis.
Acrylic Resin	Synthetic resin derived from acrylic acid used to manufacture dentures/denture teeth and provisional restorations.
Adjustment	Selective grinding of teeth or restorations to alter shape, contour, and establish stable occlusion.
Angle	A corner; **cavosurface angle**: angle formed between the cavity wall and surface of the tooth; **line angle:** angle formed between two cavity walls or tooth surfaces.
Apical	the tip, or apex, of a root of a tooth and its immediate surroundings.
Attached Gingiva	The portion of the gingiva that extends apically from the base of the sulcus to the mucogingival junction.
Attrition	loss of tooth substance or restoration caused by mastication or tooth contact.
Axial wall	An internal cavity surface parallel to the long axis of the tooth.
Base	A replacement material for missing dentinal tooth structure, used for bulk buildup and/or for blocking out undercuts. Examples include ZOIB&T, IRM and zinc-phosphate cement.
Bevel	A plane sloping from the horizontal or vertical that creates a cavosurface angle which is greater than 90°.
Bonding Agent	See Sealers.
Bridge	Permanently fixed restoration that replaces one or more missing natural teeth.

Build Up	A restoration associated with a cast restoration, which replaces some, but not all, of the missing tooth structure coronal to the cementoenamel junction. The buildup provides resistance and retention form for the subsequent cast restoration. Also called Pin Amalgam Build Up (PABU) or Foundation.
Calculus	A hard deposit attached to the teeth, usually consisting of mineralized bacterial plaque.
Caries	An infectious microbiological disease that results in localized dissolution and destruction of the calcified tissues of the teeth. The diagnosis of dentinal caries is made by tactile sensation with light pressure on an explorer, described as (1) a defect with a soft, sticky base, or (2) a defect that can be penetrated or altered by the tine of the explorer.
Cavity Preparation	Removal and shaping of diseased or weakened tooth tissue to allow placement of a restoration.
Cavosurface Margin	The line angle formed by the prepared cavity wall with the unprepared tooth surface. The margin is a continuous entity enclosing the entire external outline of the prepared cavity. Also called the cavosurface line angle.
Cementoenamel Junction	Line formed by the junction of the enamel and cementum of a tooth.
Centric occlusion	That vertical and horizontal position of the jaws in which the cusps of the maxillary and mandibular teeth intercuspate maximally.
Centric relation	That operator guided position of the jaws in which the condyles are in a rearmost and uppermost position in the fossae of the temporomandibular joint.
Col	A craterlike area of the interproximal oral mucosa joining the lingual and buccal interdental papillae.
Contact Area	The area where two adjacent teeth approximate.
Convenience Form	The shape or form of a cavity preparation that allows adequate observation, accessibility, and ease of operation in preparing and restoring the cavity.
Convergence	The angle of opposing cavity walls which, when projected in a gingival to occlusal direction, would meet at a point some distance occlusal to the occlusal or incisal surface.
Core	A restoration associated with a cast restoration which replaces <u>all</u> coronal tooth structure and is usually associated with a post of one type or another. The core provides resistance and retention form for the subsequent cast restoration.

Crown	Cast-metal restoration or porcelain restoration covering most of the surfaces of an anatomical crown.
Cusp (functional)	Those cusps of teeth which by their present occlusion, provide a centric stop which intercuspates with a fossa or marginal ridge of an opposing tooth/teeth.
Cusp (non-functional)	Those cusps of teeth which by their present occlusion, do not provide a centric stop which intercuspates with a fossa or marginal ridge of an opposing tooth/teeth.
Debris	Scattered or fragmented remains of the cavity preparation procedure. All debris should be thoroughly removed from the preparation before the restoration is placed.
Decalcification	Demineralized area of enamel that may appear white and chalky or may be discolored. It is considered unsound tooth structure if it can be penetrated by an explorer or is more than ½ the thickness of the enamel.
Defective Restoration	Any dental restoration which is judged to be causing or is likely to cause damage to the remaining tooth structure if not modified or replaced.
Dentin	Calcified tissue surrounding the pulp and forming the bulk of the tooth.
Deposits - subgingival	Deposits which are apical to the gingival margin.
Deposits - supragingival	Deposits which are coronal to the gingival margin.
Divergence	The angle of opposing cavity walls which, when projected in an occlusal to gingival direction, would meet at a point some distance gingival to the crown of the tooth.
Embrasure	A "V" shaped space continuous with an interproximal space formed by the point of contact and the subsequent divergence of these contacting surfaces in an occlusal (incisal), gingival, facial or lingual direction.
Enameloplasty	The selected reshaping of the convolutions of the enamel surface (fissures and ridges) to form a more rounded or "saucer" shape to make these area more clean able, finish able, and allow more conservative cavity preparation external outline forms.
Erosion	Abnormal dissolution of tooth substance by chemical substances. Typically involves exposed cementum at the CEJ.
Exposure	*See "Pulp Exposure"*
Finish Line	The terminal portion of the prepared tooth

Fissure	A developmental linear fault in the occlusal, buccal or lingual surface of a tooth, commonly the result of the imperfect fusion of adjoining enamel lobes.
Flash	Excess restorative material extruded from the cavity preparation extending onto the unprepared surface of the tooth.
Foundation	See Build Up
Gingival Recession	The visible apical migration of the gingival margin, which exposes the CE junction and root surface.
Gingival wall	An internal cavity surface perpendicular to the long axis of the tooth near the apical or cervical end of the crown of the tooth or cavity preparation.
Gingivitis	Inflammation of the gingiva
Glass Ionomer	Material containing polyacrylic acid and aluminosilicate glass that can be used as restorative, lining or luting material.
Grainy	The rough, perhaps porous, poorly detailed surface of a material.
Ill-defined	A cavity preparation which, while demonstrating the fundamentals of proper design, lacks detail and refinement in that design.
Infra-occlusion	A tooth or restoration which lacks opposing tooth contact in centric when such contact should be present.
Interproximal contact	The area of contact between two adjacent teeth; also called proximal contact.
Isthmus	A narrow connection between two areas or parts of a cavity preparation.
Keratinized Gingiva	In healthy mouths, this includes both the free marginal and attached gingiva which are covered with a protective layer of keratin. It is the masticatory oral mucosa which withstands the frictional stresses of mastication and toothbrushing; and provides a solid base for the movable alveolar mucosa for the action of the cheeks, lips and tongue.
Line angle	The angle formed by the junction of two surfaces. In cavity preparations there can be internal and external line angles which are formed at the junction of two cavity walls.
Line of draw	The path or direction of withdrawal or seating of a removable or cast restoration.
Liner	Resin or cement coating of minimal thickness (usually less than 0.5 mm) to achieve a physical barrier and/or therapeutic effect (a chemical effect that in some way benefits the health of the tooth pulp). Examples include Dycal, Life, Cavitec, Hydroxyline, Vitrebond, and Fuji Lining LC.

Liner - treatment An appropriate dental material placed in deep portions of a cavity preparation to produce desired effects on the pulp such as insulation, sedation, stimulation of odontoblasts, bacterial reduction, etc. Also called therapeutic liner.

Long axis An imaginary straight line passing through the center of the whole tooth occlusoapically.

Marginal deficiencies Failure of the restorative material to properly and completely meet the cut surface of the cavity preparation; the marginal discrepancy does not exceed .5 mm, and the margin is sealed. May be either voids or under-contour.

Marginal excess Restorative material which extends beyond the cavosurface margin of the cavity walls. Marginal excess may or may not extend onto the unprepared surface(s) of the tooth. See also: over-contoured, flash, over-extension.

Mobility The degree of looseness of a tooth.

Occluso-axial line angle In a casting preparation, the angle formed by the junction of the prepared occlusal and axial (lingual, facial, mesial, distal) surfaces.

Open margin A cavity margin or section of margin at which the restorative material is not tightly adapted to the cavity preparation wall(s). Margins are generally determined to be open when they can be penetrated by the tine of a sharp dental explorer.

Outline Form (external) The external boundary or perimeter of the area of the tooth surface to be included within the outline or enamel margins of the finished cavity preparation

Outline Form (internal) The internal details and dimensions of the finished cavity preparation.

Over-contoured Excessive shaping of the surface of a restoration so as to cause it to extend beyond the normal physiologic contours of the tooth when in health.

Over-extension (preparation) The placement of final cavity preparation walls beyond the position required to properly restore the tooth as determined by the factors which necessitated the treatment.

Over-extension (restoration) Restorative material which extends beyond the cavosurface margin of the cavity walls. Marginal excess may or may not extend onto the unprepared surface(s) of the tooth. See also; Over-contoured, Flash, Marginal excess.

Overhang (restoration) The projection of restorative material beyond the cavosurface margin of the cavity preparation but which does not extend on to the unprepared surface of the tooth; also, the projection of a restoration outward from the nominal tooth surface. See also Flash.

Path of insertion The path or direction of withdrawal or seating of a removable or cast restoration. See Line of Draw.

Periapical Area around the root end of a tooth.

Periodontitis Inflammation of the supporting tissues of the teeth. Usually a progressively destructive change leading to loss of bone and periodontal ligament. An extension of inflammation from gingiva into the adjacent bone and ligament.

Pits (surface) Small voids on the polished surface (but not at the margins) of a restoration.

Polishing (restoration) The act or procedure of imparting a smooth, lustrous, and shiny character to the surface of the restoration

Pontic The suspended portion of a fixed bridge that replaces the lost tooth or teeth.

Porous (restoration) To have minute orifices or openings in the surface of a restoration which allows fluids or light to pass through.

Provisional restoration Any restoration, which by it's intent, is placed for a reduced period of time or until some event occurs. Any restorative material can be placed as a provisional restoration. It is only the intent of the restoration and not the material which determines the provisional status.

Pulp cap (direct) The technique of placing a base over the exposed pulp to promote reparative dentin formation and the formation of a dentinal bridge across the exposure. The decision to perform a pulp cap or endodontics and the success of the procedure is determined by the conditions under which the pulp was exposed.

Pulp cap (indirect) The technique of deliberate incomplete caries removal in deep excavation to prevent frank pulp exposure followed by basing of the area with an appropriate pulpal protection material to promote reparative dentin formation. The tooth may or may not be re-entered in 6-8 weeks to remove the remaining dentinal caries.

Pulp exposure (carious) The frank exposure of the pulp through clinically carious dentin.

Pulp exposure (general) The exposure of the pulp chamber or former pulp chamber of a tooth with or without evidence of pulp hemorrhage.

Pulp exposure (irreparable) Generally, a pulp exposure in which most or all of the following conditions apply: The exposure is greater than 0.5 mm; the tooth had been symptomatic; the hemorrhage is not easily controlled; the exposure occurred in a contaminated field; the exposure was relatively traumatic.

Pulp exposure (mechanical) (unwarranted) The frank exposure of the pulp through non-carious dentin caused by operator error, misjudgment, pulp chamber aberration, etc.

Pulp exposure (reparable) Generally, a pulp exposure in which most or all of the following conditions apply: the exposure is less than 0.5 mm; the tooth had been asymptomatic; the pulp hemorrhage is easily controlled; the exposure occurred in a clean, uncontaminated field; the exposure was relatively atraumatic.

Pulpal wall An internal cavity surface perpendicular to the long axis of the tooth. Also pulpal floor.

Pulpoaxial line angle The line angle formed by the junction of the pulpal wall and axial wall of a prepared cavity.

Pulpotomy The surgical amputation of the vital dental pulp coronal to the cementoenamel junction in an effort to retain the radicular pulp in a healthy, vital state.

Resistance Form The features of a tooth preparation that enhance the stability of a restoration and resist dislodgement along an axis other than the path of placement.

Retention Form The feature of a tooth preparation that resists dislodgment of a crown in a vertical direction or along the path of placement.

Root planing A definitive treatment procedure designed to remove cementum or surface dentin that is rough, impregnated with calculus, or contaminated with toxins or microoganisms.

Scaling Instrumentation of the crown and root surfaces of the teeth to remove plaque, calculus, and stains from these surfaces.

Surface Sealant - composite resin restoration coating After polishing, the application of the unfilled resin (bonding agent) of the composite resin system to the surface of the restoration to fill porosities or voids in the body of the restoration or at the margins or to provide a smooth surface to the restoration followed by curing.

Sealers

Cavity sealers provide a protective coating for freshly cut tooth structure of the prepared cavity.

a. **Varnish:** A natural gum, such as copal rosin, or a synthetic resin dissolved in an organic solvent, such as acetone, chloroform, or ether. Examples include Copalite, Plastodent, Varnish, and Barrier.
b. **Resin Bonding Agents:** Include the primers and adhesives of dentinal and all-purpose bonding agents. Examples include All-Bond 2, Scotchbond MP+, Optibond, ProBond, Amalgambond, etc.

Shade (restoration)

The color of a restoration as defined by hue, value, and chroma which is selected to match as closely as possible the natural color of the tooth being restored.

Shoulder Preparation

Finish line design for tooth preparation in which the gingival floor meets the external axial surfaces at approximately a right angle.

Sonic scaler

An instrument tip attached to a transducer through which high frequency current causes sonic vibrations (approximately 6,000 cps). These vibrations, usually accompanied by the use of a stream of water, produce a turbulence which in turn removes adherent deposits from the teeth.

Sound Tooth Structure

Enamel that has not been demineralized or eroded; it may include proximal decalcification that does not exceed ½ the thickness of the enamel and cannot be penetrated by an explorer.

Stain - Extrinsic

Stain which forms on and can become incorporated into the surface of a tooth after development and eruption. These stains can be caused by a number of developmental and environmental factors.

Stain - Intrinsic

Stain which becomes incorporated into the internal surfaces of the developing tooth. These stains can be caused by a number of developmental and environmental factors.

Sterilization

A heat or chemical process to destroy microorganisms.

Straight-line Access

An access preparation that allows for an unimpeded path from the occlusal surface to the apex or to the first point of canal curvature.

Supra-occlusion

A tooth or restoration which has excessive or singular opposing tooth contact in centric or excursions when such contact should not be present and should be balanced with the other contacts in the quadrant or arch.

Taper

To gradually become more narrow in one direction

Temporary restoration

See Provisional Restoration.

Tissue Trauma	Unwarranted iatrogenic damage to extra/intraoral tissues resulting in significant injury to the typodont, such as lacerations greater than 3mm, burns, amputated papilla, or large tissue tags.
Transported Canal	The prepared root canal is over-instrumented, causing deviation from the natural pathway of the anatomical canal.
Ultrasonic scaler	An instrument tip attached to a transducer through which high frequency current causes ultrasonic vibrations (approximately 30,000 cps). These vibrations, usually accompanied by the use of a stream of water, produce a turbulence which in turn removes adherent deposits from the teeth.
Uncoalesced	The failure of surfaces to fuse or blend together such as the lobes of enamel resulting in a tooth fissure.
Under-contoured	Excessive removal of the surface of a restoration so as to cause it to be reduced beyond the normal physiologic contours of the tooth when in health.
Undercut	a. Feature of tooth preparation that retains the intra-coronal restorative material. b. An undesirable feature of tooth preparation for an extra-coronal restoration.
Under-extension (preparation)	Failure to place the final cavity preparation walls at the position required to properly restore the tooth as determined by the factors which necessitated the treatment.
Under-extension (restoration)	Restorative material which fails to extend to the cavosurface margin of the cavity walls thereby causing exposure of the prepared cavity wall.
Undermined enamel	During cavity preparation procedures; an enamel tooth surface (particularly enamel rods) which lacks dentinal support. Also called unsupported enamel.
Unsound Marginal Enamel	Loose or fragile cavosurface enamel that is usually discolored or demineralized, which can be easily removed with hand instruments when mild to moderate pressure is applied.
Varnish	See Sealers
Void(s)	An unfilled space within the body of a restoration or at the restoration margin which may or may not be present at the external surface and therefore may or may not be visible to the naked eye.

Place Candidate label here

CRDTS

ENDODONTIC PROCEDURES

STARTING TIME:_____

FINISH TIME:_____

NOTE: A single box must be signed by a Clinic Floor Examiner. A triple box must be signed by three examiners at the Evaluation Station.

CRDTS will provide the candidate a maxillary anterior module and an artificial endodontic tooth #8 on which to complete access opening, canal instrumentation and obturation. CRDTS will also provide an upper left module containing an artificial endodontic tooth #14 on which the candidate must complete an access opening. When the modules are received, the candidate's 3-digit candidate number must immediately be etched onto the lingual surface of the modules and then inserted into the Acadental carrier tray. Both endodontic procedures must be completed under rubber dam. After measuring #8, the tooth must be inserted by a Clinic Floor Examiner and all endodontic treatment must be completed with the tooth fixed in the typodont. The modules may be removed and the typodont dismantled only with the authorization of a CFE.

CFE	**TYPODONT MOUNTING APPROVED** **Modules Labeled with Cand #** **#8 Measured and Length Recorded** _____
CFE	**CFE AUTHORIZES DISMANTLING TYPODONT** **CFE Removes Modules for Evaluation** **CFE Collects Progress Form**

			FINAL EVALUATION ENDODONTIC PROCEDURES
Examiner #1	Examiner #2	Examiner #3	

NOTES and COMMENTS:

Candidates:	Examiners Only:

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Place Candidate label here

CRDTS

FIXED PROSTHODONTIC PROCEDURES

NOTE: A single box must be signed by a Clinic Floor Examiner. A triple box must be signed by three examiners at the Evaluation Station.

CRDTS will provide the candidate with a box containing two prosthodontic modules. These modules will contain artificial single-layered teeth on which the candidate must complete a ceramic crown preparation on tooth #9, a porcelain-fused-to-metal crown preparation on tooth #5 and a cast gold crown preparation on tooth #3. Teeth #5 and #3 must also be prepared as abutment teeth for a 3-unit bridge. When the modules are received, the candidate's 3-digit candidate number must immediately be etched onto the lingual surfaces of the modules with a bur and they must be inserted into the Acadental carrier tray. There will be an extra label with the candidate's number on it inside the box; the label and the foam packing must be retained. A Clinic Floor Examiner must approve the mounting of the typodont; the typodont may be dismantled only with the authorization of a Clinic Floor Examiner.

CFE	**TYPODONT MOUNTING** **Modules Labeled with Cand #**
CFE	**ANTERIOR & POSTERIOR MATRICES COMPLETED** **Modules labeled with Cand #**

When the preparations are complete and ready for evaluation, the candidate must request permission from the Clinic Floor Examiner to dismantle the manikin and remove the prosthodontic modules from the carrier trays. Put the two modules with the crown preparations and matrices in the labeled box provided by CRDTS and be sure the Prosthodontic Progress Form for the crown preparations is collected by the Clinic Floor Examiner.

CFE	**CFE AUTHORIZES DISMANTLING TYPODONT** **CFE Collects Modules, Progress Form**

			FINAL EVALUATION PROSTHODONTIC PROCEDURES
Examiner #1	Examiner #2	Examiner #3	

NOTES and COMMENTS:

Candidates:	Examiners Only:

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MUST BE COMPLETED IN BLACK OR BLUE INK

CRDTS

Place Candidate label here

PERIODONTAL MANIKIN EXAMINATION PROGRESS SHEET

STARTING TIME:_____

FINISH TIME:_____

CRDTS will provide the candidate a typodont to complete the Periodontal Procedures. When the typodonts are received, the candidate's 3-digit candidate number must immediately be etched onto the end cap of the arch and then the typodont inserted into the facial shroud. The typodont may dismantled only with the authorization of a CFE.

PERIODONTAL TREATMENT SELECTION ASSIGNMENTS

****TO BE COMPLETED BY EXAMINERS****

CLINIC FLOOR EXAMINER INSTRUCTIONS:

Circle Quadrant(s) Selected: Max Right Max Left Mand Right Mand Left

Periodontal Measurements:
CFE assigns 2 TEETH for Probing Depths:

Candidates: Measure and record the depth of each sulcus on six aspects for the two assigned teeth

Note measurements in the shaded boxes ONLY

ANY BOX LEFT BLANK WILL BE RECORDED AS AN ERROR

Anterior #	mm	Posterior #	mm
DF		DF	
F		F	
MF		MF	
DL		DL	
L		L	
ML		ML	

Calculus Detection: **CFE assigns 4 SURFACES**

Candidates: Explore assigned surfaces and indicate the presence of subgingival calculus by recording a Y or N in the shaded boxes. *****Complete prior to scaling*****

CFE

TYPODONT MOUNTING APPROVED
Arches Labeled with Cand #

CFE

CFE AUTHORIZES DISMANTLING TYPODONT
CFE Receives Typodont for Evaluation
CFE Collects Progress Form

FINAL EVALUATION PERIODONTAL PROCEDURES

CRDTS

Place Candidate label here

MANIKIN PREPARATION PROGRESS FORM

	#4___A ___C	#14 ___A ___C	#9
STARTING TIME:	_____	_____	_____
FINISH TIME:	_____	_____	_____

CRDTS will provide the candidate a typodont to complete the Restorative Procedures. When the typodonts are received, the candidate's 3-digit candidate number must immediately be etched onto the end caps of the arch and then the typodont inserted into the facial shroud. The typodont may be dismantled only with the authorization of a CFE.

MODIFICATION REQUEST:

#4	#14	#9
1	1	1
2	2	2
3	3	3
4	4	4

Ex 1	Ex 2	Ex 3

REST Ex ID: *Mod Req Reviewed*

Exp Proc

Exposure Processed: *(any pulpal exposure must be checked by Clinic Floor Examiner)*

CFE

TYPODONT MOUNTING APPROVED
Arches Labeled with Cand #
2nd arches placed in labeled bag

			FINAL EVALUATION #4 DO PREPARATION
			FINAL EVALUATION #14 MO PREPARATION
			FINAL EVALUATION #9 DL COMP PREPARATION

NOTES TO EXAMINERS (***Use ink***. *Please number each note. Notes should be written clearly and include specific information, i.e. description, location, etc.)*	***Ex. ID#***		

CRDTS

Place Candidate label here

MANIKIN RESTORATION PROGRESS FORM

	#18___A ___C	#29 ___A ___C	#23
STARTING TIME:	_____	_____	_____
FINISH TIME:	_____	_____	_____

CRDTS will provide the candidate a typodont to complete the Restorative Procedures. When the typodonts are received, the candidate's 3-digit candidate number must immediately be etched onto the end caps of the arch and then the typodont inserted into the facial shroud. The typodont may be dismantled only with the authorization of a CFE.

CFE

CFE AUTHORIZES DISMANTLING TYPODONT
CFE Receives Typodont for Evaluation in bag or box
CFE Collects Progress Form

			FINAL EVALUATION #18 MO RESTORATION
			FINAL EVALUATION #29 DO RESTORATION
			FINAL EVALUATION #23 DL COMP RESTORATION

NOTES TO EXAMINERS (***Use ink***. *Please number each note. Notes should be written clearly and include specific information, i.e. description, location, etc.)*	***Ex. ID#***		

CRDTS ID: _____ Test Site #_____ CANDIDATE #

MANIKIN MODIFICATION REQUEST FORM

Prepare to SAT criteria and see CFE BEFORE proceeding

CFE #: _____

Submission #: _____ Tooth #: _____ Amal ☐ Post Comp ☐ Ant Comp ☐

Modification Request # 1
What:
Where:
Why:
How Much:
☐ Granted ☐ Not Granted

Modification Request # 2
What:
Where:
Why:
How Much:
☐ Granted ☐ Not Granted

Modification Request # 3
What:
Where:
Why:
How Much:
☐ Granted ☐ Not Granted

Submission #: _____ Tooth #: _____ Amal ☐ Post Comp ☐ Ant Comp ☐

Modification Request # 1
What:
Where:
Why:
How Much:
☐ Granted ☐ Not Granted

Modification Request # 2
What:
Where:
Why:
How Much:
☐ Granted ☐ Not Granted

Modification Request # 3
What:
Where:
Why:
How Much:
☐ Granted ☐ Not Granted

CANDIDATE #

MODIFICATION REQUEST FORM (MANIKIN)

Prepare to SAT criteria and see CFE BEFORE proceeding

CFE #: _____

Submission #: _____ Tooth #: _____ Amal ☐ Post Comp ☐ Ant Comp ☐

Modification Request # 1
What:
Where:
Why:
How Much:
☐ **Granted** ☐ **Not Granted**

Modification Request # 2
What:
Where:
Why:
How Much:
☐ **Granted** ☐ **Not Granted**

Modification Request # 3
What:
Where:
Why:
How Much:
☐ **Granted** ☐ **Not Granted**

Submission #: _____ Tooth #: _____ Amal ☐ Post Comp ☐ Ant Comp ☐

Modification Request # 1
What:
Where:
Why:
How Much:
☐ **Granted** ☐ **Not Granted**

Modification Request # 2
What:
Where:
Why:
How Much:
☐ **Granted** ☐ **Not Granted**

Modification Request # 3
What:
Where:
Why:
How Much:
☐ **Granted** ☐ **Not Granted**

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April 8, 2020

Iowa Dental Board
Attn: President William G. McBride, DDS
400 SW 8th Street
Suite D
Des Moines, IA 50309

Dear Dr. McBride and the Iowa Dental Board Members,

During these unprecedented times coping with the COVID-19 pandemic, Southern Regional Testing Agency, Inc. (SRTA) has been in discussion with numerous dental schools and state boards across the nation regarding the complications that have arisen with licensure assessments.

In light of our deep knowledge of the issue at hand, and vast experience in dental assessments, SRTA offers our agency as a trusted resource in these challenging times. **We are also able to offer our non-patient-based exam as a solution to meet the current challenge.** Our non-patient based exam is a *thorough assessment* that includes endodontics, prosthodontics, as well as hands-on restorative skills by way of a complete manikin-based test.

We offer this examination as a full and complete assessment using all the SRTA components or propose that it may be used in conjunction to complement the Dental Licensure Objective Structed Clinical Examination (DLOSCE) as announced by the Joint Commission on National Dental Examinations recently.

SRTA has been a trusted testing agency in the U.S. since 1975. Our innovative approach to examinations, along with our wide network of examiners from across the country, afford us the opportunity to be the most responsive testing agency to meet the challenges facing our industry.

SRTA has given the manikin-based endodontics and prosthodontics portion of the examination for a number of years. As a result of how well this manikin portion is doing, we have made substantial developments in a non-patient restorative portion of the examination. We have beta-tested the non-patient restorative portion and the results are extremely promising. We believe it is fully capable of being used as an assessing option that confronts and eases current obstacles, and that fully assesses student competencies.

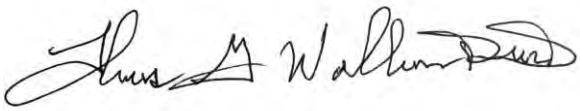
George C. Martin, D.D.S – President Thomas G. Walker, D.M.D.– President-Elect
Jacqueline G. Pace, R.D.H. - Secretary Robert B. Hall, Jr., D.D.S. - Treasurer Jessica L. Bui – Executive Director

If you and/or your board members are interested in learning more about this opportunity, please contact Jessica Bui (jbui@srta.org) or (757-318-9082).

SRTA continues to be a leader in thoroughly assessing dental competencies for candidates transitioning into the dental profession. We are committed to being responsive to the current challenge, and we would welcome a call with you to review this opportunity at your earliest convenience.

Thank you,

George C. Martin, DDS
President



Thomas G. Walker, DMD
President-Elect

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FOR IMMEDIATE RELEASE

SRTA OFFERS NON-PATIENT-BASED LICENSURE EXAMINATION AS ALTERNATIVE TO PATEINT-BASED

The Southern Regional Testing Agency advances its manikin-based licensure exam amid COVID-19 testing complications

VIRGINIA BEACH, VIRGINIA (April 13, 2020) – The Southern Regional Testing Agency, Inc. (SRTA) has announced the offering of a manikin-based restorative licensing examination for dental students in response to the testing delays and complications faced by COVID-19. The virus has brought numerous challenges to the dental profession, including the closure of dental practices and clinics across the nation, thus being extremely difficult for dental school graduates who would normally seek patients to be a part of their skills assessment for required state licensure.

"SRTA and other dental testing agencies have offered manikin-based portions of its exam for several years in its endodontics and prosthodontics modules," SRTA President George Martin, D.D.S. "In response to the coronavirus pandemic, SRTA has approved the release of its manikin-based restorative dentistry module, using cutting-edge dental products that are highly effective in simulating a live patient's dental procedures such as fillings, crowns and bridges." SRTA's exam may be used in its entirety, or the manikin-based restorative skills module can be used in conjunction with the Dental Licensure Objective Structured Clinical Examination (DLOSCE) a digital exam recently announced by the Joint Commission on National Dental Examinations.

"SRTA has beta-tested this new non-patient restorative portion, and it is fully capable of being used as an assessing option to confront and ease current obstacles we face not having live patients," said Martin.

The non-patient based SRTA exam is a thorough assessment that includes endodontics, prosthodontics, as well as hands-on restorative skills.

"While it remains at the discretion of each state's licensing boards on whether to accept this alternative assessment module," said SRTA Executive Director Jessica Bui. "SRTA continues its

commitment to being responsive and actionable during these challenging times for our industry."

About the Southern Regional Testing Agency (SRTA)
SRTA has been a trusted testing agency in the U.S. since 1975. Its innovative approach to examinations, along with the wide network of examiners from across the country, afford it the opportunity to be the most responsive testing agency to meet the present challenges facing the dental industry.

If interested in learning more about SRTA's manikin-based exam opportunity, please contact Jessica Bui (jbui@srta.org) or (757-318-9082).

###

SOUTHERN REGIONAL TESTING AGENCY, INC.

2020 DENTAL LICENSING EXAMINATION CANDIDATE MANUAL

NON-PATIENT-BASED
RESTORATIVE, ENDODONTIC, PROSTHODONTICS

PATIENT-BASED
PERIODONTAL

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APPLICATION QUESTIONS?
APPLICATIONS@SRTA.ORG

DENTAL HYGIENE QUESTIONS?
DENTALHYGIENE@SRTA.ORG

SOUTHERN REGIONAL TESTING AGENCY, INC.

Southern Regional Testing Agency, Inc. (SRTA) is a nonprofit corporation committed to being a leader at the national level in examination development and administration by providing the following –

- Uniformly administered examinations and confidential results that are consistently reliable for use by the dental licensing boards or other agencies
- Protection for the public
- Appropriate care in the examination process
- Providing the most technologically advanced examination for its member states and participating examination sites
- Providing valid examinations in the most candidate focused environment possible, for the next generation of our colleagues in the Dental and Dental Hygiene Professions

MISSION STATEMENT

SRTA will continue to provide valid, reliable, legally defensible examinations and results while striving to implement new testing methodologies in a candidate focused environment for the next generation of dental and dental hygiene professionals.

EXAMINATION PURPOSE

This year's SRTA Dental Hygiene Examination has been developed, administered and reviewed in accordance with guidelines from the American Dental Association (ADA), the American Association of Dental Boards (AADB), the American Psychological Association (APA), the American Educational Research Association and the National Council on Measurement in Education. SRTA collects input from practicing dental hygienists nationwide every five years through a Task Analysis Survey, which is the basis for all decisions regarding content. The SRTA Examination was developed to provide a reliable clinical assessment for use by state boards in making valid licensing decisions. Prior to registering for the examination, candidates are strongly encouraged to verify the examination is accepted in the state in which they seek immediate licensure. **After actively practicing two to five years, many states will accept licensure by criteria (or reciprocity). Again, candidates should check with state boards on licensure requirements.**

ANONYMITY

The SRTA Dental and Dental Hygiene Examination is conducted anonymously. All examination materials are identified by the candidate's SRTA number. The candidate's name and school information should not appear on any testing materials. All examiners are vetted current and past State Dental Board members with diverse backgrounds. We also utilize faculty examiners, although they cannot examine in their respective state, the knowledge they gain through their experience is imparted to the students. Examiners are trained and standardized prior to each examination and are evaluated to ensure they are grading to established criteria. The examiners are separated from the candidates and will remain in a separate area of the clinic. Candidates must observe all signs and follow instructions so as not to breach anonymity. Anonymity is preserved between the scoring examiners and the candidates, but not among the examiners themselves. Examiners may consult with the SRTA Clinic Floor Manager (CFM) or Dental Hygiene Administrator (DHA) whenever necessary.

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I. EXAMINATION OVERVIEW

EXAMINATION SECTIONS & FORMATS

The Southern Regional Testing Agency (SRTA) Dental Examination consists of four required sections – Endodontics, Fixed Prosthodontics, Anterior Restorative, and Posterior Restorative. SRTA also offers an **optional** Periodontal section. Sections will be broken down as follows –

A. Candidates will have one 7-hour day to complete both the Endodontic and Fixed Prosthodontic sections of the examination. If only one of these sections need to be taken, then Candidates will get 3 hours to complete the endodontics section or 4 hours to complete the Fixed Prosthodontic section.
B. Candidate will have one 7-hour day to complete the Anterior Restorative and Posterior Restorative sections of the examination. If a candidate would like to take the optional Periodontal section along with his/her Restorative sections, then he/she will have a total of 9-hours to complete all three sections.

The SRTA Dental Examination is available in two formats –

1. **Traditional Examination** → Endodontic/Fixed Prosthodontic sections and Restorative with the optional Periodontal patient-based sections will be administered in its entirety over the course of two consecutive days
2. **Progressive Integrated Examination (PIE I & PIE II**) → Endodontic/Fixed Prosthodontic sections and Restorative with the optional Periodontal patient-based sections will be administered on separate occasions. The PIE Examination is available to current students, graduates and residents deemed eligible by the participating university. All other candidates must get permission from the examination site.

SCORING PROCESS

For SRTA's Clinical Dental Skills Examinations, candidates are required to demonstrate job-related skills in simulated patient-based settings and an **optional** patient-based Periodontal section. To score these complex performance tasks, SRTA has developed scoring criteria for each of these examinations to define important characteristics of minimally competent performance. Using these scoring criteria, SRTA then trains and calibrates examiners to independently evaluate candidates' performance on the range of tasks and related procedures that comprise each examination. All examiners are currently licensed dentists who are current or past members of a state board of dentistry and who are familiar with the content of the examination, the expectations of minimally competent performance, and the characteristics of the target population of candidates.

To ensure that examiners interpret the scoring criteria consistently, SRTA relies on an industry-standard practice of having two or more examiners independently review a candidate's work product. Examiners use analytic scoring methods where candidate performances are defined as a series of criteria that will influence the acceptability of the characteristics of the product that the candidate produces. Each examiner specifies any observed major errors (i.e., domain critical errors) using electronic data entry. For an error to influence a candidate's score, it must be independently confirmed by at least one other examiner. This process helps to ensure that

any decision about the pass/fail status for a candidate is based on the independent evaluations of at least two of three examiners.

Because of the efforts to train and calibrate examiners, decisions about errors will generally be made based on the judgment of the first two examiners. However, as a measure of internal quality control and in instances where there is a disagreement about whether the performance constituted an overall pass or fail decision, a third examiner will also make independent judgments about the candidate's performance. Because the third examiner will not know whether his/her judgments are part of internal data collection for feedback or as an adjudication judgment, there is no reason for an examiner to think that his/her judgment carries more weight than any other examiner in the process.

SRTA uses analytic judgment (i.e., judgment based on a series of multiple steps and evaluation points rather than on an overall impression) rather than holistic judgment for three purposes. First, because a task comprises a number of skills, analytic judgment allows the examiner to separately evaluate the different phases of process and product that occur for a given task. Because each examination is unique, a slightly different number of skills have been defined and are scored in each section. Second, analytic judgment enables some limited feedback to the candidate about areas of strength or weakness and how these factors contributed to the overall pass/fail decision. Third, analytic judgment requires that examiners justify their ratings, given the specificity required for the judgments.

Overall, pass/fail decisions are conjunctive across examinations. This means that for a candidate to successfully pass the examination as a whole, he/she must pass each individual examination. This policy decision is based on empirical evidence suggesting that skills from one section of the examination are not sufficiently related to skills in another section such that someone would be able to compensate in practice. This decision also reflects the desire to be able to use examination results to make a decision about a candidate’s minimum competency within each of the important sub-domains of the dental profession. A score of 75 and above is reported as a passing grade.

II. POLICIES & PROCEDURES

PROFESSIONAL STANDARDS & COMPETENCY

The purpose of this examination is to assess professional competency. The candidate is expected to maintain professional standards in the following areas –

- Suitable operating attire, inclusive of the full barrier technique.
- Patients for the Periodontal section must wear protective eyewear.
- Candidates must follow OSHA and CDC Guidelines
- Consideration for patients and cooperation with examiners, examination site personnel and other candidates.
- Aseptic techniques and general cleanliness of the operatory during all procedures.
- Candidates must maintain proper infection control throughout the entire examination.
- Protection of and concern for tooth structure and supporting tissue during patient treatment.

Violation of these standards and guidelines is ground for immediate dismissal (failure) from the examination, and the candidate may be denied reexamination for 12 months.

CANDIDATE ACCESSIBILITY

Any candidate with a documented physical and/or learning disability that impairs sensory, manual or speaking skills and that requires a reasonable deviation from the normal administration of the examination may be accommodated. A written statement from a qualified physician must be provided at the time of application. The limitation(s) must be clearly defined, and the assistance required to ensure appropriate accommodations must be detailed. Requests will be evaluated on a case-by-case basis. Accommodations/deviations will not be allowed for components and skills the examination must measure.

Information received regarding the physical/learning challenges of a candidate will remain confidential except in the case of disabilities that may require emergency treatment. In this case, onsite safety personnel will be advised.

CANDIDATE ELIGIBILITY

Candidates for the examination must be graduates of an American or Canadian dental college accredited by the American Dental Association Commission on Dental Accreditation.

A candidate who has not formally graduated from his/her university is required to secure certification from the dean of his/her program stating that:

1. The candidate is eligible and qualifies for the DDS or DMD degree requirements.
2. The candidate will complete the DDS or DMD degree requirements within 36 months of the examination date.

This certification must be in the form of a letter from the dean submitted with the application or provided to SRTA by the dean prior to the receipt of the candidate's application.

Candidates who graduated from a school outside of the United States and Canada may

apply and be considered for the "state only" status, pending receipt of the appropriate state authorization. The candidate must furnish a letter from the State Board of Dentistry that accepts the results of this examination. This letter should indicate that the candidate is eligible for licensure in that state only, upon successful completion of the examination. In addition, a copy of the candidate's diploma with an English translation must be provided.

CANDIDATE INELIGIBILITY

If a candidate becomes ineligible to take the examination, they must notify the SRTA office, in writing, two weeks prior to the scheduled examination. A letter from the dean of the candidate's institution will be required as proof of ineligibility. SRTA will retain the complete application fee for any candidate declared ineligible by his/her dean. Candidates declared ineligible will be allowed to examine at a future site within a 12-month period upon payment of facility fees and a $200 administrative processing fee. A diploma or letter from the dean stating the candidate's eligibility is required for a rescheduled exam.

CANDIDATE RECOURSE – APPEALS PROCESS

Refer to www.srta.org from information regarding the appeals process.

CHAIRSIDE ASSISTANT

Chairside assistants **cannot** function as a patient or an interpreter while being an assistant.

The assistant used for the Restorative Section may be a dental assistant, dental hygienist or first-, second- or third-year dental student. The assistant **may not** be a dentist (licensed or unlicensed), or senior dental student.

The assistant used for the Periodontal Section may be a dental assistant or first-, second- or third-year dental student. The assistant **may not** be a dentist (licensed or unlicensed), senior dental student, dental hygienist (licensed or unlicensed), or final year dental hygiene student

The assistant must register with the Clinic Floor Coordinator (CFC) between 7:00 AM and 8:00 AM on the morning of the exam. They must have the completed Chairside Assistant form, two photographs of themselves and valid photo identification. The assistant may not attend orientation.

CHAIRSIDE INTERPRETER

Candidates may employ the service of an interpreter when their patient does not speak English or is hearing impaired and the hearing loss cannot be corrected (this is particularly important when the patient has a history of medical problems or is on medications.) Faculty members, dentists (licensed or unlicensed), expanded duty dental assistants, fourth year dental students and chairside assistants utilized during the examination may not act as interpreters during the examination. Candidates are responsible for the conduct of their interpreter during the examination. The interpreter must register with the Dental Administrator and receive a badge that must be worn throughout the examination. To complete an Interpreter form, the candidate must fill out the form and attach two photographs of their interpreters and the interpreter must submit the form to the CFC or Administrator's Desk with valid photo identification. **Candidates must contact the SRTA office prior to the examination to notify us that an interpreter will be needed at the examination site.**

UNETHICAL CONDUCT

Professional behavior is a critical quality in the practice of dentistry. If a candidate is suspected of unethical conduct as defined by SRTA guidelines, they will fail the examination.

Examples of unethical conduct include, but are not limited to:

- Using unauthorized equipment at any time during the exam
- Using unauthorized assistants
- Using unauthorized patients
- Altering patient records or radiographs
- Treating patients outside clinic hours or receiving assistance from another practitioner
- Altering teeth used in the manikin procedures
- Engaging in dishonesty
- Altering candidate progress forms
- Any other behavior that compromises the standards of professional behavior

When SRTA charges a candidate with unethical conduct, it is SRTA's policy to notify all participating state boards of the situation. Many state statutes have criteria that include "good moral character" as a requirement for licensure. If a state board finds a candidate guilty of the alleged unethical conduct, the candidate may be ineligible for licensure in that state at any time in the future. While SRTA allows candidates to retake the SRTA Examination, they may be unable to obtain licensure in any participating state. Candidates are encouraged to address these matters with the state in which they desire licensure prior to retaking the examination.

OTHER DISMISSAL REASONS

This list **is not** all-inclusive. Listed below are the reasons for which a candidate may receive a failing evaluation or dismissal. Some procedures may be deemed unsatisfactory for other reasons. Additionally, a combination of several unsatisfactory evaluations may result in failure. Reexamination will be denied for one year (12 months) from the date of dismissal from the examination. Infractions that may lead to dismissal or failure include –

- Lack of protection and concern for tooth structure and supporting tissue during patient treatment.
- Lack of professional judgment.
- Evidence of dishonesty or misrepresentation during the application process, including false or misleading statements or false documentation presented by the candidate or on the candidate's behalf.
- Evidence of dishonesty or misrepresentation during candidate registration or during the examination.
- Rude, abusive, or uncooperative behavior exhibited by the candidate and/or those accompanying the candidate to the examination site.
- Continuing to work after published cutoff time.
- Working on a manikin model in a manner that does not simulate actual patient conditions.
- Working on Fixed Prosthodontics, Endodontics sextants, or Restorative sextants not provided by SRTA. Any evidence of tampering with or attempting to remove the screws from the sextants will result in failure of the entire examination and will be grounds for dismissal from the exam.

- Failure to complete the examination within the allotted time (No make-up time, grace period or second effort will be allowed for any part of this examination.)
- Alteration of preoperative radiographs
- Receiving assistance from a dentist, another candidate, university representative(s), etc., during the course of the examination.
- Preparing a tooth other than the one approved by the examiners. This is considered major hard tissue damage.
- Failure to submit pre-operative radiographs for the Periodontal section of the examination.
- Administering or authorizing any form of patient sedation. Candidates who fail for this reason may reapply to take the next available examination.
- Thievery during the examination
- Performance of any unauthorized work outside of the examination site designated areas.
- Noncompliance with anonymity requirements for patient approval and/or examiner scoring. Candidates **are not** allowed in or near the area designated for scoring.
- Candidates **must instruct** their patients not to handle any paperwork during the course of the examination. Candidates should advise their patient(s) of this prohibited behavior and the consequences.
- Noncompliance with established guidelines for asepsis and infectious disease control
- Use of a patient who has previously been rejected for a specific procedure. If the candidate is using another candidate's backup patient or is sharing a patient, it is the candidate's responsibility to determine whether the patient has previously been rejected for a specific procedure.
- Use of patient who is a dentist or junior/senior dental student.
- Charging patients for services performed
- Failure to complete or refusing to provide a Post-Operative Care Agreement with a verifiable contact name of the practitioner who will provide postoperative care to the patient, or the patient's statement that he/she will seek care from a practitioner of his/her own choice
- **Use of cellular telephones, pagers, cameras, or other electronic equipment by the candidate while in the clinic or scoring areas**

RESTORATIVE MANIKIN-BASED SUBMISSIONS

If the candidate is scheduled to perform the Restorative Section as the first procedure of the day, they may begin setting up as soon as the clinic opens at 6:00AM. Between 7:00AM and 8:00AM candidates will obtain their typodonts from a SRTA Dental Administrator (DA) and secure it to the manikin head. A Clinic Floor Coordinator (CFC) will need to be called over to document that the typodont is secure and provide a start check. Restorative treatment begins at 8:00AM. Candidates will complete the preparation for a Class III Composite restoration for tooth #9 and a Class II Amalgam or Conventional Composite restoration for tooth #14. Once both procedures are complete, the candidate will remove the typodont, place it in the typodont box with his/her candidate number label on it and take it to the DA station for preparation grading. Once grading is complete, the typodont will be returned to the candidate. The candidate will then secure the typodont to the manikin and complete the Finish section of the Restorative Exam. Both the Anterior and Posterior portions must be finished in the allotted time and turned into the DA station for Finish grading.

REFUNDS

Candidates who fail to appear for a scheduled examination will lose their entire examination fees unless SRTA has received written notification **at least 48 hours prior to the exam start date**. Refunds will not be given for a patient's failure to appear, non-acceptability of any patient or a candidate's inability to secure patients for the examination. Candidates requesting a refund will have a $200 administrative processing fee deducted from the refund. If you are requesting a refund, please email help@srta.org.

Any refunds requested prior to three weeks of the scheduled examination will result in:

75% Exam Fee minus $200 Administrative Processing Fee

Any refunds requested within three weeks prior to the scheduled examination will result in:

50% Exam Fee minus $200 Administrative Processing Fee

For candidates with a medical deferment, SRTA will retain the original fee and permit examination within 12 months. A physician's statement must substantiate the deferment.

REMEDIATION

If the candidate has not passed all sections of the examination after three attempts, they must contact the State Board of Dentistry where they plan to seek licensure to discuss remediation requirements. An original letter of approval/permission from the State Board(s) is required for a fourth and any subsequent examination effort. This letter must be submitted with the SRTA application for examination.

RE-EXAMINATION REQUIREMENTS

All sections (four or five, as required by state regulations) of the SRTA Examination Series must be completed successfully within 18 or 24 months after the first section of the series is initiated. (18 months for Traditional and Progressive Integrated Exams [PIE] and 24 months for Curriculum Sequence Examinations [CSE]). Candidates may retake each section up to three times within the 18 or 24-month exam period. If not successful after 3 attempted retakes of any one section, the entire examination must be taken/repeated. If a candidate needs to retake one or more sections of the exam, all sections must be taken at the same examination site.

Time allowed for Endodontics procedure is three (3) hours; Fixed Prosthodontics procedure is four (4) hours; One Restorative procedure is four (4) hours; Two Restorative procedures is seven (7) hours; Two Restorative procedures with Periodontal is nine (9) hours.

SRTA will assign the candidate a day and time for sectional reexaminations. This information will be emailed to the candidate. Candidates who do not attend registration and orientation must register with the Clinic Floor Coordinator (CFC) between 7:00 AM and 8:00 Am in the appropriate clinic on the day of the examination.

SUPPLIES PROVIDED BY EXAMINATION SITE

Alcohol torches
Amalgam capsules
Articulating paper
Autoclave tape
Cement
Chair covers
Cotton pellets
Cotton rolls
2" x 2" cotton squares
Cotton swabs
Deck paper
Disinfectant
Disposable irrigation syringe for sodium hypochlorite
Drinking cups
Evacuator tips
Facemasks
Facial tissue
Film mounts
Floss
Gloves
Hemodent
Impression material
Instrument trays (disposable or metal)
Isopropyl alcohol
Local anesthetic
Mask
Matches
Mouth wash
Needles, short and long
Operator/patient eyewear
Operator gowns
Paper towels
Patient bibs
Polishing materials
Prophy paste
Red rope wax
RC prep (EDTA or other appropriate material)
Rubber dam
Rubber dam napkins
Saliva ejectors
Soap
Sodium hypochlorite
Topical anesthetic
Trash bags
Tray covers
X-ray developer and fixer
X-ray film
X-ray film clips

*Disclaimer: listed items may or may not all be supplied by the examination site. Please refer to the University Letter for available supplies provided.

Candidates are responsible for supplying all materials, equipment and supplies not listed above for whichever techniques they choose to use. Candidates should download the University Instruction Letter published by the examination site for any exceptions to this list. The University Instruction Letter can be found under the "Documents" tab on your SRTA BrightTrac Profile.

When the patient is sent to the evaluation area, the following items in an instrument box (enclosed) or tray must include: your white cubicle card: a sharp explorer, a probe with standard 1.0 mm incremented markings, an abrasive-free mirror, dental floss, and gauze.

STATE BOARD OF DENTISTRY & LICENSURE INFORMATION

Candidates taking the SRTA Examination must also file applications with those states in which they desire licensure, in addition to meeting the states' individual licensure requirements. Candidates should apply directly to the State Boards in which licensure is sought.

Licensure application forms for the participating State Boards of Dentistry are not available through SRTA and must be obtained from the various State Boards.

Individual state laws regarding remedial training may vary. Candidates should contact the states in which licensure is sought for their requirements on remedial education.

The Southern Regional Testing Agency's policy allows score certification of the most recent examination attempt for a period of five years. The individual State Boards of Dentistry determine acceptance of scores. The State Boards of Dentistry listed in the following chart automatically receive your examination results.

SRTA MEMBER STATES	
Alabama Alabama Board of Dental Examiners 2229 Rocky Ridge Rd Birmingham, AL 35216 T: 205 985 7267 www.dentalboard.org	**Arkansas** Arkansas State Board of Dental Examiners 101 East Capitol Avenue, Suite 111 Little Rock, AR 72201 T: 501 682 2085 www.asbde.org
South Carolina South Carolina Board of Dentistry Department of Labor, Licensing & Regulation Synergy Business Park, Kingstree Building 110 Centerview Drive Columbia, SC 29210 T: 803 896 4599 www.llr.state.sc.us	**Tennessee** Tennessee Board of Dentistry Bureau of Health, Licensure & Regulation Division of Health Related Boards 227 French Landing, Suite 300 Heritage Place Metro Center Nashville, TN 37243 T: 800 778 4123 or 615 532 3202 http://health.state.tn.us/boards/dentistry/index.htm
Virginia Virginia Board of Dentistry 9960 Mayland Drive, Suite 300 Henrico, VA 23233 T: 804 367 4538 www.dhp.virginia.gov/dentistry	**West Virginia** West Virginia Board of Dental Examiners 1319 Robert C. Byrd Drive,PO Box 1447 Crab Orchard, WV 25327 T: 877 914 8266 or 304 252 8266 www.wvdentalboard.org

SCORING CERTIFICATION

If you would like to request examination scores to be sent to your home or to a non-participating State Board, you may do so for a nominal fee. Some State Boards may require a notarized copy of the final report, which SRTA will also provide for a minimal fee. Please visit www.srta.org and fill out a Score Card Request Form.

QUESTIONS

Questions concerning jurisprudence, licensing, reciprocity and licensure by credentials should be directed to the appropriate State Board of Dentistry where licensure is sought.

Questions concerning examination facilities and equipment should be directed to the appropriate examination site. A University Instruction Letter with detailed site information can be downloaded under the "Documents" tab on your SRTA BrightTrac Profile.

If necessary, please contact the university/examination site after you have thoroughly read the letter. The addresses and telephone numbers for each examination site are listed under Examination Sites, Dates and Fees.

All questions concerning examination procedures, content, applications and test dates should be directed to Southern Regional Testing Agency. See the front cover of this manual for address and telephone information.

If you prefer to email your questions, use exam@srta.org for dental examination questions,applications@srta.org for application questions, and help@srta.org for general questions. Be sure to include your contact information. Once an application has been processed for a particular site, any questions must be initiated by the candidate only.

III. MANIKIN-BASED EXAMINATION

The Endodontic, Fixed Prosthodontics and Restorative Sections are administered on the same manikin head. **All sections will be performed as if the manikin were a live patient.** The manikin head and facial shroud must be maintained in an acceptable operating position, and the candidate must follow all appropriate infection control procedures.

When unpacking the typodont, all packing materials should be saved and used in repacking the typodont when finished. If there are any problems with the typodont during the examination, notify a Clinic Floor Coordinator (CFC) immediately.

Manikin heads may be mounted in simulation labs as part of a simulated patient work area, or they may be chair mounted in a clinic setting. In either scenario, the manikin head may not be disassembled or removed from the dental chair for any reason without prior permission of a CFC.

Candidates will have **three hours** to complete the Endodontic Section and **four hours** to complete the Fixed Prosthodontics Section. Candidates will have **seven hours** to complete both Restorative Sections and if taking the Periodontal Section will have a combined total of **nine hours**.

The Endodontics Section is followed by the Fixed Prosthodontics Section. After finishing the Endodontics Section, a Clinic Floor Coordinator (CFC) must be called to check the completion. If a candidate finishes the Endodontics Section early, they may proceed to the Fixed Prosthodontics Section without waiting but will only be allowed the standard four hours for this section.

The Restorative Section will either begin with preparation of the Class II or Class III lesion or the Periodontal Section if the candidate has elected to take that portion and is assigned the Periodontal Section first.

Air/Water spray: The Candidate should use only air but may use both air and water spray when preparing the teeth. If water spray is utilized, a mechanism to collect and remove the water must be in place during the use of the water spray.

Assigned teeth: Only the assigned teeth may be treated. If the candidate begins a procedure on the wrong tooth, they must notify the CFC. Candidates may mark the teeth to be treated (on the facial surface) but only after the actual examination has started and while employing all infection control guidelines.

Assistants: Auxiliary personnel are not permitted to assist at chairside or in a laboratory during the manikin-based Endodontic and Prosthodontic examination sections. Candidates are permitted to use a chairside assistant during the manikin-based restorative examination as described under the Chairside Assistant Section. Candidates may not assist each other or critique or discuss one another's work.

Security requirements: No written materials may be in the operating area other than a copy of the Candidate Manual or parts thereof, notes written in the manual and the examination forms.

Note: Any validated unacceptable criteria recorded in either endodontics, fixed prosthodontics, or restorative will result in a failure of that procedure.

ENDODONTICS SECTION

The Endodontics Section consists of two procedures:

1. **Anterior Endodontics** – Access opening, canal instrumentation and obturation on an anterior tooth (#8). Tooth #8 is considered to have a normal size pulp chamber for a 21-year-old. The access opening must be triangular in shape, in the middle third of the tooth both inciso-gingivally and mesio-distally and otherwise appropriate for a young adult.
2. **Posterior Endodontics** – Access opening on a posterior tooth (#14). Candidate must achieve direct access to all three canals.

Filling material: No temporary filling material, cotton pellet or restorative material should be placed in the pulp chamber.

Instruments: Other than the instruments and materials provided by the examination site, the candidate is responsible for providing the instruments, files and materials of their choice. Rotary instruments are permissible during the Endodontics Section.

Isolation dam: The use of an isolation dam is required for the endodontic procedures. A single dam may be used to isolate both teeth simultaneously or separate dams for each tooth may be used to isolate each independently. **An isolation dam clamp should not be placed on tooth #8 and #14. Doing so may cause the crown to separate from the root of the manikin tooth.** Clamping of adjacent teeth or ligation is acceptable. All treatment must be done with the dam in place.

Caution: the use of warm gutta-percha or carrier-based, thermoplasticized gutta-percha techniques is not recommended, as they may cause damage to the plastic endodontic tooth.

Radiographs: Since the tooth/canal length of tooth #8 is directly measured prior to the procedure, no radiographs are permitted at any point during this section.

Reference point: The cemento-enamel junction (CEJ) on the facial surface should be used as the reference point to determine the fill depth in the pulp chamber.

Tooth Fractures: If the anterior endodontic tooth fractures during filling, contact the Clinic Floor Coordinator (CFC) before the treatment is continued/completed. If the crown fractures during treatment, contact the CFC immediately.

ANTERIOR ENDODONTICS: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent teeth and/or restorations are free from damage.
2. The simulated gingiva and/or typodont is/are free from damage.
3. Correct tooth related.

SCORING CRITERIA

Acceptable
1. Damage to adjacent tooth/teeth can be removed by polishing without adversely altering the shape of the contour and/or contact. 2. There is slight damage to the simulated gingiva and/or typodont consistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is gross damage to adjacent tooth/teeth, requiring a restoration. 2. There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure. 3. Wrong tooth treated.

ANTERIOR ENDODONTICS: ACCESS OPENING CRITERIA

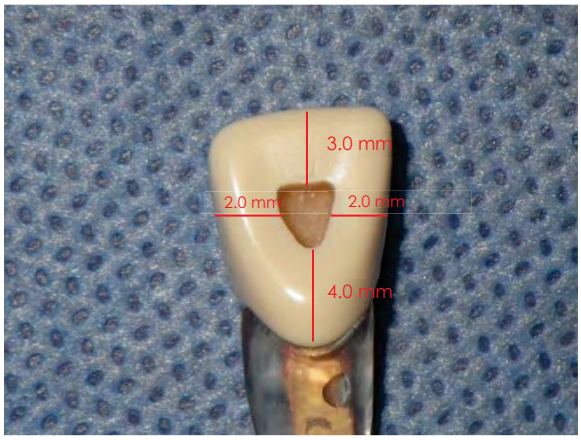
TREATMENT GOALS

1. The placement of the access opening is on the lingual surface over the pulp chamber and allows for:
    - Pulp horns to be removed
    - Debridement of the pulp chamber
    - Provides straight line access to the root canal system.
2. The size of the access opening:
    - Allows for complete removal of the pulp horns
    - The incisal aspect of the access opening is 3.0 mm from the incisal edge which provides for a fully supported incisal edge
    - The cervical aspect of the access opening is 4.0 mm from the lingual CEJ which provides for a fully supported cingulum
    - The widest portion of the preparation mesio-distally provides for fully supported 2.0 mm marginal ridges.
3. From the lingual surface to the cervical portion, the internal form smoothly tapers to the canal opening.

SCORING CRITERIA

Acceptable
1. The placement of the access opening is on the lingual surface over the pulp chamber and allows for: • Debridement of the pulp chamber • Provides straight line access to the root canal system. 2. The size of the access opening: • Allows for complete removal of the pulp horns • The incisal aspect of the access opening is not less than 2.0 mm from the incisal edge which provides for a fully supported incisal edge • The cervical aspect of the access opening is not less than 3.0 mm from the lingual CEJ which provides for a fully supported cingulum • The widest portion of the preparation provides for fully supported marginal ridges. 3. From the lingual surface to the cervical portion, the internal form tapers to the canal opening with only slight irregularities.

ACCEPTABLE OPENING – ANTERIOR TOOTH



Unacceptable
1. The placement of the access opening is NOT over the pulp chamber and/or does NOT allow for: • Complete debridement of the pulp chamber OR • Access to debride the root canal system 2. The size of the access opening: • Does NOT allow removal of the pulp horns • The incisal aspect of the access opening is less than 2.0 mm from the incisal edge which compromises incisal edge • The cervical aspect of the access opening is less than 3.0 mm from the lingual CEJ which compromises the cingulum • The preparation compromises the mesial and/or distal marginal ridge(s) (less than or equal to 1.0 mm measured from the external surface) 3. The internal form exhibits excessive gouges, which compromises the integrity of the tooth.

ANTERIOR ENDODONTICS: CANAL INSTRUMENTATION CRITERIA

TREATMENT GOALS

1. The canal is shaped to a continuous taper to allow adequate debridement and obturation.
2. The cervical portion of the canal is of appropriate location and size to allow access to the apical root canal system.
3. The mid root portion of the canal blends smoothly with the cervical portion.
4. The apical portion of the canal is prepared to the anatomical apex of the tooth.
5. The mid root and apical preparations are not transported and are congruent with the anatomical apex.
6. No portion of the tooth is perforated.
7. No portion of the tooth is fractured.

SCORING CRITERIA

Acceptable
1. The canal is shaped to a continuous taper to allow adequate debridement and obturation. 2. The cervical portion of the canal is of appropriate location and size to allow access to the apical root canal system. 3. The mid root portion of the canal blends smoothly with the cervical portion. If canal irregularities are present they will not prevent canal obturation. 4. The mid root or apical portion of the canal may be transported during preparation, but the apical portion of the preparation is still congruent with the anatomical apex. 5. No portion of the tooth is perforated. 6. No portion of the tooth is fractured. 7. Apical portion of the canal is prepared to the anatomical apex of the tooth or < or = 3.0 mm short of the anatomical apex.
Unacceptable
1. The shape of the canal preparation does not allow adequate debridement and obturation. 2. The cervical portion of the canal is grossly over prepared affecting the integrity of the tooth structure. 3. The mid root portion of the canal has significant instrumentation irregularities that will compromise obturation. 4. The apical portion of the canal preparation is transported to the extent that the apical portion of the canal is not instrumented. 5. Any portion of the tooth is perforated. 6. Any portion of the tooth is fractured. 7. Apical portion is under-prepared > 3.0 mm short of the anatomical apex.

ANTERIOR ENDODONTICS: CANAL OBTURATION CRITERIA

TREATMENT GOALS

1. The root canal is obturated with gutta percha and sealer 1.0 mm short of the anatomical root apex.
2. The obturation in the root canal is dense without voids.
3. The coronal extent of the gutta percha in the root canal is removed to the level of the CEJ when measured from the facial.
4. The pulp chamber is clean without remnants of gutta percha or sealer.
5. No file separation.
6. No restorative material present in pulp chamber.

SCORING CRITERIA

Acceptable
1. The root canal is obturated with gutta percha at the anatomical apex or up to 2.0 mm short of the root apex. 2. The apical third of the obturation in the root canal is dense but may contain minor voids. 3. The gutta percha in the root canal is up to 3.0 mm apical to the CEJ when measured from the facial. 4. Gutta percha and/or sealer is/are evident in the pulp chamber extending up to 2.0 mm coronal to the CEJ when measured from the facial. 5. A file is separated in the root canal but does not affect the obturation of the root canal. 6. There is no restorative material present in the pulp chamber.
Unacceptable
1. The root canal is obturated with gutta percha more than 2.0 mm short of the anatomical apex or beyond the anatomical apex. 2. There are significant voids throughout the obturation of the root canal or there is no gutta percha present in the root canal or a material other than gutta percha was used to obturate the root canal. 3. The gutta percha in the root canal is more than 3.0 mm apical to the CEJ when measured from the facial. 4. Gutta percha and/or sealer is/are evident in the pulp chamber extending more than 2.0 mm coronal to the CEJ when measured from the facial. 5. A file is separated in the root canal and either prevents obturation or allows obturation at a critically deficient level. 6. There is restorative material present in the pulp chamber.

POSTERIOR ENDODONTICS: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent teeth and/or restorations are free from damage.
2. The simulated gingiva and/or typodont is/are free from damage.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Damage to adjacent tooth/teeth can be removed by polishing without adversely altering the shape of the contour and/or contact. 2. There is slight damage to simulated gingiva and/or typodont consistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is gross damage to adjacent tooth/teeth, requiring a restoration. 2. There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure. 3. Wrong tooth treated.

POSTERIOR ENDODONTICS: ACCESS OPENING CRITERIA

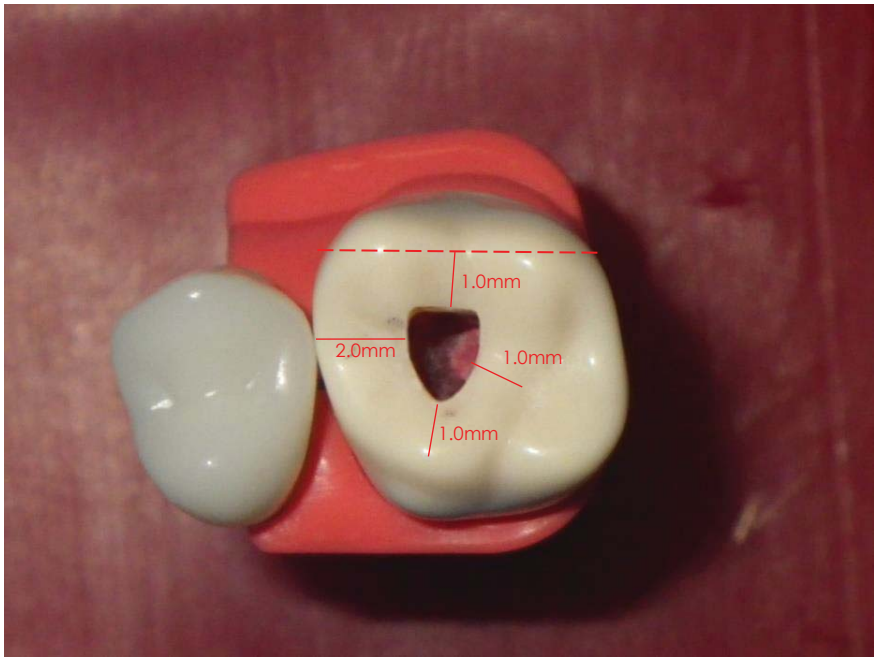
TREATMENT GOALS

1. The placement of the access opening is over the pulp chamber allowing debridement of the pulp chamber and straight-line access to the three root canals located in the tooth. The access opening allows access to the three root canals to the extent that instruments can be placed to the apex of the roots.
2. The access opening is in the mesial triangular pit and central fossa of the tooth and:
    - The mesial extent of the access preparation is 3.0 mm from the external surface of the mesial marginal ridge of the tooth.
    - The buccal extent of the access preparation is 2.0 mm from the line bisecting the mesiobuccal and distobuccal cusp tips.
    - The distal extent of the access preparation is 1.5 mm from the distal oblique groove.
    - The palatal extent of the access preparation is 2.0 mm from the palatal cusp tip.
3. The depth of the access preparation removes the entire roof of the pulp chamber and all three canals can be accessed. The depth of the access preparation is 8.0 mm when measured from the buccal cavosurface margin of the access preparation.
4. The internal form of the access preparation leaves 2.0 mm of supported lateral tooth structure at any point of the preparation and tapers to the canal orifices with no gouges.
5. No portion of the tooth is perforated.
6. No portion of the tooth is fractured.

SCORING CRITERIA

Acceptable
1. The placement of the access opening is ideally over the pulp chamber allowing debridement of the pulp chamber and straight-line access to the three root canals located in the tooth. The placement of the access opening may not be directly over the pulp chamber and may hinder, but will allow, complete debridement of the pulp chamber. The access opening must allow access to the three root canals to the extent that instruments can be placed to the apex of the roots. 2. The access opening is in the mesial triangular pit and central fossa of the tooth and: • The mesial extent of the access preparation is not less than 2.0 mm from the external surface of the mesial marginal ridge of the tooth. • The buccal extent of the access preparation is not less than 1.0 mm from the line bisecting the mesiobuccal and distobuccal cusp tips. • The distal extent of the access preparation is not less than 1.0 mm from the distal oblique groove. • The palatal extent of the access preparation is not less than 1.0 mm from the palatal cusp tip. 3. The depth and size of the access preparation removes the entire roof of the pulp chamber and all three canals can be straight-line accessed. The depth of the access preparation is a maximum of 10.0 mm when measured from the buccal cavosurface margin of the access preparation. 4. The internal form of the access preparation leaves at least 1.0 mm of supported lateral tooth structure at any point of the preparation and tapers to the canal orifices with no or slight gouges. 5. No portion of the tooth is perforated. 6. No portion of the tooth is fractured.

ACCEPTABLE OPENING – POSTERIOR TOOTH



Unacceptable

1. The placement of the access opening is not over the pulp chamber and does not allow complete debridement of the pulp chamber or access to the three root canals to the extent that instruments can be placed to the apex of the roots.
2. The access opening is either grossly under-or-over-extended in one or more of the following categories:
    - The mesial extent of the access preparation is less than 2.0 mm distal to the external surface of the mesial marginal ridge.
    - The buccal extent of the access preparation is less than 1.0 mm to the line bisecting the mesiobuccal and distobuccal cusp tips.
    - The distal extent of the access preparation is less than 1.0 mm from the distal oblique groove.
    - The palatal extent of the access preparation is less than 1.0 mm from the palatal cusp tip.
3. The depth and size of the access preparation does not remove the roof of the pulp chamber to the extent that all pulp tissue can be removed or all 3 canals cannot be straight-line accessed or the depth of the access preparation is more than 10.0 mm deep when measured from the buccal cavosurface margin of the access preparation.
4. The internal form of the access preparation leaves less than 1.0 mm of lateral supported tooth structure at any point of the preparation and/or tapers to the canal orifices with gross ledges that will inhibit access to the root canal orifices.
5. Any portion of the tooth is perforated.
6. Any portion of the tooth is fractured.

FIXED PROSTHODONTIC SECTION

The Fixed Prosthodontics Section consists of three procedures:

1. **Porcelain-fused-to-metal crown preparation** as an anterior abutment for the 3-unit bridge, plus an evaluation of the line of draw for the bridge abutment preparations (tooth #5)
2. **Cast metal / All-Zirconia crown preparation** as a posterior abutment for the 3-unit bridge (tooth #3)
3. **All-ceramic crown preparation** on an anterior central incisor (tooth #9)

Equilibration prohibited: No equilibration will be permitted on the typodont prior to or subsequent to any crown preparation.

Isolation dam: No isolation dam is required for the crown preparations.

Reduction guide: A reduction guide/stent can be fabricated during the set-up time. This can be done without the use of gloves prior to typodont mounting. Other impressions can be taken during the exam but can only be made using appropriate infection control procedures. All impressions, casts or models must be turned in at the end of the exam.

Reiteration: Stents and Reduction Guides can be fabricated during set up time. Upon completion of the exam, candidates must write their candidate number using a black permanent marker (indelible ink) on all sections of the stent. These are placed in a plastic bag with a candidate label adhered to the bag. This bag is then turned in when the typodont is submitted for scoring. If the candidate incorrectly fabricates stents, the ability to appeal is forfeited.

Prohibited materials: Prefabricated impressions, registrations, overlays, clear plastic shells, models or prefabricated preparations are not permitted to be brought to the examination site**. Failure to follow these requirements will result in confiscation of the materials as well as dismissal from and failure of the examination.**

Note: Before the typodont is submitted at the end of the examination, you must be sure it is clear of all dust and debris. At the discretion of the examiner, the stents may be used to aid in grading the typodont.

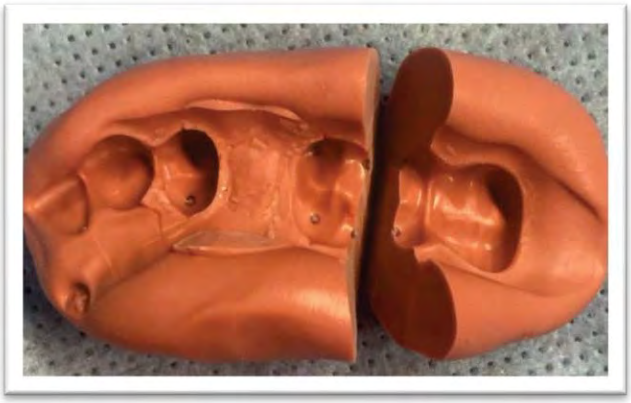
STENT FABRICATION

**Note: The fabrication of stents is required. Stents should be made during set-up time.

For the Fixed Prosthodontic Section, candidates may form stents for three assigned teeth (#3, #5, and #9) using heavy-bodied putty PVS (poly vinyl siloxane). The stent for #3 and #5 can be made with one piece of putty. The stent should cover #2 and extend to #7, extending down past the facial and lingual surfaces of the teeth to be prepped and their adjacent teeth.

Teeth #3 & #5
Form the stent to cover entirely from #2 to #7. Be certain to smear a small amount of the putty into the central grooves immediately prior to placing the bulk of the putty over the sextant. This will ensure the central groove area is captured in the putty stent.

Tooth #3
With a scalpel/knife (Bard Parker blade works well) make a cut connecting the mesial buccal and the mesial lingual cusp tips. Then make a cut through the distal buccal and distal lingual cusp tips. The resulting three sections should be easily reassembled over the teeth to ensure that the stent is well adapted to all the contours of the tooth and supporting gingival area. The mesial portion of the stent will include tooth #5, which is addressed on the next page.



Tooth #5

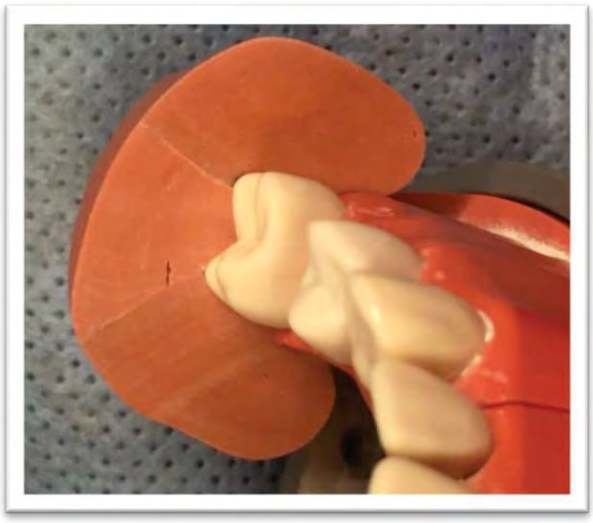
The mesial section of #3 contains your tooth #5. With a scalpel/knife make a cut connecting the buccal and the lingual cusps tips. This will result in a total of four sections for the two posterior teeth. These should be easily reassembled over the teeth #3 & #5 to ensure that the stent is well adapted to all the contours of the tooth, adjacent teeth, and supporting gingival area.

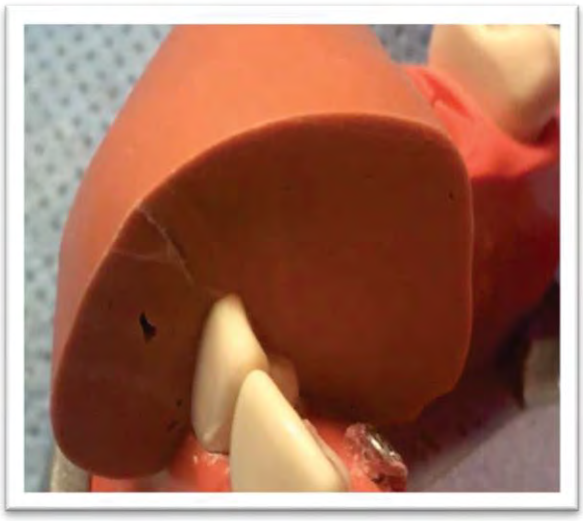
Tooth #9

Mark the mesial-distal center of the incisal edge of tooth #9. Using a scalpel/knife, make a cut entirely through the putty stent, perpendicular to the incisal edge. The two resulting sections of the stent should be easily reassembled over the teeth to ensure that the stent is well adapted to all the contours of the tooth and supporting gingival area.

Fit of the stents

The stents should fit intimately to the teeth and adjacent soft tissue.





Remember: write your candidate number- using a black permanent marker (indelible ink) on all sections of the stent. Place the stents in a plastic bag with a candidate label affixed to the bag. Turn in the bag when the typodont is submitted for scoring. If stents are fabricated incorrectly or are not submitted, you will forfeit the ability to pursue an appeal based on reduction.

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent teeth and/or restorations are free from damage.
2. The simulated gingiva and/or typodont is/are free from damage.
3. Correct tooth treated

SCORING CRITERIA

Acceptable
1. Damage to adjacent tooth/teeth can be removed by polishing without adversely altering the shape of the contour and/or contact. 2. There is slight damage to simulated gingiva and/or typodont consistent with the procedure. 3. Correct tooth treated
Unacceptable
1. There is gross damage to adjacent tooth/teeth, requiring a restoration. 2. There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure. 3. Wrong tooth treated

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION: CERVICAL MARGIN CRITERIA

TREATMENT GOALS

1. The cervical margins should be 1.0 mm occlusal to the simulated free gingival margin.
2. The cervical margin is smooth, continuous and well defined.
3. The margin design is a chamfer/rounded shoulder.
4. The facial margin is 1.5 mm in width.
5. The lingual margin is 1.0 mm.

SCORING CRITERIA

Acceptable
1. The cervical margin is less than 0.5 mm below or no greater than 1.5 mm above the simulated free gingival margin. If greater than 0.5 mm there is no visual damage. 2. The cervical margin is continuous but may be slightly rough and lacks some definition. 3. The margin design is a chamfer/rounded shoulder. 4. The facial margin is greater than 0.5 mm to 2.5 mm in width. 5. The lingual margin is 0.5 mm to 2.0 mm in width.
Unacceptable
1. The cervical margin is greater than 0.5 mm below with visual damage or greater than 1.5 mm above the simulated free gingival margin. 2. The cervical margin has no continuity and/or definition and will prevent fabrication of an adequate restoration. 3. The cervical margin is cupped or j-shaped resulting in unsupported enamel that will prevent fabrication of an adequate restoration. 4. The facial margin is less than 0.5 mm or greater than 2.5 mm in width. 5. The lingual margin is feathered and/or not explorer detectable or more than 2.0 mm in width.

PORCELAIN-FUSED-TO-METAL CROWN PREPARATION: WALLS & TAPER CRITERIA

TREATMENT GOALS

1. The facial axial tissue removal is 1.5 mm to be sufficient for convenience, retention and resistance form.
2. The lingual axial tissue removal is 1.0 mm to be sufficient for convenience, retention and resistance form.
3. The walls are smooth and well defined and/or internal line angles and/or cusp tip areas are rounded.
4. Taper, total occlusal convergence (TOC) is 10°– 16°.
5. There are no undercuts.
6. Occlusal reduction is 2.0 mm.
7. The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces, and a line of draw is established.

SCORING CRITERIA

Acceptable
1. The facial axial tissue removal is 0.5 mm to 2.5 mm. 2. The walls may be slightly rough and lack some definition and/ or internal line angles and/or cusp tip areas are rounded and have a slight tendency of being sharp. 3. Taper, total occlusal convergence (TOC) is 16° or less. 4. Slight undercut(s) exists, but an adequate restoration can be fabricated. 5. Occlusal reduction is 1.0 mm to 3.0 mm. 6. The path of insertion or line of draw deviates 10° to less 30° from the long axis of the tooth.
Unacceptable
1. The facial axial tissue removal is less than 0.5 mm or greater than 2.5 mm. 2. The walls are grossly rough and lack definition and/or internal line angles and/or cusp tip areas are sharp with no evidence of rounding. 3. Taper, total occlusal convergence (TOC) is greater than 16° TOC. 4. Undercut(s) exists greater than 0.5 mm and an adequate restoration cannot be fabricated. 5. Occlusal reduction is less than 1.0 mm; more than 3.0 mm. 6. The path of insertion or line of draw is unacceptable, deviating 30° or more from the long axis of the tooth.

CAST METAL/ALL ZIRCONIA CROWN PREPARATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent teeth and/or restorations are free from damage.
2. The simulated gingiva and/or typodont is/are free from damage.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Damage to adjacent tooth/teeth can be removed by polishing without adversely altering the shape of the contour and/or contact. 2. There is slight damage to simulated gingiva and/or typodont consistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is gross damage to adjacent tooth/teeth, requiring a restoration. 2. There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure. 3. Wrong tooth treated.

CAST METAL/ALL ZIRCONIA CROWN PREPARATION: CERVICAL MARGIN CRITERIA

TREATMENT GOALS

1. The cervical margins should be 1.0 mm occlusal to the simulated free gingival margin.
2. The cervical margin is smooth, continuous and well defined.
3. The cervical margin meets the external surface of the tooth at approximately a right angle.
4. The cervical margin is 1.0 mm in width.

SCORING CRITERIA

Acceptable
1. The cervical margin is less than 0.5 mm below or no more than 1.5 mm above the simulated free gingival margin. If greater than 0.5 mm there is no visual damage. 2. The cervical margin is continuous but may be slightly rough and lacks some definition. 3. The cervical margin meets the external surface of the tooth at approximately a right angle. 4. The cervical margin is a chamfer and varies slightly in width, is detectable visually or with an explorer, and is less than or equal to 2.0 mm in width.
Unacceptable
1. The cervical margin is greater than 0.5 mm below causing visual damage or greater than 1.5 mm above the simulated free gingival margin. 2. The cervical margin has no continuity and/or definition and/or will prevent fabrication of an adequate restoration. 3. The cervical margin meets the external surface of the tooth at an angle greater than 120°. The cervical margin is cupped or j-shaped resulting in unsupported enamel that will prevent fabrication of an adequate restoration. 4. The cervical margin is not a chamfer, is not detectable, and/or is greater than 2.0 mm in width.

CAST METAL/ALL ZIRCONIA CROWN PREPARATION: WALLS & TAPER CRITERIA

TREATMENT GOALS

1. Axial tissue removal is optimally 1.0 mm to be sufficient for convenience, retention and resistance form.
2. The walls are smooth and well defined and/or internal line angles and/or cusp tip areas are rounded.
3. Taper, total occlusal convergence (TOC) is 10°– 16°.
4. There are no undercuts.
5. Occlusal reduction is 1.5 mm.
6. The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces, and a line of draw is established.

SCORING CRITERIA

Acceptable
1. The axial tissue removal is greater than 0.5 mm but less than 2.5 mm. 2. The walls are slightly rough and lack some definition and/or internal line angles and/or cusp tip areas are rounded and have a slight tendency of being sharp. 3. Taper, total occlusal convergence (TOC) is 16° or less. 4. Slight undercut(s) exists, but it will not interfere with fabrication of an adequate restoration. 5. Occlusal reduction is greater than 1.0 mm or less than or equal to 2.5 mm. 6. The path of insertion or line of draw deviates 10° to less than 30° from the long axis of the tooth.
Unacceptable
1. The axial tissue removal is less than 0.5 mm or greater than 2.5 mm. 2. The walls are rough and lack definition and/or internal line angles and/or cusp tip areas are sharp with no evidence of rounding. 3. Taper, total occlusal convergence (TOC) is greater than 16°. 4. Undercut(s) exists greater than 0.5 mm and an adequate restoration cannot be fabricated. 5. The occlusal reduction is less than 1.0 mm or more than 2.5 mm. 6. The path of insertion or line of draw is unacceptable, deviating 30° or more from the long axis of the tooth.

BRIDGE FACTOR -PATH OF INSERTION/LINE OF DRAW CRITERIA

TREATMENT GOALS

The line of draw or path of insertion would allow for the full seating of a fixed prosthesis in a direct vertical plane without rotation.

SCORING CRITERIA

Acceptable
A line of draw exists whereby an adequate prosthesis may be fabricated.
Unacceptable
An adequate prosthesis may not be fabricated without removal of additional tooth structure.

ALL-CERAMIC CROWN PREPARATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent teeth and/or restorations are free from damage.
2. The simulated gingiva and/or typodont is/are free from damage.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Damage to adjacent tooth/teeth can be removed by polishing without adversely altering the shape of the contour and/or contact. 2. There is slight damage to simulated gingiva and/or typodont consistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is gross damage to adjacent tooth/teeth, requiring a restoration. 2. There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure. 3. Wrong tooth treated.

ALL-CERAMIC CROWN PREPARATION: CERVICAL MARGIN CRITERIA

TREATMENT GOALS

1. The cervical margins should be 1.0 mm occlusal to the simulated free gingival margin.
2. The cervical margin is smooth, continuous and well defined.
3. The cervical margin meets the external surface of the tooth at approximately a right angle.
4. The cervical margin is 1.25 mm in width.

SCORING CRITERIA

Acceptable
1. The cervical margin is less than 0.5 mm below or no more than 1.5 mm above the simulated free gingival margin. If greater than 0.5mm there is no visual damage. 2. The cervical margin is continuous but may be slightly rough and lacks some definition. 3. The cervical margin meets the external surface of the tooth at approximately a right angle. 4. The cervical margin is 0.5 mm to 2.0 mm in width.
Unacceptable
1. The cervical margin is greater than 0.5 mm below with visual damage or greater than 1.5 mm above the simulated free gingival margin. 2. The cervical margin has no continuity and/or definition and/or will prevent fabrication of an adequate restoration. 3. The cervical margin meets the external surface of the tooth at an angle greater than 120°. The cervical margin is cupped or j-shaped resulting in unsupported enamel that will prevent fabrication of an adequate restoration. 4. The cervical margin is less than 0.5 mm or greater than 2.0 mm in width.

ALL-CERAMIC CROWN PREPARATION: WALLS & TAPER CRITERIA

TREATMENT GOALS

1. The axial tissue removal is 1.0 mm to be sufficient for convenience, retention and resistance form.
2. The walls are smooth and well defined and/or internal line angles and/or incisal edge area are rounded.
3. Total occlusal convergence (TOC) is 10°– 16°.
4. There is no undercut present.
5. The incisal reduction is 2.0 mm.
6. The lingual wall is 2.0 mm in height.
7. The appropriate path of insertion varies less than 10° from parallel to the long axis of the tooth on all axial surfaces, and a line of draw is established.

SCORING CRITERIA

Acceptable
1. The axial tissue removal is 1.0 mm to 2.5 mm. 2. The walls may be slightly rough and lack some definition and/or internal line angles and/or incisal edge are rounded and have a slight tendency of being sharp. 3. Taper, total occlusal convergence (TOC) is 16° or less. 4. Slight undercut(s) exists but will not interfere with fabrication of an adequate restoration. 5. The incisal reduction is 1.0 mm to 3.5 mm. 6. The lingual wall is greater than 1.0mm. 7. The path of insertion or line of draw deviates 10° to less than 30° from the long axis of the tooth.
Unacceptable
1. The axial tissue removal is less than 1.0 mm or greater than 2.5 mm. 2. The walls are grossly rough and lack definition and/or internal line angles and/or incisal edge are sharp with no evidence of rounding. 3. Taper, total occlusal convergence (TOC) is greater than 25°. 4. Undercut(s) exists and is greater than 0.5 mm and an adequate restoration cannot be fabricated. 5. The incisal reduction is less than 1.0 mm; more than 3.5 mm. 6. The lingual wall is less than 1.0 mm. 7. The path of insertion or line of draw is unacceptable, deviating 30° or more from the long axis of the tooth.

RESTORATIVE SECTION

The Restorative examination consists of two sections –

1. **Anterior Restorative Section:** Tooth #9 will be used for the Class III composite restoration. Surface sealants must not be placed on the finished composite restoration.
2. **Posterior Restorative Section:** Tooth #14 will be used for the Class II restoration. The candidate is required to complete one of the following:
    a. Amalgam
    b. Traditional Composite

    ***For amalgam only:** The condensed and carved amalgam surface should **not** be polished or altered by abrasive rotary instrumentation except for the purpose of adjusting occlusion. Proximal contact is a critical part of the evaluation, and the candidate should be aware that the examiners will be checking the contact with floss. Please note that, for this examination, proximal contacts must be **visually** closed. Some resistance to the passage of floss is not sufficient for judging a contact to be closed. Also, contacts must not prevent floss from passing through. Proximal contacts that are not visibly closed or that do not permit the passage of floss are evaluated as *Unacceptable.* The candidate must be familiar with the properties of the amalgam being used and should be sure to allow sufficient time for the amalgam to set before sending the typodont to the Evaluation Area/Grading Area.

If a candidate is taking only <u>one of the two restorative procedures</u> (anterior, posterior they will be given **4 hours**. If a candidate is taking <u>both restorative procedures</u>, they will have **7 hours** to complete. If a candidate is taking <u>anterior, posterior & periodontal</u>, they will have **9 hours** to complete.

The candidate is required to prepare a Class II traditional (no slot preps) on tooth #14 and a Class III on tooth #9 preparation and submit together for Prep grading. If the candidate does not pass one of the preparations, they will be informed of the failure but allowed to complete the other preparation to finish for grading. They will be required to complete the one preparation that was failed at the next available grading site. If both preparations result in failure, the Restorative Section is stopped and the candidate will be required to take both portions at the next available test site. If they have elected to take the Periodontal Section, they will be permitted to take that portion at an approved start time the same day.

TREATMENT GUIDELINES

Restorative instruments and equipment: Candidates must provide the following materials for use during the Restorative Section:

- **Isolation dam:** It is advised, though not required, that cavity preparations be instrumented with an isolation dam.
- **Caries detector:** Caries detector liquid (except red) may be used, but it must be completely removed prior to the submission of the preparation for evaluation.

Pulpal exposure: If a candidate anticipates a pulpal exposure, a modification request must be completed describing what the candidate intends to do prior to continuing with the preparation, then send the typodont and modification form to the Express Chair.

In the event of a pulpal exposure, the candidate should write in the Notes section on the Progress Form that a pulpal exposure has occurred, indicate the time and briefly describe how

the situation should be treated. A CFC is called, and the typodont is sent to the Express Chair in the Evaluation Area.

Recontouring: Recontouring of adjacent teeth is allowed only after the preparation has been evaluated and only with the request of grading examiners. Candidates must enter the request to recontour the adjacent tooth in the *Additional Comments* section of the Progress Form. A CFC must then review the request and will place his/her examiner number and the time next to the request. The candidate may then restore the tooth after the CFC checks the adjacent tooth recontouring.

Instructions to candidates: Evaluators may provide written instructions to candidates if they believe a treatment should be modified during the course of the examination. When the typodont returns from the Evaluation Area, if the candidate does not receive an Instruction to Candidate Form, the candidate should continue to the next step of the treatment. If the candidate **does** receive an Instruction to Candidate Form, it should be delivered by a CFC. The CFC will review the instructions with the candidate, and both the candidate and CFC will sign the form to indicate that the candidate understands the instructions. The corrections must be completed as stated on the form and checked by a CFC. The candidate must not request an opinion from CFC's concerning instructions given on the Instruction to Candidate Form (ITC).

MODIFICATION REQUESTS

"Bundling" of modification requests is not allowed. Each request must be separate and answer the question where, how much, and why. The forms are available from the CFC Assistant.

The tooth must be prepared to ideal dimensions prior to submission of a Modification Request Form.

To request a modification, the candidate must briefly write each modification on the Modification Request Form. The candidate may obtain a Modification Request Form from a CFC. The request for each modification should include:

- **What** is the candidate requesting to do? (Type of modification)
- **Where**? (e.g., gingival axial line angle, mesial box)
- **How Much** is to be removed? (e.g., 0.5 mm from the axial wall)
- **Why** is the modification needed? (e.g., due to caries, decalcification)

If any of the four spaces for modification requests are not needed, cross out the additional requests lines not used. After viewing and logging the Modification request, the CFC will place a red dot in the designated circle at the top-left of the Progress Form to indicate a requested modification.

A request for modification may be denied on the basis of any one of the parts of the request. For example, if a candidate's request to "extend the box; to the lingual; 2.0 mm; to remove caries" is denied, they should not assume that the request was denied because there are no caries. The denial may be because the request to remove 2.0 mm is excessive.

The typodont is checked-in to the Express Chair in the Evaluation Area for review of the Modification Request.

At the Express Chair, the examiners will place a green dot over the red dot on the Progress Form to indicate that they have assessed the request. A copy of the Modification Request

Form will be returned to the candidate by the CFC to indicate whether the modification(s) has been granted or not granted.

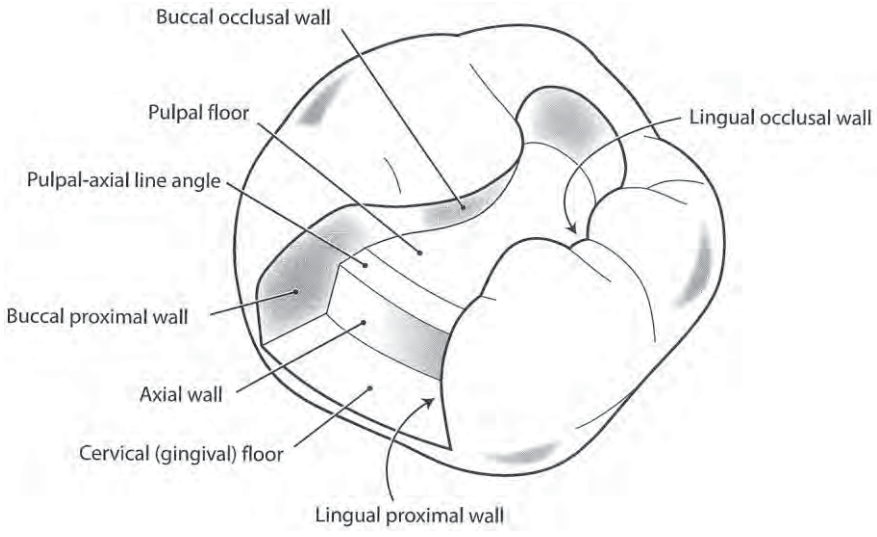
Carefully review the criteria for modification requests. Inappropriate requests for modification(s) will result in a small penalty for each modification not granted. A larger penalty will be assigned for requests for a modification for removal of caries or decalcification when no caries or decalcification exists or for repeated modification requests in an apparent attempt to have the examiners confirm when all caries is removed. Modifications that have been approved and appropriately accomplished will not result in any penalties.

Regardless if the modification is granted or not granted, the candidate must complete the preparation and send the typodont back to the Evaluation Area for evaluation of the final completed preparation.

If the candidate subsequently has additional requests for modification on the same preparation, a new red dot is placed over the green dot on the Progress Form, and the same procedure is followed. If more than one modification is anticipated at any time, it is to the candidate's advantage to submit them at the same time, as no additional time is provided for evaluation of modification requests, and multiple submissions may significantly decrease treatment time.

Once all approved modifications are completed, the typodont and all required papers and instruments are submitted to the Evaluation Area for evaluation of the final preparation.

Terminology to be used when requesting modifications



PROCEDURE MANAGEMENT GUIDELINES

Final evaluation of the preparation: Three independent examiners evaluate the prepared tooth/cavity. The typodont box along with the candidate ID labeled typodont, cubicle card, and Progress Forms for both restorations must be sent to the scoring area once both preparations are completed for grading.

Final evaluation of the restoration: Once both restorations have been restored, the typodont box along with the candidate ID labeled typodont, cubicle card, and Progress Forms for both restorations must be sent to the scoring area for grading. For the Class II amalgam restoration, the amalgam must be sufficiently set to allow a check of the occlusion. Any of the composite restorations must be presented without any surface glaze/sealer on the restoration.

If adjustments to the restoration are required, an Instruction to Candidate Form (ITC) will be issued. Candidates must perform the corrections as instructed and verified by a CFC.

CLASS III ANTERIOR COMPOSITE PREPARATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent teeth and/or restorations are free from damage.
2. The soft tissue is free from damage, or there is tissue damage that is consistent with the procedure.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact. 2. There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage. 2. There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage. 3. Wrong tooth treated.

CLASS III ANTERIOR COMPOSITE PREPARATION: EXTERNAL OUTLINE FORM CRITERIA

TREATMENT GOALS

1. The outline form is sufficient in size to have access to remove caries and to manipulate and finish the restorative material.
2. The outline form is not overextended beyond what is necessary for complete removal of caries.
3. The incisal cavosurface margin does not compromise the incisal angle.
4. The wall opposite the access, if broken, does not extend more than 0.5 mm beyond the contact area.
5. There are no caries remaining.
6. The cavosurface margins are not irregular and there is no explorer-penetrable decalcification remaining on the cavosurface margin.
7. There is no unsupported enamel.
8. Enamel cavosurface margin may be beveled.

SCORING CRITERIA

Acceptable
1. The outline form is sufficient in size to have access to remove caries and to manipulate and finish the restorative material. 2. The outline form may be extended mesiodistally up to 1.5 mm beyond what is necessary. 3. The outline form may be extended incisogingivally up to 5.0 mm 4. The incisal cavosurface margin does not compromise the incisal angle. 5. The wall opposite the access, if broken, may extend no more than 2.0 mm beyond the contact area. 6. There is no caries remaining. 7. The cavosurface margins may be slightly irregular but there is no explorer-penetrable decalcification remaining on the cavosurface margin. 8. There may be a small area of unsupported enamel, which is necessary to preserve facial esthetics. 9. Enamel cavosurface margin bevels, if present; do not exceed 1.0 mm in width. 10. The gingival clearance is open up to 2.0 mm.
Unacceptable
1. The outline form is under-extended, making it impossible to remove caries or to manipulate and finish the restorative material. 2. The outline form is extended mesiodistally up by more than 1.5 mm 3. The outline form is extended incisogingivally by more than 5.0 mm 4. The incisal cavosurface margin is over-extended so that the incisal angle is compromised, removed or fractured. A Class IV restoration is now necessary without prior justification. 5. The wall opposite the access opening extends more than 2.0 mm beyond the contact area. 6. There is caries remaining. 7. The cavosurface margin does not terminate in sound natural tooth structure. There is explorer–penetrable decalcification at the cavosurface margin. 8. There are large or multiple areas of unsupported enamel that are not necessary to preserve facial esthetics. 9. Enamel cavosurface margin bevels, if present, exceed 1.0 mm in width, are not uniform or are inappropriate for the size of the restoration 10. The gingival clearance is open greater than 2.0 mm.

CLASS III ANTERIOR COMPOSITE PREPARATION: INTERNAL FORM CRITERIA

TREATMENT GOALS

1. The preparation is free of caries.
2. The depth of the axial wall is just inside the DEJ.
3. No pulp exposure.

SCORING CRITERIA

Acceptable
1. The preparation is free of caries. 2. The depth of the axial wall is no more than 2.5 mm beyond the DEJ. 3. Properly managed justified pulp exposure.
Unacceptable
1. The preparation has remaining caries. 2. The axial wall is greater than 2.5 mm beyond the DEJ. 3. Any pulp exposure that is not properly managed or unjustified.

CLASS III ANTERIOR COMPOSITE FINISHED RESTORATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent and/or opposing hard tissue is free from evidence of damage and/or alteration.
2. The soft tissue is free from damage, or there is soft tissue damage consistent with the procedure.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Any hard tissue damage to adjacent or opposing tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact. 2. There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage. 2. There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage. 3. Wrong tooth treated.

CLASS III ANTERIOR COMPOSITE FINISHED RESTORATION: CONTOUR, CONTACT & OCCLUSION CRITERIA

TREATMENT GOALS

1. Interproximal contact is present. The contact is visually closed and properly shaped and positioned. There is definite, but not excessive, resistance to dental floss when passed through the interproximal contact area.
2. The restoration reproduces the normal physiological proximal contours of the tooth, occlusal anatomy and marginal ridge anatomy.
3. When checked with articulating paper, all centric and excursive contacts on the restoration are consistent in size, shape and intensity with such contacts on other teeth in that quadrant.

SCORING CRITERIA

Acceptable
1. Interproximal contact is visually closed, and the contact is adequate in size, shape or position but may demonstrate little resistance to dental floss. 2. The restoration may not reproduce the normal lingual anatomy, proximal contours of the tooth or marginal ridge anatomy but would not be expected to adversely affect the tissue health. 3. When checked with articulating paper, the restoration is in hyperocclusion. The restoration only requires minor occlusal adjusting.
Unacceptable
1. Interproximal contact is visually open or will not allow floss to pass through the contact area. 2. The restoration does not reproduce the normal lingual anatomy, proximal contour of the tooth or marginal ridge anatomy and as such it would be expected to adversely affect the health of the surrounding soft tissue. 3. There is gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant.

CLASS III ANTERIOR COMPOSITE FINISHED RESTORATION: MARGIN INTEGRITY & SURFACE FINISH CRITERIA

TREATMENT GOALS

1. There is no marginal deficiency.
2. There is no marginal excess.
3. The restoration is not fractured and is bonded to the prepared tooth structure.
4. There is no evidence of unwarranted or unnecessary removal, or recontouring of tooth structure adjacent to the restoration, without a previous modification approval.
5. The shade of the restoration blends with the surrounding tooth structure.

SCORING CRITERIA

Acceptable
1. There is no open margin. 2. Marginal deficiency may be absent or detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, but is no greater than 0.5 mm. 3. Marginal excess may be absent or detectable at the restoration-tooth interface, but it is no greater than 1.0 mm at the gingival margin and may extend greater than 0.5 mm in other areas. 4. The restoration is not fractured, debonded and/or movable in the preparation. 5. There is no or minimal evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration (enameloplasty).
Unacceptable
1. An open margin is detectable (either visually or with the tine of an explorer) at the restoration tooth interface. 2. Marginal deficiency is detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, and is greater than 0.5 mm. 3. Marginal excess is greater than 1.0 mm at the gingival margin which impinges on the gingival tissue and will be detrimental to the gingival health. 4. The restoration is fractured, debonded and/or movable in the preparation. 5. There is evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration (enameloplasty).

CLASS II POSTERIOR AMALGAM PREPARATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent and/or opposing hard tissue is free from evidence of damage and/or alteration.
2. The soft tissue is free from damage, or there is soft tissue damage consistent with the procedure.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Any hard tissue damage to adjacent or opposing tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact. 2. There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage. 2. There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage. 3. Wrong tooth treated.

CLASS II POSTERIOR AMALGAM PREPARATION: EXTERNAL OUTLINE FORM CRITERIA

TREATMENT GOALS

1. The proximal clearance at the height of contour is visibly open.
2. The proximal cavosurface margin is 90^0 to the external surface of the tooth.
3. There are no areas of unsupported enamel.
4. The gingival clearance is visibly open.
5. The isthmus is a minimum of 1.0 mm wide to no more than one-third the intercuspal width.
6. The cavosurface margins terminates in sound tooth structure, are not irregular and there is no explorer-penetrable decalcification remaining.
7. The outline form includes all carious and non-coalesced fissures and is smooth, rounded and flowing.

SCORING CRITERIA

Acceptable
1. The proximal clearance at the height of contour is visibly open or extends no more than 3.0 mm on either one or both proximal walls. 2. The proximal cavosurface margin may deviate from 90^0 but is unlikely to jeopardize the longevity of the tooth or restoration; includes small areas of unsupported enamel. 3. The gingival clearance is visibly open or not greater than 3.0 mm. 4. The isthmus is from 1.0 mm wide to no more than one-half the intercuspal width. 5. The cavosurface margins should terminate in sound tooth structure, and may be slightly irregular, but there is no explorer-penetrable decalcification remaining. 6. The outline form does not compromise the marginal ridge.
Unacceptable
1. The proximal clearance at the height of contour is not visibly open or extends beyond 3.0 mm on either one or both proximal walls. 2. The proximal cavosurface margin deviates excessively from 90^0 and will jeopardize the longevity of the tooth or restoration; includes unsupported enamel. 3. The gingival clearance is not visibly open or is greater than 3.0 mm. 4. The isthmus is less than 1.0 mm or greater than one-half the intercuspal width. 5. The cavosurface margins do not terminate in sound tooth structure and there is explorer- penetrable decalcification. 6. The marginal ridge is undermined and/or less than 1.0 mm in width.

CLASS II POSTERIOR AMALGAM PREPARATION: INTERNAL FORM CRITERIA

TREATMENT GOALS

1. The pulpal floor depth is 2.0 mm beyond the cavosurface margin.
2. The depth of the axial wall is just inside the DEJ.
3. The walls of the proximal box are convergent and appropriate internal retention is present.
4. There is no evidence of caries.
5. Retention, when used, does not undermine the enamel.
6. Prepared surfaces are smooth.
7. No pulp exposure

SCORING CRITERIA

Acceptable
1. The pulpal floor depth is 1.5 mm to 2.5 mm beyond the cavosurface margin. 2. The depth of the axial wall is no more than 2.5 mm beyond the DEJ. 3. The walls of the proximal box should be convergent but may be parallel, but appropriate internal retention is present. 4. There is no evidence of caries. 5. Retention, when used, may not undermine the enamel, and is acceptable and therefore not likely to jeopardize the longevity of the tooth or restoration. 6. Prepared surfaces may be slightly rough, irregular, or sharp. 7. Properly managed justified pulp exposure.
Unacceptable
1. The pulpal floor depth is less than 1.5 mm or greater than 2.5 mm from the cavosurface margin. 2. The axial wall is greater than 2.5 mm beyond the DEJ or is still in the enamel and does not include the DEJ. 3. The walls of the proximal box diverge occlusally, offering no retention and jeopardizing the longevity of the tooth or restoration. 4. The preparation has remaining caries. 5. Retention excessively undermines the enamel and is likely to jeopardize the longevity of the tooth or restoration. 6. A prepared surface of the tooth is excessively rough, irregular or sharp and is likely to jeopardize the longevity of the tooth restoration. 7. Any pulp exposure that is not properly managed and/or unjustified.

CLASS II POSTERIOR AMALGAM FINISHED RESTORATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent and/or opposing hard tissue is free from evidence of damage and/or alteration.
2. The soft tissue is free from damage, or there is soft tissue damage consistent with the procedure.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Any hard tissue damage to adjacent or opposing tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact. 2. There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage. 2. There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage. 3. Wrong tooth treated.

CLASS II POSTERIOR AMALGAM FINISHED RESTORATION: CONTOUR, CONTACT & OCCLUSION CRITERIA

TREATMENT GOALS

1. Interproximal contact is present. The contact is visually closed and properly shaped and positioned. There is definite, but not excessive, resistance to dental floss when passed through the interproximal contact area.
2. When checked with articulating paper, all centric and excursive contacts on the restoration are consistent in size, shape and intensity with such contacts on other teeth in that quadrant.
3. The restoration reproduces the normal physiological proximal contours of the tooth, occlusal anatomy and marginal ridge anatomy.

SCORING CRITERIA

Acceptable
1. Interproximal contact is visually closed, and the contact may be deficient in size, shape or position but may demonstrate little resistance to dental floss or shreds the floss. 2. When checked with articulating paper, the restoration may be in slight hyperocclusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth and the restoration may require adjustment. 3. The restoration may not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy, but would not be expected to adversely affect the tissue health.
Unacceptable
1. Interproximal contact is visually open or will not allow floss to pass through the contact area. 2. There is gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant. 3. The restoration does not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy and will adversely affect the tissue health.

CLASS II POSTERIOR AMALGAM FINISHED RESTORATION: MARGIN INTEGRITY & SURFACE FINISH CRITERIA

TREATMENT GOALS

1. There is no marginal deficiency.
2. There is no marginal excess detectable, either visually or with the tine of an explorer, at the restoration-tooth interface.
3. The surface of the restoration is free of pits and voids.
4. Restoration is not fractured.
5. There is no evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration (enameloplasty).
6. There is no evidence of open margins.

SCORING CRITERIA

Acceptable
1. Marginal deficiency may be absent or detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, but it is no greater than 0.5 mm. 2. Marginal excess may be absent or detectable at the restoration-tooth interface, but it is no greater than 1.0 mm at the gingival margin and does not extend greater than 2.0 mm in other areas. 3. The surface of the restoration may be slightly grainy or rough, but it is free of pits and voids. 4. Restoration is not fractured. 5. There is no or minimal evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration (enameloplasty). 6. There is no evidence of open margins.
Unacceptable
1. Marginal deficiency is detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, and is greater than 0.5 mm. 2. Marginal excess is greater than 1.0 mm at the gingival margin which impinges on the gingival tissue and will be detrimental to the gingival health and/or extends greater than 2.0 mm in other areas. 3. The surface of the restoration is rough and exhibits significant surface irregularities, pits or voids. 4. Restoration is fractured. 5. There is evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the tooth being restored (enameloplasty). 6. There is an open margin detectable with the tine of an explorer.

CLASS II POSTERIOR CONVENTIONAL COMPOSITE PREPARATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. There is no hard tissue damage to adjacent or opposing tooth/teeth.
2. There is no iatrogenic trauma to the soft tissue inconsistent with the procedure
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Any hard tissue damage to adjacent or opposing tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact. 2. There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage. 2. There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage. 3. Wrong tooth treated.

CLASS II POSTERIOR CONVENTIONAL COMPOSITE PREPARATION: EXTERNAL OUTLINE FORM CRITERIA

TREATMENT GOALS

1. The proximal contact is either closed, or visibly open.
2. The gingival clearance is visibly open.
3. The outline form is not sharp and irregular. The outline form is not over extended so that it compromises the remaining marginal ridge and/or cusp(s).
4. The isthmus is at least 1.0 mm and may not exceed one-half the intercuspal width.
5. The cavosurface margin is 90° to the external surface of the tooth. There is no unsupported enamel.
6. The cavosurface margins terminates in sound tooth structure, are not irregular and there is no explorer-penetrable decalcification remaining.
7. There is no remaining non-coalesced fissure(s) that extend the DEJ and are contiguous with the outline form.

SCORING CRITERIA

Acceptable
1. The proximal contact is either closed, or visibly open and proximal clearance at the height of contour does not extend more than 2.5 mm on either one or both proximal walls. 2. The gingival clearance may be closed, or is less than or equal to 2.0 mm. 3. The outline form may be sharp and irregular. The outline form may be inappropriately over extended so that it compromises the remaining marginal ridge and/or cusp(s). 4. The isthmus must be at least 1.0 mm and may not exceed one-half the intercuspal width. 5. The cavosurface margin may deviate from 90° but is unlikely to jeopardize the longevity of the tooth or restoration; Includes small areas of unsupported enamel and/or excessive bevel(s). 6. The cavosurface margins should terminate in sound tooth structure and may be slightly irregular but there is no explorer-penetrable decalcification remaining. 7. There are no remaining non-coalesced fissure(s) that extend the DEJ and are contiguous with the outline form.
Unacceptable
1. The proximal clearance at the height of contour extends beyond 2.5 mm on either one or both proximal walls. 2. The gingival clearance is greater than 2.0 mm. 3. The outline form is grossly over-extended so that it compromises or undermines the remaining marginal ridge to the extent that the cavosurface margin is unsupported by dentin or the width of the marginal ridge is 0.5 mm or less. 4. The isthmus is less than 1.0 mm or greater than one-half the intercuspal distance. 5. The cavosurface margin deviates from 90° and is likely to jeopardize the longevity of the tooth or restoration. This includes unsupported enamel and/or excessive bevel(s). 6. The cavosurface margins do not terminate in sound tooth structure, are grossly irregular and there is explorer–penetrable decalcification. 7. There are remaining non-coalesced fissure(s) that extend to the DEJ and are contiguous with the outline form.

CLASS II POSTERIOR CONVENTIONAL COMPOSITE PREPARATION: INTERNAL FORM CRITERIA

TREATMENT GOALS

1. The pulpal floor depth is equal to 2.0 mm from the cavosurface margin and there is no remaining enamel.
2. The depth of the axial wall is just inside the DEJ.
3. The walls of the proximal box may be divergent or convergent but there is no undermined enamel.
4. There is no evidence of caries.
5. Retention, when used, does not undermine the enamel.
6. Prepared surfaces are smooth.
7. No pulp exposure.

SCORING CRITERIA

Acceptable
1. The pulpal floor depth is equal to or greater than 0.5 mm from the cavosurface margin, and the pulpal floor depth is no more than 4.0 mm from the cavosurface margin; there may be remaining enamel. 2. The depth of the axial wall is no more than 2.5 mm beyond the DEJ. 3. The walls of the proximal box may be divergent or convergent, and which may result in some undermined enamel. 4. There is no evidence of caries. 5. Retention, when used, may not undermine the enamel which is not likely to jeopardize the longevity of the tooth or restoration. 6. Prepared surfaces may be rough, irregular or sharp. 7. Properly managed justified pulp exposure.
Unacceptable
1. The pulpal floor depth is 4.0 mm or greater from the cavosurface margin or is less than 0.5 mm. 2. The axial wall is more than 2.5 mm beyond the DEJ or is entirely in enamel. 3. The walls of the proximal box are excessively divergent or convergent, resulting in excessively undermined enamel, that is likely to jeopardize the longevity of the tooth or restoration. 4. The preparation has remaining caries. 5. Retention excessively undermines the enamel and is likely to jeopardize the longevity of the tooth or restoration. 6. Prepared surfaces are excessively rough, irregular or sharp and likely to jeopardize the longevity of the tooth restoration. 7. Any pulp exposure that is not properly managed or unjustified.

CLASS II POSTERIOR CONVENTIONAL COMPOSITE FINISHED RESTORATION: TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The adjacent and/or opposing hard tissue is free from evidence of damage and/or alteration.
2. The soft tissue is free from damage, or there is soft tissue damage consistent with the procedure.
3. Correct tooth treated.

SCORING CRITERIA

Acceptable
1. Any hard tissue damage to adjacent or opposing tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact. 2. There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure. 3. Correct tooth treated.
Unacceptable
1. There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage. 2. There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage. 3. Wrong tooth treated.

CLASS II POSTERIOR CONVENTIONAL COMPOSITE FINISHED RESTORATION: CONTOUR, CONTACT & OCCLUSION CRITERIA

TREATMENT GOALS

1. Interproximal contact is present. The contact is visually closed and is properly shaped and positioned. There is definite, but not excessive, resistance to dental floss when passed through the interproximal contact area.
2. When checked with articulating paper, all centric and excursive contacts on the restoration are consistent in size, shape and intensity with such contacts on other teeth in that quadrant.
3. The restoration reproduces the normal physiological proximal contours of the tooth, occlusal anatomy and marginal ridge anatomy.

SCORING CRITERIA

Acceptable
1. Interproximal contact is visually closed, but the contact may be deficient in size, shape or position, and may demonstrate little resistance to dental floss or shreds the floss. 2. When checked with articulating paper, the restoration may be in hyperocclusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth. The restoration requires adjustment. 3. The restoration may not reproduce the normal occlusal anatomy, proximal contours of the tooth, or marginal ridge anatomy, but would not be expected to adversely affect the tissue health.
Unacceptable
1. Interproximal contact is visually open or will not allow floss to pass through the contact area. 2. There is gross hyperocclusion, such that the restoration is the only point of occlusion in that quadrant. 3. The restoration may not reproduce the normal occlusal anatomy, proximal contours of the tooth, or marginal ridge anatomy, and adversely affects tissue health.

CLASS II POSTERIOR CONVENTIONAL COMPOSITE FINISHED RESTORATION: MARGIN INTEGRITY & SURFACE FINISH CRITERIA

TREATMENT GOALS

1. There is no marginal deficiency.
2. There is no marginal excess detectable, either visually or with the tine of an explorer, at the restoration-tooth interface.
3. The restoration is bonded to the prepared tooth structure.
4. There is no evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration.
5. Shade selection matches surrounding tooth structure.
6. There is no evidence of open margins.

SCORING CRITERIA

Acceptable
1. Marginal deficiency may be absent or detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, but it is no greater than 0.5 mm. 2. Marginal excess may be absent or detectable at the restoration-tooth interface, but it is no greater than 1.0 mm at the gingival margin and may extend greater than 0.5 mm in other areas 3. The restoration is not fractured, debonded and/or movable in the preparation. 4. There is no or minimal evidence of unwarranted or unnecessary removal, or recontouring of tooth structure adjacent to the restoration (enameloplasty). 5. There is no evidence of open margins.
Unacceptable
1. Marginal deficiency is detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, and is greater than 0.5 mm. 2. Marginal excess is greater than 1.0 mm at the gingival margin which impinges on the gingival tissue and will be detrimental to the gingival health. 3. The restoration is fractured, debonded and/or movable in the preparation. 4. There is evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the tooth being restored (enameloplasty). 5. There is an open margin detectable with the tine of an explorer.

IV. OPTIONAL PERIODONTAL EXAM

The Periodontal is the only **patient-based** section of the examination. This section is an optional part of the SRTA examination. Candidates should contact the appropriate state board of dentistry directly to determine state-specific requirements before deciding whether to take the Periodontal section.

If a candidate is taking anterior, posterior & periodontal, they will have **9 hours** to complete. If taking only Periodontal, 3 hours total is allotted with a 1.5-hour patient treatment time included.

Patient Eligibility: Patients for the Periodontal Section must meet the eligibility requirements listed under the Patient Selection.

Medical History and Patient Consent Forms: Forms must be completed as described under the Examination Forms Section.

Radiographs: Radiographs for the Periodontal Section must meet the criteria listed under the Standards of Acceptability for Radiographs.

Assistants: Candidates are permitted to use a chairside assistant during the periodontal section as described under the Chairside Assistant Section. Candidates may not assist each other or critique or discuss one another's work.

Time Management: The candidate should be aware that the time allowed for the examination includes the time that the patient(s) will be at the Evaluation Area. The average time a patient will be in the Evaluation Area is 45 minutes – this may vary depending on the time of the day.

MALPRACTICE INSURANCE

SRTA's professional liability insurance company provides malpractice insurance for all candidates at no additional charge. CNA Insurance Company extends SRTA's professional liability coverage to candidates with the limit of $1,000,000/$3,000,000 for the patient-based portion of the 2019 SRTA clinical examination in dental hygiene. SRTA's liability coverage does **not** extend to qualified practitioners providing local anesthetic services.

MEDICAL HISTORY FORM

It is required for candidates to complete a current Medical History Form within 30 days of the examination for the Periodontal section patient.

The patient's blood pressure must be taken on the day of the examination and documented by a Clinic Floor Coordinator (CFC). The CFC does not witness the candidate taking the patients' blood pressure, but must verify and sign-off that it was taken the day of the exam and is on the appropriate form before sending the patient to the Evaluation Area for approval.

The patient's health status must be acceptable and will be assessed during the patient approval portion of the examination for the Periodontal section. Therefore, patient selection is essential for successful completion of this examination.

Medications: On the day of the examination, the candidate must document on the Medical History Form all medications or supplements taken by the patient within the last 24 hours. Candidates should document antibiotic pre-medication on the Medical History Form.

Health qualifications: In order to participate in the examination, patients must meet the following criteria:

1. Patients must have a blood pressure reading of 159/94 or below to proceed without medical clearance. Patients with a blood pressure reading between 160/95 and 179/109 are accepted only with a written medical clearance from the patient's physician. Patients with a blood pressure reading 180/110 or greater will not be accepted for this examination, even if a physician authorizes treatment.
2. Candidates who are sharing a patient requiring antibiotic prophylaxis must treat the patient the same day. Treatment of the same patient on subsequent clinical days will not be permitted.
3. Patients must have no history of a heart attach (myocardial infarction), stroke or cardiac surgery within the last six months.
4. Patients may not have active tuberculosis. A patient who has tested positive for tuberculosis or who is being treated for tuberculosis but does not have the clinical symptoms is acceptable.
5. Patients may not have undergone chemotherapy treatment for cancer within the last six months.
6. Patients may not have a history of taking IV or orally-administered bisphosphonate medications
7. Patients may not have active incidence of bisphosphonate osteonecrosis of the jaw (BON), also known as osteochemonecrosis or, osteonecrosis of the jaw (ONJ).
8. Patients may not have any condition or medication/drug history that might be adversely affected by the length or nature of the examination procedures.
9. Patients with known allergies to latex will not be allowed to sit for the examination at those sites where latex may still be used or present.
10. If the patient answers YES to any of the questions on the Medical History Form, the candidate must explore the item further and determine whether a medical clearance from a licensed physician would be appropriate. A medical clearance is required if the finding could affect the patient's suitability for elective dental treatment during the examination.

Candidates must follow the current American Heart Association **antibiotic pre-medication** recommendations when treating patients at potential risk of infective endocarditis following dental treatment. A medical clearance may be indicated to determine the patient's potential risk of infective endocarditis.

If the patient has a medical condition that could affect his/her suitability for treatment, the candidate must obtain a written medical clearance from the patient's physician to indicate that the patient is healthy enough to participate in the examination. The medical clearance must also be submitted on the day of the examination and should meet the following criteria:

- Clearly legible statement from a licensed physician
- Written within 30 days prior to the examination on official letterhead
- A positive statement of how the patient should be medically managed
- The physician's clearly legible name, address and phone number

- A telephone number where the physician may be reached on the day of the examination if a question arises regarding the patient's health

PATIENT SELECTION & GUIDELINES

Candidates must obtain their own patient and are responsible for their arrival and return. SRTA is not responsible for procuring patients used in the examination. Patient selection and management is an important facet of the examination and should be completed independently.

Candidates are strongly advised to secure a backup patient for the Periodontal section. Unacceptable patients will be dismissed. Candidates must then procure an acceptable patient in order to continue the examination. Candidates must advise their patients of the time required to participate in this examination; evaluation of a patient can take an average of 45 minutes, in addition to the time required to complete the procedure.

Patients must be at least 14 years of age. A parent or legal guardian must be available in the waiting area during treatment and provide written consent for minors under the age of 18. A patient may **not** be:

- A dentist (licensed or unlicensed)
- A junior/senior dental student
- Expanded duty assistants or hygienists
- Latex sensitive at those sites where latex may still be used or present.
- A female in her first or third trimester of pregnancy
- A person with a history of taking IV-administered bisphosphonate medications (except an annual IV dosage (infusion) for osteoporosis).
- A dental hygienist (licensed or unlicensed)
- A dental hygiene student in their final year
- A person with a history of taking IV or orally-administered bisphosphonate medications.

Each patient to be treated will be required to sign a Patient Consent, Disclosure and Assumption of Responsibility Form. Both the candidate and patient must complete a Post-Operative Care Agreement before any clinical procedure may commence. The patient must receive a copy of these forms.

Candidates may not administer or authorize any form of patient sedation. The use of sedation is grounds for failure of and dismissal from the entire exam. Candidates may reapply to take the next available examination.

All written and oral communication must be in English for purposes of this examination. Candidates may communicate with their patient in another language. Patients may be photographed during the examination. The images will be used ***only*** to revise the Southern Regional Testing Agency's examiner standardization.

RADIOGRAPHS – STANDARD OF ACCEPTABILITY

Pre-operative radiographs are required for the Periodontal Section. Because schools differ in their radiographic facilities, the candidate must refer to the University Instruction Letter published by the examination site to determine what is available. Some examination sites will have only conventional (film) facilities available, some will have only digital and others will have both. The University Instruction Letter will identify what is available at the examination site.

Radiographs for the Periodontal Section must meet the following criteria:

- Candidates must submit a diagnostic panoramic radiograph or complete mouth radiographic series exposed within the last three years. If a full mouth series is presented, films must be mounted according to ADA procedures (convexity up). Both the options must indicate the exposure date, patient's name, right and left side and candidate identification number.
- Copies are acceptable for the Periodontal Section.
- Digital images or digital prints are permitted. Candidates from outside the host school will need to contact the examination site to inquire if they allow digital images from outside the facility to be entered into their system. If digital prints are to be used, the radiographs must be printed and submitted on photo quality paper or acetate (preferably blue).
- If the school name is normally incorporated into the digital image, this should be removed or masked, if possible, before printing out the image on photo quality paper or the Clinic Floor Coordinator (CFC) should be asked to cover such a school identifier on the day of the examination.
- Alternatively, images may be displayed on monitors if they are available from the school's database. Candidates from outside the host school will need to contact the host exam site to inquire if they allow digital images from outside the facility.to be entered into their system.
- Radiographs must not be retaken simply to produce a "perfect" image. Radiographs that have minor errors such as minor cone cutting, not showing all of a third molar or a slightly off-center panoramic film, will not result in any loss of points and should not be retaken.
- Radiographic technique is not being evaluated in this part of the examination.

If the candidate submits one or two poor quality or non-diagnostic radiographs (film or digital prints), examiners will take the following action:

- First rejection– examiners will request new film(s).
- Second rejection– candidate will be dismissed from the examination.

Refer to the University Instruction Letter to determine the availability of digital radiographs at your examination site. It is the responsibility of the candidate to ensure that his/her radiographs will conform to SRTA policy for the examination.

PATIENT/TREATMENT, SELECTION & CHECK-IN

Patient selection for the Periodontal section is important. If the candidate is unable to complete a procedure due to patient management problems, the procedure cannot be evaluated, and no credit will be assigned. No more than two treatment selections may be submitted for a procedure. If a second treatment selection is rejected or a second treatment

selection is not presented after the first treatment is rejected, a candidate may not continue with that procedure and will not pass that portion of the examination.

Patient check-in: the candidate may begin setting up their operatories when the clinic opens.

For candidates that have been assigned an 8:00 AM Periodontal section start time, between 7:00 AM and 8:00 AM a CFC may be called over to check blood pressure and the required forms and radiographs. **The CFC must review and authorize your patient's Medical History via the tablet. Failure to do so will prevent the patient from being checked-in for approval.**

After the CFC check is completed, the patient is sent to the Evaluation Area, where the treatment selections are either approved or rejected.

ANTIBIOTIC PROPHYLAXIS

Prophylaxis against IE is reasonable before dental procedures that involve manipulation of gingival tissue or the periapical region of teeth, or perforation of the oral mucosa.*

***Antibiotic prophylaxis is NOT recommended for the following dental procedures or events:** routine anesthetic injections through noninfected tissue; taking dental radiographs; placement of removable prosthodontic or orthodontic appliances; adjustment of orthodontic appliances; placement of orthodontic brackets; and shedding of deciduous teeth and bleeding from trauma to the lips or oral mucosa.

Antibiotic Prophylactic Regimens for Dental Procedures

Situation	Agent	Regimen—Single Dose 30-60 minutes before procedure	
		Adults	Children
Oral	Amoxicillin	2 g	50 mg/kg
Unable to take oral medication	Ampicillin **OR**	2 g IM or IV*	50 mg/kg IM or IV
	Cefazolin or ceftriaxone	1 g IM or IV	50 mg/kg IM or IV
Allergic to penicillins or ampicillin—Oral regimen	Cephalexin**†	2 g	50 mg/kg
	OR		
	Clindamycin	600 mg	20 mg/kg
	OR		
	Azithromycin or clarithromycin	500 mg	15 mg/kg
Allergic to penicillins or ampicillin and unable to take oral medication	Cefazolin or ceftriaxone†	1 g IM or IV	50 mg/kg IM or IV
	OR Clindamycin	600 mg IM or IV	20 mg/kg IM or IV

*IM—intramuscular; IV—intravenous

**Or other first or second generation oral cephalosporin in equivalent adult or pediatric dosage.

†Cephalosporins should not be used in an individual with a history of anaphylaxis, angioedema or urticaria with penicillins or ampicillin.

Gastrointestinal/Genitourinary Procedures: There is no evidence for IE prophylaxis in GI or GU procedures absent known enterococcal infection.

Other Procedures: procedures involving the respiratory tract or infected skin, tissues just under the skin, or musculoskeletal tissue for which prophylaxis is reasonable are discussed in the document referenced below.

Adapted from *Prevention of Infective Endocarditis: Guidelines From the American Heart Association,* by the Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease. *Circulation,* 2007; 116: 1736-1754. Accessible at http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.106.183095.

Healthcare Professionals – Please refer to these recommendations for more complete information as to which patients and which dental procedures it would be reasonable for antibiotic prophylaxis to reduce risk of infective endocarditis.

Antibiotic prophylaxis with dental procedures is reasonable for patients with cardiac conditions associated with the highest risk of adverse outcomes from endocarditis, including:

- Prosthetic cardiac valves, including transcatheter-implanted prostheses and homografts
- Prosthetic material used for cardiac valve repair, such as annuloplasty rings and chords
- Previous endocarditis
- Congenital heart disease (CHD) only in the following categories:*
  - –Unrepaired cyanotic CHD, including those with palliative shunts and conduits
  - –Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or catheter intervention, during the first six months after the procedure†
  - –Repaired CHD with residual shunts or valvular regurgitation at the site or adjacent to the site of a prosthetic patch or prosthetic device (which inhibit endothelialization)
- Cardiac transplantation recipients with valve regurgitation due to a structurally abnormal valve

*Except for the conditions listed above, antibiotic prophylaxis before dental procedures is not recommended for any other form of CHD.

†Prophylaxis is reasonable because endothelialization of prosthetic material occurs within six months after the procedure.

American Heart Association | American Stroke Association.

life is why*

National Center
7272 Greenville Avenue
Dallas, Texas 75231-4596
www.heart.org

The Council on Scientific Affairs of the American Dental Association has approved this statement as it relates to dentistry.

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ANESTHETIC DURATION PROFILE

Anesthetic Duration Profile

SHORT DURATION PLAIN	BRAND NAME	DOSE PER CART	MAX DOSE	MAX # CART 150+LBS	MAX # CART 110 LBS
Lidocaine, Plain 2%	Xylocaine	36 mg	300 mg 4.5 mg/kg 2.0 mg/lb	8 (6)*	6 (4)*
Mepivacaine, Plain 3%	Carbocaine Isocaine 3% Polocaine Scandonest 3% Mepivacaine 3%	54 mg	400 mg 6.6 mg/kg 3.0 mg/lb	7 (5)*	6 (4)*
Prilocaine, Plain 4%	Citanest Plain	72 mg	600 mg 8.0 mg/kg 3.6 mg/lb	8 (6)*	5.5 (3.5)*
INTERMEDIATE DURATION WITH VASOCONSTRICTOR	**BRAND NAME**	**DOSE PER CART**	**MAX DOSE**	**MAX # CART 150+LBS**	**MAX # CART 110 LBS**
Articaine w/ Epi, 4% 1:100,000	Septocaine w/ Epi 1:100,000 Zorocaine	68 mg	7.0 mg/kg 3.2 mg/lb	7 (5)*	5 (3)*
Articaine w/ Epi, 4% 1:200,000	Septocaine w/ Epi 1:200,000	68 mg	7.0 mg/kg 3.2 mg/lb	7 (5)*	5 (3)*
Lidocaine w/ Epi, 2% 1:100,000	Lidocaine 2% w/ Epi 1:100,000 Lignospan Stand Octocaine 100 Xylocaine	36 mg	500 mg 7.0 mg/kg 3.2 mg/lb	13.5 (11.5)*	9.5 (7.5)*
Lidocaine w/ Epi, 2% 1:50,000	Lidocaine Lignospan Forte Octocaine 50 Xylocaine	36 Mg	7 cartridges .1 cart/kg .045 cart/lb	7 (5)*	5 (3)*
Mepivacaine w/ Levonordefrin 2% 1:20,000	Carbocaine 2% w/ Neo-Cobefrin 1:20,000 Isocaine 2% Scandonest 2% L	36 mg	400 mg 6.6 mg/kg 3.0 mg/lb	11 (9)*	9 (7)*
Prilocaine w/ Epi, 4% 1:200,000	Citanest Forte	72 mg	600 mg 8.0 mg/kg 3.6 mg/lb	8 (6)*	5.5 (3.5)*
LONG DURATION WITH VASOCONSTRICTOR	**BRAND NAME**	**DOSE PER CART**	**MAX DOSE**	**MAX # CART 150+LBS**	**MAX # CART 110 LBS**
Bupivacaine w/ Epi, 0.5% 1:200,000	Marcaine Vivacaine Bupivacaine 0.05%	9 mg	90 mg	10 (8)*	7 (5)*

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***Maximum # of Cartridges allowed by SRTA in Parentheses for patient**

INSTRUMENTS

The candidate's performance will not be evaluated without the proper instruments. Sonic/ultrasonic instruments are permissible for scaling, but they may not be available at the examination site (check with the examination site). If the candidate elects to provide their own unit, they must check with the examination site about appropriate connection mechanisms. Air-abrasive polishers are **not** permissible.

An instrument box or tray containing the following items must be sent with the patient:

- Completed Medical History Form
- Signed Patient Consent Form
- Periodontal Progress Form
- Properly mounted radiographs
- Cubicle card
- Instruments
    - 11/12 explorer
    - Clear mirror (unscratched, not tinted, non-disposable)
- Napkin, fluid resistant side down with Candidate ID Label

TREATMENT SELECTION

The candidate's treatment selection must include the proper number of teeth, adequate deposits of calculus and appropriate pocket depths as defined below:

- **Teeth**. There must be at least six and not more than eight permanent teeth selected, at least three of which are molars or premolars, including at least one molar. All posterior teeth must have at least one approximating tooth surface within 2.0 mm distance. Each of the selected teeth must have at least one surface of subgingival calculus selected for removal.
- **Calculus**. There must be exactly 12 surfaces of explorer-detectable subgingival calculus identified on the selected teeth, and no more than four surfaces may be on the incisors. Three of the 12 identified surfaces of calculus must be on interproximal surfaces of posterior teeth, i.e., molars and/or premolars.
    - Explorer detectable subgingival calculus is defined as a distinct deposit of calculus that can be felt with an explorer as it passes over the calculus. Qualified deposits may exhibit such characteristics as:
        - A definite "jump" or "bump" felt by the explorer, with the rough surface characteristic of calculus
        - Ledges or ring formations
        - Spiny or nodular formations
    - Qualified deposits must be apical to the gingival margin and may occur with or without associated supragingival deposits.
- **Exclusions.** Patients with full-banded orthodontics are **not** acceptable. Implants or teeth with any fixed appliance – banded, bonded or splinted, either orthodontically or periodontally – may **not** be included in the treatment selection. No retained primary teeth may be included in the treatment selection.
- If during the initial evaluation, the examiners confirm that four or more of the twelve surfaces of explorer detectable subgingival calculus are not present; this section of the examination is stopped as the candidate cannot successfully complete the examination. Thus, eliminating unnecessary patient treatment.

Candidates may use the Treatment Selection Worksheet (available at www.srta.org) to identify and document a selection of the patient's teeth that meet these criteria. Please refer to Examination Forms, Periodontal Treatment Selection Worksheet for more information.

Scaling: After the candidate performs the periodontal procedure, the subgingival surfaces of the assigned teeth must be smooth, with no deposits detectable with an explorer. Air may be used to deflect the tissue to locate areas for tactile confirmation. (All subgingival surfaces on an assigned tooth must be scaled, but only the selected surfaces will be evaluated.)

Supragingival deposits (polishing): All supragingival calculus, plaque and stain must be removed from **all coronal surfaces** of the assigned teeth so that all surfaces are visually clean when air-dried and tactilely smooth upon examination with an explorer. The use of disclosing solution is **not** permitted.

PROCEDURE & PATIENT MANAGEMENT GUIDELINES

1. The patient must be informed that they will be participating in an examination and that additional treatment may be required to meet his/her oral health needs.
2. Two patients may be presented for the Periodontal Section. If the first patient submitted is found to not to be acceptable due to examination protocols, guidelines or requirements, a back-up patient may be presented. If the patient is otherwise acceptable but there has been a correctable paperwork error, the candidate may be allowed to correct those errors and re-submit that patient for approval. In all circumstances the candidate must have their patients presented and approved for treatment BEFORE proceeding further with the examination. Treatment on a patient without documented approval by a Clinic Floor Coordinator (CFC) is a violation of examination protocol and may subject the candidate to dismissal from the examination.
3. The candidate must accurately transfer the information from the Treatment Selection Worksheet to the Periodontal Evaluation Form (available on the SRTA website until 2 weeks prior to the exam) to indicate their treatment selection. The teeth should be listed in ascending order, and the surfaces to be treated should be indicated in the smaller box to the right on the form. See Forms section.
4. The Periodontal Progress Form will be provided at the examination site. When the candidate receives the Progress Form, they should place a candidate identification label on the form and enter his/her cubicle number.
5. The procedures, instruments and materials used are the choice of the candidate, as long as they are currently accepted and taught by accredited dental schools and the candidate has been trained in their use. It is the responsibility of the candidate to provide the instruments used in this examination and listed in this Candidate Manual, unless such instruments are furnished by the school.
6. If the candidate is scheduled to perform the periodontal procedure as the first procedure of the day, they may call over a CFC as early as 7:00 a.m. to check the Medical History Form, Patient Consent Form (including the *anesthetic record* section), radiographs and confirm the patient's blood pressure was taken that day. At 8:00 a.m. the patient may be sent to the Evaluation Area for patient check-in/case acceptance. If the Periodontal Section is not the candidate's first procedure of the day, the candidate may begin the periodontal procedure after both the Class II and Class III restorative procedures are completed.

7. If any problems arise during the examination, the candidate should immediately notify a CFC. The CFC is also present to aid in any emergencies that may occur.
8. Candidates must complete the anesthesia portion on the Progress Form whether or not anesthesia is to be used. If the patient is too sensitive to withstand the use of a periodontal probe or explorer during patient check-in, the candidate must request authorization from a CFC to anesthetize the patient prior to patient check-in.
9. When the patient is sent to the Evaluation Area for patient check-in, they will first sign in with the Dental Administrator. Patients will be evaluated for case acceptance in the order in which they are signed in. Patients must take the required forms and instruments with them to the Evaluation Area. Only the patient may carry the tray to the Evaluation Area.
10. The Dental Administrator will indicate a Finish Treatment Time on the Periodontal Progress Form. The approximate total time for the Periodontal Section is about 3 hours. The patient treatment time is a maximum of 1 ½ hours and minimum of 45 minutes. Candidates must check their patient in for pre-treatment approval by 3:45pm and be checked out of the evaluation area by 4:15pm to receive a treatment time of 45 minutes prior to the end of the examination day. When the patient returns from the Evaluation Area, treatment should begin. Treatment continues until it is completed or until the Finish Time, as noted on the Periodontal Progress Form. If candidates finish the patient treatment before their assigned Finish Time, they may sign-in the patient with the Dental Administrator for evaluation. The candidate must scale all subgingival surfaces on the six to eight selected teeth, but only the 12 selected surfaces chosen by the candidate will be evaluated. Supragingival calculus, plaque and stain must be removed from all surfaces of the selected teeth. No other teeth may be scaled or polished during the examination, and once the examination is completed, the patient must be dismissed.
11. The patient must be signed in with the Dental Administrator for evaluation at the Evaluation Area by the recorded Finish Time.
12. For the treatment evaluation, the candidate must send the patient, wearing a clean napkin with candidate ID label on it, to the Evaluation Area.
13. The examiners will evaluate tissue management and subgingival calculus removal from the selected tooth surfaces and evaluate supragingival calculus, stain and plaque removal from all surfaces on the selected teeth.
14. When the patient returns from the Evaluation Area, the candidate may dismiss the patient, unless directed to do otherwise. The candidate must clean the clinic area following accepted infection control procedures.

PERIODONTAL CRITERIA

PERIODONTAL EXAMINATION: PATIENT SELECTION CRITERIA

TREATMENT GOALS

1. The Patient Consent Form, Medical History, Post-Operative Care, and Progress Form are complete, accurate and current.
2. Both systolic and diastolic blood pressure are less than or equal to 159/94, or systolic and diastolic blood pressure are between 160/95 and 179/109 **with** a written medical clearance on physician's letterhead authorizing treatment during the examination.
3. Radiographs are of diagnostic quality and reflect the current clinical condition of the mouth. Panoramic or complete set have been exposed within the past three years. Radiographs are properly mounted and labeled with exposure date and patient's name.
4. The Calculus Detection portion of the Periodontal Evaluation Form is properly completed, indicating:
    a. Six to eight teeth selected, each with at least one surface of calculus charted
    b. At least three posteriors (molars, premolars), including at least one molar, in the selection. All posterior teeth must have at least one approximating tooth within 2.0 mm distance.
    c. Exactly 12 surfaces of subgingival calculus charted, including at least three surfaces of interproximal calculus on molars/premolars
    d. At least eight of the surfaces on canines, premolars or molars (no more than four surfaces on incisors)

PERIODONTAL EXAMINATION: TISSUE & TREATMENT MANAGEMENT CRITERIA

TREATMENT GOALS

1. The patient has adequate anesthesia for pain control, is comfortable and demonstrates no evidence of distress or pain.
2. Instruments, polishing cups or brushes and dental floss are effectively utilized so that no unwarranted soft or hard tissue trauma occurs as a result of the scaling and polishing procedures.
3. All calculus has been removed from the candidate's 12 selected surfaces. No Plaque and/or stain remain on those 12 surfaces.

SCORING CRITERIA

Acceptable
1. There is minor soft tissue trauma that is inconsistent with the procedure. Soft tissue trauma may include, but is not limited to, abrasions, lacerations or ultrasonic burns. 2. There is minor hard tissue trauma that is inconsistent with the procedure. Hard tissue trauma may include root surface abrasions that do not require additional definitive treatment. 3. Calculus remaining on 3 or less surfaces with no plaque and/or stain remaining on those selected surfaces.
Unacceptable
1. There is major damage to the soft and/or hard tissue that is inconsistent with the procedure and preexisting condition which may require additional evaluation, intervention or definitive treatment as a result of the damage. This damage may include, but is not limited to, such trauma as: • Amputated papillae • Exposure of the alveolar process • A laceration or damage that requires suturing and/or periodontal packing • One or more ultrasonic burns that require follow up treatment • A broken instrument tip in the sulcus or soft tissue 2. There is major hard tissue trauma that is inconsistent with the procedure such as: • Root surface abrasion that requires additional treatment • Exposure of bone that requires further treatment 3. Calculus remaining on 4 or more surfaces and plaque and/or stain is remaining on those selected surfaces.

V. EXAMINATION SCHEDULE

PIE I EXAMINATION SCHEDULE

All clinics will be open at 6:00AM so setup may begin.

DAY ONE	Registration and Orientation **4:00PM** or time designated by host examination site		
DAY TWO	**START**	**FINISH**	**PROCEDURE**
	7:00AM	8:00AM	Check-in, distribution of typodonts, set up cubicle, measure tooth, call for CFC
	8:00AM	11:00AM	Endodontic Procedures
	11:15AM	3:15PM	Fixed Prosthodontic Procedures

DAY ONE – REGISTRATION & ORIENTATION
Candidates will receive instructions on the location and time of registration and orientation. During this time, candidates will register for the PIE I Examination and then proceed to the orientation.

For registration, candidates must present one form of government-issued photo identification (e.g.: Military ID, Driver's License, State-Issued ID, or School ID). Candidates will receive a white envelope that contains the following: peel-off ID labels, two (2) cubicle cards, badge, and progress forms. Candidates must keep the white envelopes and turn them in at the end of the examination. Orientation will begin after registration and will last approximately 45 minutes. Orientation will deal strictly with manikin-based procedures and will cover the following information:

- Examination schedule
- Equipment troubleshooting
- Scoring and forms
- Helpful examination hints
- How to avoid the most common examination errors

DAY TWO – ENDODONTICS & FIXED PROSTHODONTICS PROCEDURES
Both examination sections are administered together on the same manikin head. All procedures will be performed as if the manikin were a live patient. The manikin head and facial shroud must be maintained in an acceptable operating position, and the candidate must follow all appropriate infection control procedures. If a candidate is retaking **only** the Endodontics Section they will have 3 hours to complete treatment. If a candidate is retaking **only** the Fixed Prosthodontics Section they will have 4 hours to complete treatment.

6:00AM – Candidates can begin setting up their unit when clinics open.

7:00AM – Typodonts are distributed to candidates. Candidates must present their candidate ID card to receive typodont. Clinic Floor Coordinator (CFC) must verify that the tooth for the endodontics instrumentation and obturation has been measured and secured in the typodont. This should be done prior to putting the typodont on the manikin head.

8:00AM– The endodontics procedures will begin for all candidates. There is no extension of time due to starting treatment after 8:00AM. Teeth may not be removed or disassembled from the typodont or manikin head without permission from a CFC. Candidates have until 11:00 AM to finish the all endodontic procedures. When the endodontic procedures are complete, the candidate will call for a CFC. The CFC will remove the two sextants containing the exam teeth, place them in a poly bag with candidate's ID label and send it to the Evaluation Area to be examined. The CFC will replace the two endodontic sextants with new sextants for full dentition for the Fixed Prosthodontics procedures.

If candidates finish the endodontics procedures prior to 11:00AM, and want to begin the Fixed Prosthodontics procedures, they must get permission from the CFC. If given permission, candidate will still only have four hours to complete Fixed Prosthodontic Procedures.

11:15AM – The fixed prosthodontic procedures will begin. When the fixed prosthodontic procedures are complete, the candidate will contact a CFC. The candidate along with the typodont and properly completed progress form must be in line at the collection area no later than 3:15PM. <u>All treatment must stop at 3:15PM.</u>

**** Sextants arriving in the Evaluation Area after the designated cutoff time will not be scored, and the candidate will fail that section of the examination.**

CHECK OUT PROCESS

Upon completion of the Endodontics and Fixed Prosthodontics examinations, candidates must personally submit all examination packets to the CFC. The following items **must be submitted in the provided white envelope and accounted for prior to dismissal from the examination site:**

- Completed Endo/Pros Progress Forms
- Candidate's photo ID card
- Cubicle cards (2)

PIE II & TRADITIONAL EXAMINATION SCHEDULE

All clinics will be open at 6:00AM so setup may begin.

DAY ONE	Registration and Orientation **3:30PM** or time designated by host examination site		
DAY TWO & THREE	**MANIKIN ENDODONTIC/PROSTHODONTIC SCHEDULE**		
	START	**FINISH**	**PROCEDURE**
	7:00AM	8:00AM	Check-in, distribution of typodonts, set up cubicle, call for CFC to measure endo tooth.
	8:00AM	11:00AM	Candidates doing Endodontic Procedures have 3 hours.
	11:15AM	3:15PM	Candidates doing Fixed Prosthodontic Procedures have 4 hours.
	MANIKIN RESTORATIVE AND PERIODONTAL PATIENT-BASED SCHEDULE		
	START	**FINISH**	**PROCEDURE**
	7:00AM	8:00AM	Depending on assignments, candidates will either start the Periodontal Section or the Manikin Restorative Section. Candidates can secure their typodonts from the DA and mount them in their units. Candidates can then receive approval from a CFE for set up and 8:00AM start time. Candidates taking the Periodontal Section can input their surface selection at the Administrator's Desk if they did not do so online.
	8:00AM	11:00AM	Candidates only doing the Periodontal Section. Candidates have 1.5 hours from the time their patient is approved.
	*8:00AM	3:00PM	Candidates doing only the Restorative Section have 7 hours.
	*8:00AM	5:00PM	Candidates doing both the Restorative and Periodontal Section have 9 hours. For periodontal, candidates have 1.5** hours from the time their patient is approved.

* PIE Candidates will be assigned 7 hours on Day Two or Day Three, for the Restoration section. If taking periodontal, candidates will have 9 hours.

**Maximum treatment time of 1 hour 30 minutes and minimum 45 minutes.

SRTA reserves the right to amend the schedule for PIE I, PIE II, and Traditional Exams as needed. All candidates should remain on site during the examination. All scheduled times as listed

could be moved earlier if conditions exist to do so and all candidates permit this by means of vote.

DAY ONE – REGISTRATION & ORIENTATION

Candidates will receive instructions on the location and time of registration and orientation. During this time, candidates will register for the PIE II and Traditional Examination and then proceed to the orientation.

For registration, candidates must present one form of government-issued photo identification (e.g.: Military ID, Driver's License, State-Issued ID, or School ID). Candidates will receive a white envelope which has peel-off ID labels, two (2) cubicle cards, badge, and progress forms. Candidates must keep the white envelopes and turn them in at the end of the examination. Orientation will begin after registration and will last approximately 45 minutes. Orientation will deal with patient-based and manikin-based procedures. It also will cover the following information:

- Examination schedule
- Equipment troubleshooting
- Scoring and forms
- Helpful examination hints
- How to avoid the most common examination errors

DAY TWO/THREE – PIE II & TRADITIONAL EXAMINATION

Any treatment procedure that is approved must be completed on the same day before the designated cutoff time. Time management is the candidate's responsibility.

All patients must report to the Evaluation Area no later than the designated cutoff time for each day of the examination. All typodonts must be submitted by the designated cutoff time on the day the procedure was initiated. Any procedure submitted to the Evaluation Area after the designated cutoff time will not be scored, and the candidate will fail that section of the examination. One examiner will evaluate the Periodontal procedure to determine that proper treatment has been provided.

Candidates found treating patients or with patients in the clinic after the designated cutoff time will fail that section of the examination.

The allocated period for patient treatment includes the time the patient(s) may spend at the Evaluation Area for approval or evaluation of the Periodontal procedure. On average, patients are away for scoring for 15 to 60 minutes, depending on the backlog of patients. Candidates should be aware of conditions and plan accordingly when scheduling patients.

CHECK OUT PROCESS

Upon completion of all manikin-based and patient- based examinations, candidates must personally submit all examination packets to the CFC. The following items **must be submitted in the provided white envelope and accounted for prior to dismissal from the examination site:**

- The **Full mouth series** of radiographs for the Periodontal Section need not be submitted unless requested by an examiner. (If the examination site requires that radiographs be retained in the patient record, the candidate may submit duplicates of periodontal radiographs.) At sites where digital images are displayed on a monitor, an electronic copy of the digital images used must be submitted on a disk to the testing agency.

- Completed Progress Forms
- Photo ID card for candidate, chairside assistant and interpreter (if utilized) Periodontal Examination
- Patient Consent Form(s) Periodontal Examination
- Medical History Form(s) Periodontal Examination
- Incident Disclaimer Periodontal Examination
- Cubicle cards (2)

Note: Any one validated unacceptable criteria recorded in either anterior restorative, posterior restorative, or periodontal will result in a failure of that section only.

SECTIONAL EXAMINATION SCHEDULE

Note to candidates taking PIE: If a candidate has previously taken the PIE I (manikin-based) sections and needs to retake one or both sections, they can apply for a sectional examination at the site where they plan to take PIE II (Manikin-Based Restorative procedures). The candidate will be assigned an additional 3 hours if retaking only the Endodontic section or 4 hours if retaking only the Fixed Prosthodontics section or 7 hours for both sections.

Candidates will be scheduled on Friday (Day Two) and/or Saturday (Day Three) according to which sections they are taking, the number of sections and the availability of operatory space.

Candidates scheduled for re-examination(s) must register with the Clinic Floor Coordinator the day of their exam if they did not attend orientation.

CHECKLIST

- ☐ Read the entire Candidate Manual for the SRTA Dental Examination Series.

REGISTRATION

- ☐ Complete the online registration by following the instructions in Application Process Section of this manual.

TAKE TO THE CLINICAL EXAMINATION SITE AND REGISTRATION/ORIENTATION

- ☐ One form of identification, with your signature and photograph.
  Acceptable forms of ID include valid current driver's license, passport, military ID, school and employee ID. An out-of-date driver's license is not considered a valid ID for this purpose.
- ☐ Assigned examination site, time and candidate number, available for printing from your SRTA online profile under the *Apply* tab.
- ☐ A ballpoint pen to be used on the Progress Forms
- ☐ Two #2 lead pencils
- ☐ All necessary materials and instruments
- ☐ SRTA Candidate Manual

PERIODONTAL PATIENTS

- ☐ Complete appropriate SRTA forms for the patient.
- ☐ Ensure that the patient meets the SRTA requirements as published in this Candidate Manual.
- ☐ Bring all necessary radiographs to the examination site.
- ☐ Review all the criteria that are to be evaluated in the clinical section of the Periodontal examination.
- ☐ Inform the patient that this exercise is not a complete oral care treatment.
- ☐ Ensure that a back-up patient(s) is/are available if needed.

VI. EXAMINATION FORMS

Forms to be completed before the examination: Post-Operative Care Agreement, Periodontal Scaling Treatment Selection Worksheet, Patient Consent, Disclosure and Assumption of Liability (Patient Consent Form), and Medical History

Candidates can find these forms on their SRTA website, www.srta.org, or by logging into their profile.

Forms to be completed at the examination: Progress Forms, Modification Form, and Instructions to Candidate Form (ITC)

These forms will be distributed to candidates at the examination site. These forms may not be removed from the examining area and may not be reviewed by unauthorized

POST-OPERATIVE CARE AGREEMENT

This form is completed by the patient and candidate. If additional care is needed as a result of the work performed during the examination, the patient indicates who they will contact for any follow-up care. The patient receives one copy of this form and the candidate will turn in one copy to the CFC when they sign off on the medical history, and the candidate will submit one copy in their candidate packet at the end of the examination.

SRTA | Post-Operative Care Agreement

A separate form must be completed for each patient treated during the examination.

PLACE ID LABEL HERE

Candidate Information
Candidate Seq. Number: _____
Examination Site: _____
Examination Date: _____

Procedure
☐ Restorative
☐ Periodontal

Patient Information
Name (Print): _____ Address: _____
Today's Date: _____ City, State, Zip Code: _____

The SRTA Examination is the process for determining if a Dentist/Dental Hygienist has the minimal practical skills necessary to obtain a license to practice Dentistry/Dental Hygiene; therefore, no guarantee can be made that the work performed will be adequate. If you feel you may need additional care as a result of the work performed during the examination, you should visit a licensed Dentist/Dental Hygienist. You may visit a Dentist/Dental Hygienist of your choosing or you may use the referral listed below. (Note to Candidate: Please complete only one of the sections – A, B, or C – listed in item I. A signature is required under item II – Patient Acceptance.)

I. Acceptance of Responsibility for Post-Operative Care

☐ A. The patient is a "patient of record" at the Dental School and will provide post-operative care as necessary according to the guidelines of the School of Dentistry/Dental Hygiene.

_____ _____
Signature of Authorized School Official Date

☐ B. This is to confirm my willingness to provider any post-operative care required related to treatment rendered on the SRTA dentistry/dental hygiene examination. It is understood that this agreement expires sixty days following the examination.

_____ _____ _____
Name License # Telephone #

_____ _____
Address City, State, Zip Code

_____ _____
Signature of Provider Date

☐ C. I will choose my own Dentist/Dental Hygienist if post-operative care is necessary.

_____ _____
Name of Provider Date

Reason for Post-Operative Care: _____

II. Patient Acceptance – I understand and agree to the following:

- Additional treatment related to services rendered during this examination may be required.
- Post-operative arrangements specified above.
- There may be a fee involved in the post-operative care and I hereby release SRTA and associated testing agencies, and the School of Dentistry/Dental Hygiene, where the examination was held from any financial obligation.
- The provider listed above has no obligation to provide care if not initiated within sixty (60) days of the examination.

_____ _____ _____
Patient Signature Date Patient Telephone #

_____ _____ _____
Legal guardian or Parent Signature (If patient is minor) Date CFC Pin

This form has an Generation and Signature. Submit the Original and Copy #1.

Agency – Original Examination Site – Copy #1 Patient – Copy #2 Candidate – Copy #3 Provider – Copy #4

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PATIENT CONSENT, DISCLOSURE, & ASSUMPTION OF LIABILITY (PATIENT CONSENT FORM)

SRTA | Patient Consent, Disclosure, & Assumption of Responsibility

PLACE ID LABEL HERE

☐ Posterior Amalgam Prep & Restoration ☐ Posterior Composite Prep & Restoration
☐ Anterior Composite Prep & Restoration ☐ Periodontal Treatment

Acknowledgment
I understand the following:

- the Candidate may not be a licensed dentist. (Cross through this line if the Candidate is a licensed dentist.)
- any arrangements between the Candidate and me regarding my serving as a patient (including any financial arrangements) are solely between the Candidate and me, and do not involve the testing agency in any way.
- the testing agency has no knowledge of the Candidate's skill or competence, and makes no promises about them.
- the testing agency has no duty to, and will not, notify me of inadequate work done by the Candidate during the Examination.
- it is my responsibility to have any and all dental work performed by the Candidate checked by a licensed dentist to determine that it is satisfactory.

Disclosure of Risks
The Candidate has explained to me the risks involved in the procedures the Candidate will perform on me. The nature and purpose of the dental procedure(s), as well as the risks and possible complications, have been explained to me to my satisfaction by the Candidate. My questions with regard to the dental procedure(s) have been answered.

Adequacy of Treatment
I understand that the treatment provided during the Examination does not necessarily fulfill all my oral health needs, may not be performed correctly, or may not represent my entire treatment plan, and that further treatment may be necessary. I have been informed of the availability of services to complete treatment.

Authorization of Disclosure of Medical Information
I recognize that medical information which could be pertinent to the oral health care I receive in the course of the Examination may be communicated to the testing agency, their examiners, the staff and clinicians of the dental school where the Examination is located, and any other medical professionals when deemed medically necessary, or when necessary for the administration for the Examination. I authorize this disclosure. This authorization specifically includes the disclosure of radiographs (X-rays), and information about my current medical and dental condition and my prior medical and dental history.

Medical Condition and Medications
I have fully disclosed my current medical conditions and medical history to the best of my knowledge. I understand that if I am taking medications that are associated with certain dental conditions, I may not be accepted as a patient for the Examination. I have fully disclosed all medications that I am currently taking. I have been informed that patients who are taking bisphosphonate medications may be at risk of osteonecrosis of the jaw after dental treatment or as a result of dental infections. I understand that neither the testing agency nor the school assumes any responsibility or liability regarding the health status of patients or candidates. As neither the candidate nor patient is considered an employee of the testing agency or school, OSHA regulations do not apply. If an exposure to blood borne agents such as HIV or hepatitis or other infectious conditions occurs, it is not the responsibility of the testing agency or school to provide serologic testing, counseling, follow up care or any other health service.

Consent to X-Rays and Photographs
I consent to the taking of appropriate intraoral films (X-rays) and the examination of my teeth gums. I also consent to having testing agency examiners or the staff and clinicians of the dental school take photographs of my teeth and gums for use in future examinations, provided that my name is not in any way associated with the photographs or X-rays.

Anesthesia
I understand that as part of the dental procedure(s), it may be necessary to administer local anesthetics and I consent to the use of anesthetics by the Candidate.

Agreement
I release the SRTA, participating dental schools, and their employees and/or agents from any and all responsibility or liability of any nature whatsoever for third acts, and any acts of the Candidate (including negligence), which occur during the course of this Examination, and any damages or injuries I may suffer as a result of my participation in the Examination.

I verify that I am not a dentist (licensed or unlicensed), a dental student in the 3rd or 4th or final year of dental school, or a dental hygiene student in the final year of school.

By my signature below, I verify that I have read and fully understood the above information, and I agree to the terms of this agreement.

Patient Signature _____ Date _____

Candidate Sequential Number & Initials _____ Date _____

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Candidates must review the double-sided Patient Consent Form with their patients and submit a signed copy on the day of the examination. This form will be reviewed by examiners during the procedure; therefore, candidates **should initial – but not sign –** the form before in order to preserve anonymity. Patients should sign with their full signature.

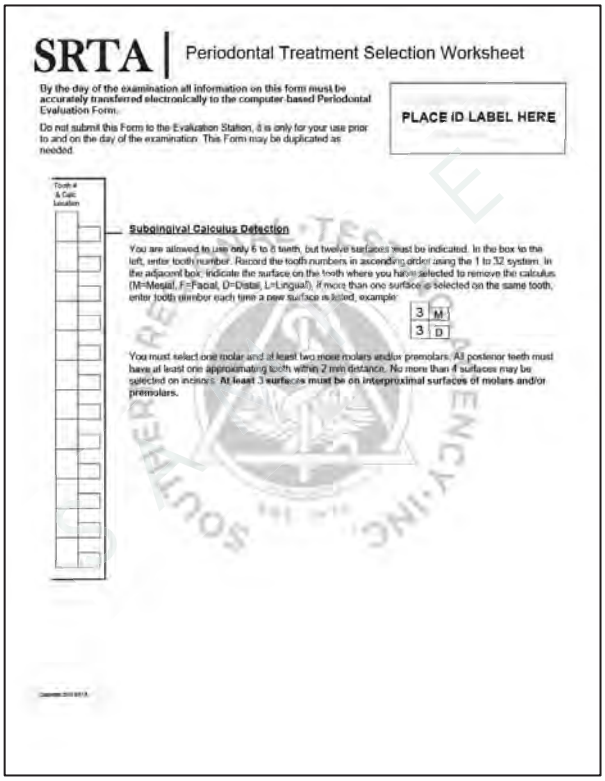
PERIODONTAL TREATMENT SELECTION WORKSHEET

The Periodontal Treatment Selection Worksheet is a practice form that candidates may use to identify the teeth they will treat during the Periodontal Clinical Examination Section.

The Periodontal Scaling Treatment Selection Worksheet does not need to be with the Patient when submitting them to the Evaluation Area.

To earn an *Acceptable* rating for patient selection on the Periodontal Section, the candidate must identify a selection of teeth that meet these criteria:

- Six to eight teeth selected, each with at least one surface of calculus charted
- At least three posteriors (molars, premolars), including at least one molar, in the selection
- All posterior teeth must have at least one approximating tooth within 2 mm distance



SRTA | Periodontal Treatment Selection Worksheet

By the day of the examination all information on this form must be accurately transferred electronically to the computer based Periodontal Evaluation Form.

Do not submit this Form to the Evaluation Station, it is only for your use prior to and on the day of the examination. This Form may be duplicated as needed.

PLACE ID LABEL HERE

Tooth # & Calc Location

Subgingival Calculus Detection

You are allowed to use only 6 to 8 teeth, but twelve surfaces must be indicated. In the box to the left, enter tooth number. Record the tooth numbers in ascending order using the 1 to 32 system. In the adjacent box, indicate the surface on the tooth where you have selected to remove the calculus (M=Mesial, F=Facial, D=Distal, L=Lingual). If more than one surface is selected on the same tooth, enter tooth number each time a new surface is listed, example:

3	M
3	D

You must select one molar and at least two more molars and/or premolars. All posterior teeth must have at least one approximating tooth within 2 mm distance. No more than 4 surfaces may be selected on incisors. At least 3 surfaces must be on interproximal surfaces of molars and/or premolars.

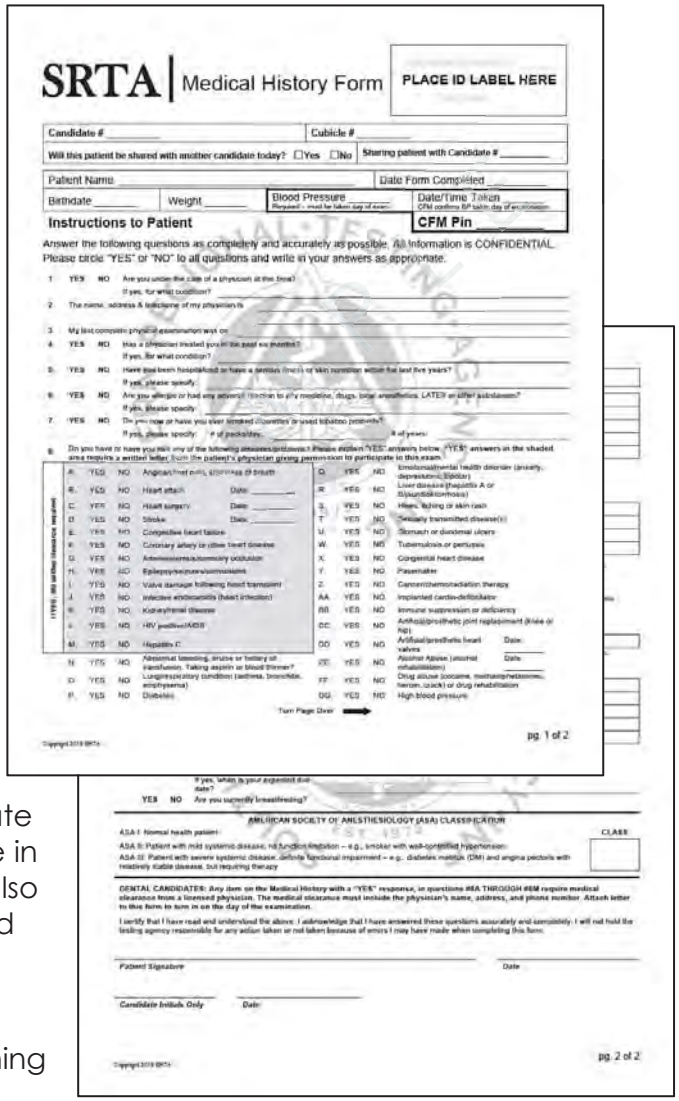
- Exactly 12 surfaces of subgingival calculus charted, including at least three surfaces of interproximal calculus on molars/premolars
- At least eight of the surfaces on canines, premolars or molars (no more than four surfaces on incisors)

To enter the treatment selection on the Periodontal scaling Evaluation Form, candidates log into their profile at https://srta.brighttrac.com and follow the online instructions. Access to the Electronic Periodontal Evaluation Form is closed 2 weeks prior to the exam date at all given examination sites, to allow uploading of the information prior to the examination. However, a computer will be available at the Evaluation Area to enter the periodontal treatment selection on the day of the examination. In order to reduce lost time on the day of the examination, it is highly recommended that this step is **completed prior** to the day of the examination.

Candidates may use the paper Periodontal Scaling Treatment Selection Worksheet to identify and list the selected teeth, and then transfer their responses online from the Worksheet onto the Computerized Periodontal Evaluation Form.

MEDICAL HISTORY FORM

The candidate must complete a Medical History Form for each patient participating in the examination. The Medical History Form should be completed prior to the examination and will be reviewed by the Clinic Floor Coordinator (CFC) prior to patient check-in. If the patient will be treated by more than one candidate, each candidate must submit a separate Medical History Form.


SRTA | Medical History Form

PLACE ID LABEL HERE

Candidate # _____ Cubicle # _____

Will this patient be shared with another candidate today? ☐Yes ☐No Sharing patient with Candidate # _____

Patient Name _____ Date Form Completed _____

Birthdate _____ Weight _____ Blood Pressure _____ Date/Time Taken _____

Instructions to Patient

CFM Pin _____

Answer the following questions as completely and accurately as possible. All information is CONFIDENTIAL. Please circle "YES" or "NO" to all questions and write in your answers as appropriate.

1. YES NO Are you under the care of a physician at this time?
   If yes, for what condition?
2. The name, address & telephone of my physician is
3. My last complete physical examination was on
4. YES NO Has a physician treated you in the past six months?
   If yes, for what condition?
5. YES NO Have you been hospitalized or have a serious illness or skin reaction within the last five years?
   If yes, please specify:
6. YES NO Are you allergic or had any adverse reaction to any medicine, drugs, local anesthetics, LATEX or other substances?
   If yes, please specify:
7. YES NO Do you now or have you ever smoked cigarettes or used tobacco products?
   If yes, please specify: # of packs/day: # of years:
8. Do you have or have you had any of the following ailments/problems? Please circle "YES" answers below. "YES" answers in the shaded area require a written letter from the patient's physician giving permission to participate in this exam.

A.	YES	NO	Angina/chest pain, shortness of breath	Q.	YES	NO	Emotional/mental health disorder (anxiety, depression, bipolar)
B.	YES	NO	Heart attack Date: _____	R.	YES	NO	Liver disease (hepatitis A or B/cirrhosis/cirrhosis)
C.	YES	NO	Heart surgery Date: _____	S.	YES	NO	Hives, itching or skin rash
D.	YES	NO	Stroke Date: _____	T.	YES	NO	Sexually transmitted disease(s)
E.	YES	NO	Congestive heart failure	U.	YES	NO	Stomach or duodenal ulcers
F.	YES	NO	Coronary artery or other heart disease	W.	YES	NO	Tuberculosis or pertussis
G.	YES	NO	Arrhythmia/cardiovascular occlusion	X.	YES	NO	Congenital heart disease
H.	YES	NO	Epilepsy/seizures/convulsions	Y.	YES	NO	Pacemaker
I.	YES	NO	Valve damage following heart transplant	Z.	YES	NO	Cancer/chemo/radiation therapy
J.	YES	NO	Infective endocarditis (heart infection)	AA.	YES	NO	Implanted cardio-defibrillator
K.	YES	NO	Kidney/renal disease	BB.	YES	NO	Immune suppression or deficiency
L.	YES	NO	HIV positive/AIDS	CC.	YES	NO	Artificial joint/prosthetic joint replacement (knee or hip)
M.	YES	NO	Hepatitis C	DD.	YES	NO	Artificial/prosthetic heart valves Date:
N.	YES	NO	Abnormal bleeding, bruise or history of transfusion. Taking aspirin or blood thinner?	EE.	YES	NO	Alcohol Abuse (alcohol rehabilitation) Date:
O.	YES	NO	Lung/respiratory condition (asthma, bronchitis, emphysema)	FF.	YES	NO	Drug abuse (cocaine, methamphetamine, heroin, crack) or drug rehabilitation
P.	YES	NO	Diabetes	GG.	YES	NO	High blood pressure

Turn Page Over

pg. 1 of 2

If yes, what is your expected due date?

YES NO Are you currently breastfeeding?

AMERICAN SOCIETY OF ANESTHESIOLOGY (ASA) CLASSIFICATION

ASA I: Normal health patient

ASA II: Patient with mild systemic disease, no functional limitation – e.g., smoker with well-controlled hypertension

ASA III: Patient with severe systemic disease, definite functional impairment – e.g., diabetes mellitus (DM) and angina pectoris with relatively stable disease, but requiring therapy

CLASS

DENTAL CANDIDATES: Any item on the Medical History with a "YES" response, in questions #6A THROUGH #6M require medical clearance from a licensed physician. The medical clearance must include the physician's name, address, and phone number. Attach letter to this form to turn in on the day of the examination.

I certify that I have read and understood the above. I acknowledge that I have answered these questions accurately and completely. I will not hold the testing agency responsible for any action taken or not taken because of errors I may have made when completing this form.

Patient Signature _____ Date _____

Candidate Initials Only _____ Date: _____

pg. 2 of 2

The patient's blood pressure must be taken on the day of the examination and documented by a CFC. The CFC does not witness the candidate taking the patients' blood pressure and heart rate but must verify and sign-off that it was taken the day of the exam and is on the appropriate form before sending the patient to the Evaluation Area for examiner approval.

If the patient has a medical condition that could affect his/her suitability for treatment, the candidate must obtain a written medical clearance from the patient's physician to indicate that the patient is healthy enough to participate in the examination. The medical clearance must also be submitted on the day of the examination and should meet the following criteria:

- Clearly legible statement from a licensed physician, on official letterhead – containing the physician's legible name, address,

business phone number and an alternate phone number where the physician may be reached on the day of the examination, if a question arises regarding the patient's health. This must be written within 30 days prior to the examination.

- Must contain a positive statement of how the patient should be medically managed.

This form will be reviewed by examiners during the procedure; therefore, candidates **should initial – but not sign –** the form before in order to preserve anonymity. Patients should sign with their full signature.

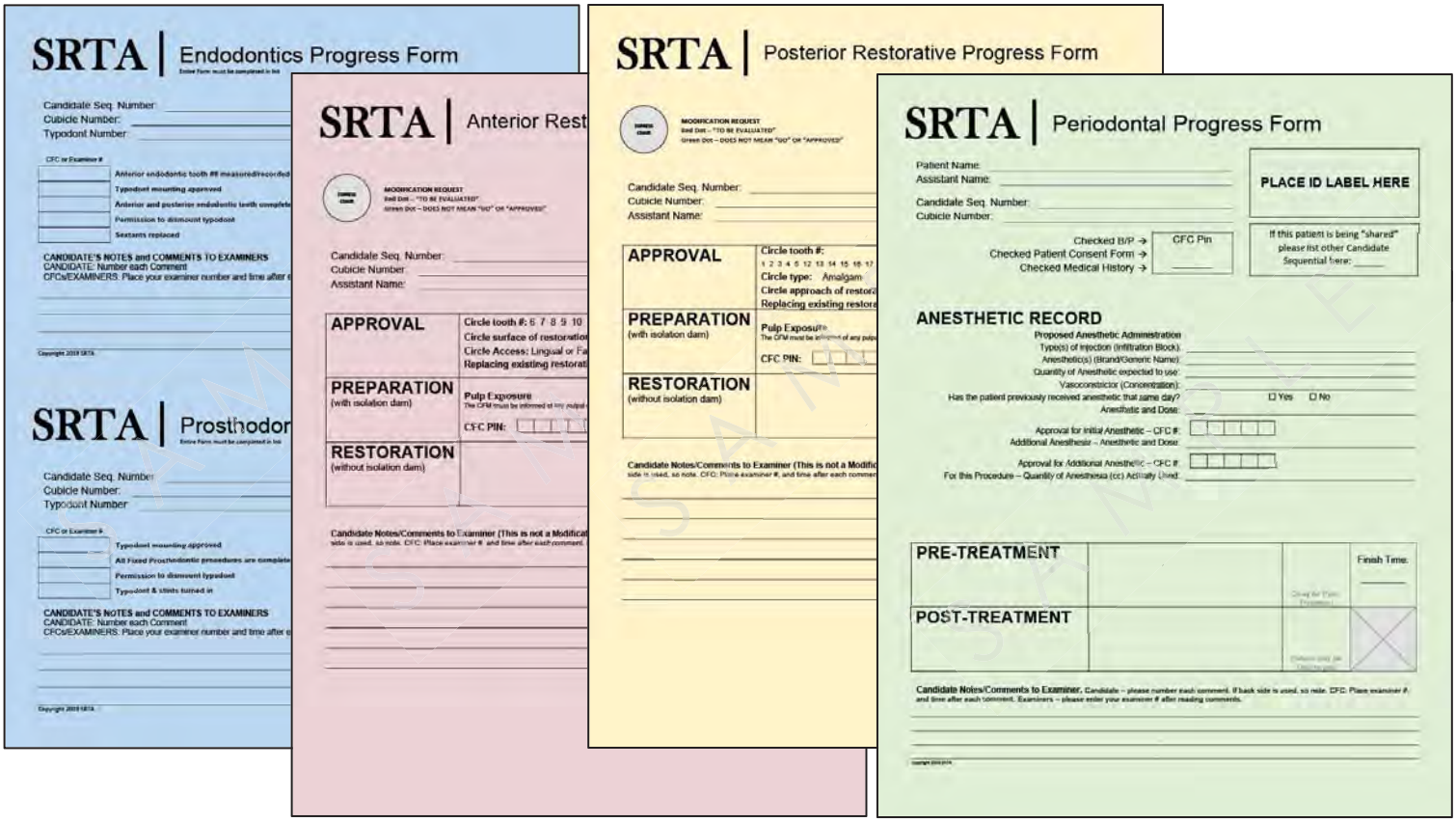
PROGRESS FORMS

Color-coded Progress Forms are utilized to track the candidate's progress through each procedure, document anesthesia administered (Periodontal Section) and treatment provided, collect examiner pins for all completed portions of the examination and provide appropriate progress notes from the candidate to examiners during the course of treatment.

Candidates will be provided with identification labels to place on each procedure's Progress Form, as indicated on the form.

The appropriate Progress Forms must be presented to the examiners at the time of patient check-in. Original radiographs must be mounted for the Periodontal Section or be available on the monitors located in the Evaluation Area.

The Endodontic Section Progress Form and Fixed Prosthodontics will be filled out at the beginning of the examination and turned in upon completion of the manikin section of the examination.

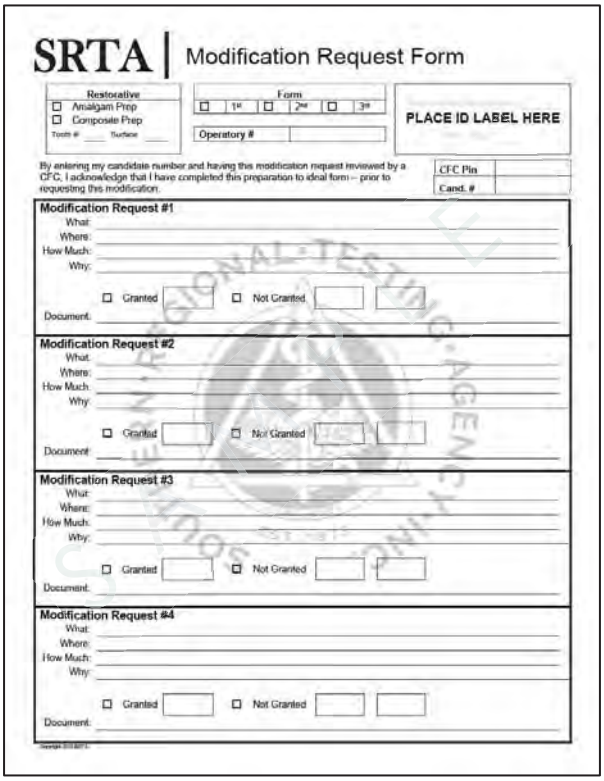


MODIFICATION REQUEST FORM

Modification Request Forms are utilized to request permission to deviate from a *Satisfactory*-level restorative preparation.

Candidates who need to request a modification should place an identification label on the Modification Request Form and indicate their cubicle number, procedure, day and time.

For more information refer to Treatment Guidelines in the Restorative Section.



SRTA | Modification Request Form

Restorative: ☐ Amalgam Prep ☐ Composite Prep

Tooth # ____ Surface ____

Form: ☐ 1st ☐ 2nd ☐ 3rd

Operatory #

PLACE ID LABEL HERE

By entering my candidate number and having this modification request reviewed by a CFC, I acknowledge that I have completed this preparation to ideal form – prior to requesting this modification.

CFC Pin

Cand. #

Modification Request #1

What:

Where:

How Much:

Why:

☐ Granted ☐ Not Granted

Document:

Modification Request #2

What:

Where:

How Much:

Why:

☐ Granted ☐ Not Granted

Document:

Modification Request #3

What:

Where:

How Much:

Why:

☐ Granted ☐ Not Granted

Document:

Modification Request #4

What:

Where:

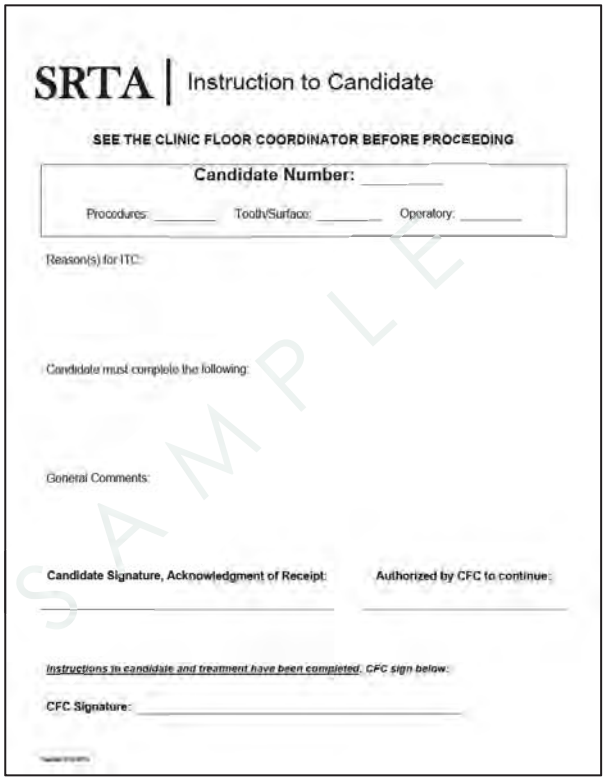
How Much:

Why:

☐ Granted ☐ Not Granted

Document:

INSTRUCTION TO CANDIDATE FORM (ITC)



SRTA | Instruction to Candidate

SEE THE CLINIC FLOOR COORDINATOR BEFORE PROCEEDING

Candidate Number: _____

Procedures: _____ Tooth/Surface: _____ Operatory: _____

Reason(s) for ITC:

Candidate must complete the following:

General Comments:

Candidate Signature, Acknowledgment of Receipt: _____

Authorized by CFC to continue: _____

Instructions to candidate and treatment have been completed. CFC sign below:

CFC Signature: _____

Candidates may receive written instructions from examiners on an Instruction to Candidate Form if the examiners believe the treatment should be modified. The Instruction to Candidate Form is generated electronically by the examiners and printed out in the Evaluation Area. Then it is delivered to the candidate by a Clinic Floor Coordinator, in order to preserve anonymity. The candidate must initial on the Instruction to Candidate Form that they understand the instructions.

VII. FAQs & HELPFUL HINTS

FAQs

1. **How long do I have before patient approval on the morning of the examination?**
   Clinics open at 6:00AM Restorative Approval is from 7:00AM – 8:00AM.

2. **Can I use a dental assistant?**
   Yes, for the Periodontal section only.

3. **Why must my dental assistant have photo identification and 2 photos?**
   Dental Administrator will verify that the assistant is indeed the person described on the Assistant Certification Form and will create an ID badge for the assistant to wear during the exam. Assistants must check-in with the Dental Administrator in the morning with their photo identification, 2 photos and the Dental Assistant Certification Form.

4. **What is the cutoff time to have a patient approved?**
   Pre-treatment approval for Periodontal is 1 hour 15 minutes prior to the end of the day.

5. **What is the cutoff time for my restorative typodont or periodontal patient to be sent to the Evaluation Area at the end of the day?**
   5:00PM is the cutoff time for candidates doing the Restorative and Periodontics sections. And 3:00PM is the cutoff time for candidates doing Restorative only, (This applies to all candidates who are taking the complete examination. Reexamination candidates should refer to the schedule of times emailed to them.)

6. **For the Class II Amalgam Procedure, does there have to be contact on the amalgam?**
   Yes, the tooth must be in contact with a sound enamel surface.

7. **Do I have to use an isolation dam?**
   During the Restorative Section, cavity preparations may be instrumented with or without an isolation dam.

   <u>During the Endodontic section, an isolation dam is required.</u>

8. **Where do I obtain new Progress Forms in the event I need to submit a different patient for the Periodontal Section?**
   Additional copies of these forms are available through the Clinic Floor Coordinator (CFC) and his/her assistant.

9. **If a selection is not approved, what do I do with the forms? Will I need a new Medical History Form, Procedure Form, etc.? Will they be available?**
   Submit the forms for the non-approval to the Clinic Floor Coordinator. The CFC will provide you with new forms.

10. **When do I administer anesthesia—before or after patient approval?**
    For the Periodontal procedure, if the patient is too sensitive to withstand the use of a periodontal probe or explorer during patient check-in, the candidate may request authorization from a CFC to anesthetize the patient prior to patient check-in.

11. **For the Amalgam Procedure, I have cut an ideal preparation but caries is still present. Do I need to send my typodont to the scoring area for observation of the condition and then remove the caries and send the typodont for a second check?**
    Yes, you would obtain a Modification Form from the CFC and complete the form stating the reason for deviating from ideal. You will then send your typodont to the Evaluation Area. When you have finished the prep, send the typodont to the Evaluation Area for the prep to be scored.

12. **I have an exposure. How do I proceed?**
    Write in the Notes section on the Progress Form that a pulp exposure has occurred, indicate the time and briefly describe how the situation should be treated. Then call a CFC, who will consult with other examiners to determine the appropriate course of treatment. The CFC may instruct you to send the typodont to the Evaluation Area.

13. **What do I do if my manikin head is damaged?**
    Notify the CFC to observe the condition prior to beginning any work.

14. **What is the purpose of the Instruction To Candidate Form?**
    An Instruction To Candidate Form is used by the scoring examiners to convey information to the candidate. This form is used only for certain errors that can be adjusted/corrected/removed at the examination site.

15. **If the equipment provided by the examination site malfunctions, what do I do?**
    Notify the CFC immediately so repairs or appropriate arrangements can be made.

16. **How do I know that all of the scoring examiners are grading to the same set of standards?**
    All of the scoring examiners participate in a very detailed standardization program prior to each examination. This training ensures that all examiners are grading reliably to the same criteria.

17. **If I think my attempt at the examination was unsuccessful and apply for reexamination, and then receive my scores indicating that I passed, how do I obtain a refund?**
    You will not be eligible to receive a refund. We strongly recommend that candidates not apply for reexamination until they check their scores online or receive their final report.

18. **I sent my application four days prior to the deadline, but I wasn't placed in my preferred examination site. Why?**
    Typically, sites are filled before the published application deadline. There is no guarantee of placement at any site even though the application is submitted prior to the published date. Plan ahead, collect all required items and submit your application as soon as you determine the need for the examination.

HELPFUL HINTS

- Time management is the candidate's responsibility. Be familiar with the time schedule each day and plan accordingly. Be sure your patients know the day and time of their appointments and are aware of the time commitment involved, not only for the procedure, but also for the examiner evaluation.
- When you send your patient to the Evaluation Area for any procedure, anticipate 15 to 60 minutes for patient evaluation.
- All procedures must be completed/scored in sufficient time to submit the typodont/patient to the Evaluation Area no later than the published cutoff time.
- **Proper tooth selection for the Periodontal Section is a key to success in this examination**. Ensure that your patient is cooperative and well informed and select teeth that meet the criteria. Do not put yourself in jeopardy with a difficult patient and/or teeth selection. It is always recommended to have an alternate selection and/or backup patient. Inform your patients of the examination protocol, procedures and time involved.
- Verify that all required instruments, forms and supplies are on your tray when you send your patient to the Evaluation Area to be checked or scored.
- Do not send Post-Operative Care Agreements and Patient Consent Form with the patient for initial approval. Submit these forms in your white envelope and have a Clinic Floor Coordinator (CFC) sign off on your check off list.
- You must have a rubber dam in place for the Endodontic Procedures
- Do not use a rubber dam for grading of the Restorative Restorations
- If a pulp exposure occurs during the preparation, write in the Notes section on the Progress Form that a pulp exposure has occurred, indicate the time and briefly describe how the situation should be treated. Then call a CFC, who will consult with other examiners to determine the appropriate course of treatment.
- Exercise caution if using new burs when preparing the typodont teeth.
- To avoid adjacent damage, use an interproximal wedge and/or shim.
- Allow time for the amalgam to set before sending your typodont to the Evaluation Area in order to prevent open contact created by flossing, either by the candidate or examiners.
- When you have finished your preparation, get up and stretch or get a drink of water; then, return and take a fresh look at your finished product.
- Be sure to look at your preparations and finished restorations from more than one direction: facial, lingual and occlusal.
- Review your Progress Form to assure your tooth/teeth selection has been approved.
- Each time your typodont returns from the Evaluation Area, review the Progress Form to confirm that it has been stamped. If the "SRTA" stamp is missing, contact the CFC.
- The Anesthetic Record will be reviewed when the patient is sent to the Evaluation Area for initial evaluation after approval. The quantity must be updated prior to sending your patient to the Evaluation Area.
- Work on your Endodontic and Fixed Prosthodontic and Restorative models as if they were a patient, using the proper position in the operatory chair, rubber dam for Endodontics and a shroud for the Restorative, Endodontics & Fixed Prosthodontics procedures.
- Use a marker to make an "X" on the teeth to be treated for the Restorative, Endodontic and Fixed Prosthodontic procedures.
- **Read this manual, keep it in your operatory and refer to it throughout the examination.**

VIII. GLOSSARY OF WORDS, TERMS & PHRASES

Abrasion Abnormal wearing of tooth substance or restoration by mechanical factors other than tooth contact.

Abutment A tooth used to provide support or anchorage for a fixed removable prosthesis.

Adjustment Selective grinding of teeth or restorations to alter shape or contour and establish stable occlusion.

Angle A corner.

- **Cavosurface angle**: An angle formed between the cavity wall and surface of the tooth.
- **Line angle:** The angle formed between two cavity walls or tooth surfaces.

Apical The tip or apex of a root of a tooth and its immediate surroundings.

Attached gingiva The portion of the gingiva that extends apically from the base of the sulcus to the mucogingival junction.

Axial wall An internal cavity surface parallel to the long axis of the tooth.

Base A replacement material for missing dentinal tooth structure, used for bulk build-up and/or for blocking out undercuts. Examples include ZOIB&T, IRM and zinc-phosphate cement.

Bevel A plane sloping from the horizontal or vertical wall that creates a cavosurface angle greater than 90°.

Bonding agent A component of a bonded resin restorative system, which is applied to an etched tooth surface and to which, after it is cured, the restorative material is applied and cured. A bonding agent may also be used to seal the surface of a cured composite resin restoration.

Bridge A permanent restoration that replaces one or more missing natural teeth.

Build-up A restoration associated with a cast restoration that replaces some, but not all, of the missing tooth structure coronal to the cementoenamel junction. The buildup provides resistance and retention form for the subsequent cast restoration. Also called Pin Amalgam Build Up (PABU) or Foundation.

Calculus A hard deposit attached to the teeth, usually consisting of mineralized bacterial plaque.

Caries An infectious microbiological disease that results in localized dissolution and destruction of the calcified tissues of the teeth. The diagnosis of dentinal caries is made by tactile sensation with light pressure on an explorer, described as 1) a defect with a soft, sticky base or 2) a defect that can be penetrated and exhibits definite resistance upon withdrawal of the explorer.

Cavity preparation Removal and shaping of diseased or weakened tooth tissue to allow placement of a restoration.

Cavosurface margin The line angle formed by the prepared cavity wall with the unprepared tooth surface. The margin is a continuous entity enclosing the entire external outline of the prepared cavity. Also called the cavosurface line angle.

Cementoenamel junction Line formed by the junction of the enamel and cementum of a tooth.

Chamfer A finish line design for tooth preparation in which the gingival aspect meets the external axial surface at an obtuse angle.

Contact area The area where two adjacent teeth approximate.

Crown	Cast-metal restoration or porcelain restoration covering most of the surfaces of an anatomical crown.
Cusp, functional	Cusps of teeth that provide vertical stops that interdigitate with fossae or marginal ridges of an opposing tooth/teeth when the teeth are occluded.
Cusp, non-functional	Cusps of teeth, which by their present occlusion, do not provide a centric stop that interdigitates with a fossa or marginal ridge of an opposing tooth/teeth.
Debonded restoration	A restoration that exhibits immediate marginal leakage as a result of adhesive failure, which may include, but is not limited to, marginal discoloration, movement of the restoration or foreign substance between the restoration and tooth interface.
Debris	Scattered or fragmented remains of the cavity preparation procedure. All debris should be thoroughly removed from the preparation before the restoration is placed.
Defective restoration	Any dental restoration that is judged to be causing or is likely to cause damage to the remaining tooth structure if not modified or replaced.
Dentin	Calcified tissue surrounding the pulp and forming the bulk of the tooth.
Deposits, subgingival	Deposits that are apical to the gingival margin.
Deposits, supragingival	Deposits that are coronal to the gingival margin.
Divergence	The angle of opposing cavity walls that, when projected in an occlusal to gingival direction, would meet at a point some distance gingival to the crown of the tooth.
Enameloplasty	The selective reshaping of the enamel surfaces of teeth to improve their form.
Fissure	A developmental linear fault in the occlusal, buccal or lingual surface of a tooth, commonly the result of the imperfect fusion of adjoining enamel lobes.
Flash	Excess restorative material extruded from the cavity preparation extending onto the unprepared surface of the tooth.
Gingival recession	The visible apical migration of the gingival margin, which exposes the CEJ and root surface.
Gingival wall	An internal cavity surface perpendicular to the long axis of the tooth near the apical or cervical end of the crown of the tooth or cavity preparation, which in a Class II preparation, is the floor of the proximal box.
Gingivitis	Inflammation of the gingiva.
Grainy	The rough, perhaps porous, poorly detailed surface of a material.
Interproximal contact	The area of contact between two adjacent teeth. Also called proximal contact.
Isthmus	A narrow connection between two areas or parts of a cavity preparation.
Line angle	The angle formed by the junction of two surfaces. In cavity preparations there can be internal and external line angles, which are formed at the junction of two cavity walls.
Line of draw	The path or direction of withdrawal or seating of a removable or cast restoration.
Liner	Resin or cement coating of minimal thickness (usually less than 0.5 mm) to achieve a physical barrier and/or therapeutic effect (a chemical effect that in some way benefits the health of the tooth pulp). Examples include Dycal, Life, Cavitec, Hydroxyline, Vitrebond and Fuji Lining LC.
Liner, treatment	An appropriate dental material placed in deep portions of a cavity preparation to produce desired effects on the pulp, such as insulation, sedation, stimulation of odontoblasts, bacterial reduction, etc. Also called therapeutic liner.

Long axis	An imaginary straight line passing through the center of the whole tooth occlusoapically.
Marginal deficiencies	Failure of the restorative material to meet the cut surface of the cavity preparation properly and completely; the marginal discrepancy does not exceed 0.5 mm, and the margin is sealed. Marginal deficiencies may include voids or under-contour.
Marginal excess	Restorative material that extends beyond the cavosurface margin of the cavity walls. Marginal excess may or may not extend onto the unprepared surface(s) of the tooth. See also: over-contoured, flash, over-extension.
Mobility	The degree of looseness of a tooth.
Occlusion	As used in this manual, occlusion refers to the closed bite relationship of the teeth in which the cusps are maximally interdigitated, i.e., "centric occlusion," also known as CO, maximal intercuspal position (MI/MIP), habitual occlusion or acquired occlusion).
Open margin	A cavity margin or section of margin at which the restorative material is not tightly adapted to the cavity preparation wall(s). Margins are generally determined to be open when they can be penetrated by the tine of a sharp dental explorer.
Outline form, external	The external boundary or perimeter of the finished cavity preparation.
Outline form, internal	The internal details and dimensions of the finished cavity preparation.
Over-contouring	Excessive shaping of the surface of a restoration so as to cause it to extend beyond the normal physiologic contours of the tooth when in health.
Over-extension of preparation	The placement of final cavity preparation walls beyond the position required to restore the tooth properly as determined by the factors that necessitated the treatment.
Over-extension of restoration	Restorative material that extends beyond the cavosurface margin of the cavity walls. Marginal excess may or may not extend onto the unprepared surface(s) of the tooth. See also over-contoured, flash, and marginal excess.
Overhang, restoration	The projection of restorative material beyond the cavosurface margin of the cavity preparation but not extending onto the unprepared surface of the tooth. Also refers to the projection of a restoration outward from the nominal tooth surface. See also flash.
Path of insertion	The path or direction of withdrawal or seating of a removable or cast restoration. See also line of draw.
Periapical	Area around the root end of a tooth.
Periodontitis	Inflammation of the supporting tissues of the teeth. Usually a progressively destructive change leading to loss of bone and periodontal ligament. An extension of inflammation from gingiva into the adjacent bone and ligament.
Pits, surface	Small voids on the polished surface (but not at the margins) of a restoration.
Polishing, restoration	The act or procedure of imparting a smooth, lustrous and shiny character to the surface of the restoration.
Porous, restoration	Describes the surface of a restoration with minute orifices or openings that allow fluids or light to pass through.
Previous restorative material	Any preexisting restorative material present on a tooth, including pit and fissure sealants, liners, bases, composites, resin-based materials, alloys or cements.
Provisional restoration	Any restoration that, by intent, is placed for a limited period of time or until some event occurs. Any restorative material can be placed as a provisional restoration. The intent in placing the restoration and not the material determines the provisional status.

Pulp cap, direct — The technique of placing a liner (composed of an appropriate protective material) over the exposed pulp to promote reparative dentin formation and the formation of a dentinal bridge across the exposure. Usually a base is placed over the liner to provide structural support. The decision to perform a pulp cap or endodontics and the success of the procedure is determined by the conditions under which the pulp was exposed.

Pulp cap, indirect — The technique of deliberate incomplete caries removal in deep excavation to prevent frank pulp exposure, followed by basing of the area with an appropriate pulpal protection material to promote reparative dentin formation. The tooth may or may not be re-entered in six to eight weeks to remove the remaining dentinal caries.

Pulp exposure, carious — The frank exposure of the pulp through clinically carious dentin.

Pulp exposure, general — The exposure of the pulp chamber or former pulp chamber of a tooth with or without evidence of pulp hemorrhage.

Pulp exposure, irreparable — Generally, a pulp exposure in which most or all of the following conditions apply:

- The exposure is greater than 0.5 mm.
- The tooth had been symptomatic.
- The hemorrhage is not easily controlled.
- The exposure occurred in a contaminated field.
- The exposure was relatively traumatic.

Pulp exposure, mechanical/ unwarranted — The frank exposure of the pulp through non-carious dentin caused by operator error, misjudgment, pulp chamber aberration, etc.

Pulp exposure, reparable — Generally, a pulp exposure in which most or all of the following conditions apply:

- The exposure is less than 0.5 mm.
- The tooth had been asymptomatic.
- The pulp hemorrhage is easily controlled.
- The exposure occurred in a clean, uncontaminated field.
- The exposure was relatively atraumatic.

Pulpal wall — An internal cavity surface perpendicular to the long axis of the tooth, which is the floor of the occlusal portion of the cavity preparation. Also referred to as the pulpal floor.

Pulpoaxial line angle — The line angle formed by the junction of the pulpal wall and axial wall of a prepared cavity.

Reduction of the crown, in endodontics — Reduction of the occlusal surface of a posterior tooth or lingual and/or incisal surfaces of an anterior tooth to take the tooth out of occlusion purposely.

Resistance form — The feature of a tooth preparation that resists dislodgment of a restoration in a vertical direction or along the path of placement.

Retention form — The feature of a tooth preparation that resists dislodgment of a crown in a vertical direction or along the path of placement.

Scaling — Instrumentation of the crown and root surfaces of the teeth to remove plaque, calculus and stains from these surfaces.

Surface sealant, composite resin restoration coating — The application and curing of an unfilled resin to the surface of a composite restoration to fill porosities or voids or to provide a smooth surface after polishing the restoration.

Sealers — Cavity sealers provide a protective coating for freshly cut tooth structure of the prepared cavity.

- Varnish: A natural gum, such as copal rosin or a synthetic resin dissolved in an organic solvent, such as acetone, chloroform or ether. Examples include Copalite, Plastodent, Varnish, and Barrier.
- Resin bonding agents: Include the primers and adhesives of dentinal and all-purpose bonding agents. Examples include All-Bond 2, Scotchbond MP+, Optibond, ProBond, Amalgambond, etc.

Shade, restoration	The color of a restoration as defined by hue, value and chroma, which is selected to match as closely as possible the natural color of the tooth being restored.
Sound tooth structure	Enamel that has not been demineralized or eroded; it may include proximal decalcification that does not exceed one-half the thickness of the enamel and cannot be penetrated by an explorer. Previous restorative material or calcareous deposits do not qualify as sound tooth structure.
Stain, extrinsic	Stain that forms on and can become incorporated into the surface of a tooth after development and eruption. These stains can be caused by a number of developmental and environmental factors.
Stain, intrinsic	Stain that becomes incorporated into the internal surfaces of the developing tooth. These stains can be caused by a number of developmental and environmental factors.
Taper	The convergence of two opposing external walls of a tooth preparation as viewed in a given plane. The extension of those average lines within that plane form an angle describe as the total angle of convergence. Also known as Total Occlusal Convergence.
Temporary restoration	See provisional restoration.
Tissue trauma	Unwarranted iatrogenic damage to extra/intraoral tissues resulting in significant injury to the patient, such as lacerations greater than 3 mm, burns, amputated papillae or large tissue tags.
Total Occlusal Convergence	The convergence of two opposing external walls of a tooth preparation as viewed in a given plane. The extension of those average lines within that plane form an angle describe as the total angle of convergence. Also known as taper.
Ultrasonic scaler	An instrument tip attached to a transducer through which high frequency current causes ultrasonic vibrations (approximately 30,000 cps). These vibrations, usually accompanied by the use of a stream of water, produce a turbulence, which in turn removes adherent deposits from the teeth.
Under-contouring	Excessive removal of the surface of a restoration so as to cause it to be reduced beyond the normal physiologic contours of the tooth when in health.
Undercut	Feature of tooth preparation that retains the intracoronal restorative material. An undesirable feature of tooth preparation for an extracoronal restoration.
Undermined enamel	During cavity preparation procedures, an enamel tooth surface (particularly enamel rods) that lacks dentinal support. Also called unsupported enamel.
Varnish	See sealers.
Void(s)	An unfilled space within the body of a restoration or at the restoration margin, which may or may not be present at the external surface and therefore may or may not be visible to the naked eye.

IX. CRITERIA REFERENCE CHART

Posterior Endodontics			
Treatment Management		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Damage to adjacent/opposing teeth**	Damage to the adjacent tooth/teeth and/or opposing teeth can be removed by polishing without adversely altering the shape of the contour and/or contact.	There is damage to adjacent tooth/teeth and/or opposing teeth requiring a restoration.
2	**Damage to simulated gingiva and/or typodont**	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
Access Opening		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Access Placement**	The placement of the access opening is ideally over the pulp chamber allowing debridement of the pulp chamber and straight-line access to the three root canals located in the tooth. The placement of the access opening may not be directly over the pulp chamber and may hinder, but will allow, complete debridement of the pulp chamber. The access opening must allow access to the three root canals to the extent that instruments can be placed to the apex of the roots.	The placement of the access opening is not over the pulp chamber and does not allow complete debridement of the pulp chamber or access to the three root canals to the extent that instruments can be placed to the apex of the roots.
2	**Access Opening**	The access opening is in the mesial triangular pit and central fossa of the tooth and: • The mesial extent of the access preparation is not less than 2.0 mm from the external surface of the mesial marginal ridge of the tooth. • The buccal extent of the access preparation is not less than 1.0 mm from the line bisecting the mesiobuccal and distobuccal cusp tips. • The distal extent of the access preparation is not less than 1.0 mm from the distal oblique groove. • The palatal extent of the access preparation is not less than 1.0 mm from the palatal cusp tip.	The access opening is either grossly under-or-over-extended in one or more of the following categories: • The mesial extent of the access preparation is less than 2.0 mm distal to the external surface of the mesial marginal ridge. • The buccal extent of the access preparation is less than 1.0 mm to the line bisecting the mesiobuccal and distobuccal cusp tips. • The distal extent of the access preparation is less than 1.0 mm from the distal oblique groove. • The palatal extent of the access preparation is less than 1.0 mm from the palatal cusp tip.
3	**Access Depth**	The depth and size of the access preparation removes the entire roof of the pulp chamber and all three canals can be straight-line accessed. The depth of the access preparation is a maximum of 10.0 mm when measured from the buccal cavosurface margin of the access preparation.	The depth and size of the access preparation does not remove the roof of the pulp chamber to the extent that all pulp tissue can be removed and all 3 canals cannot be straight-line accessed or the depth of the access preparation is more than 10.0 mm deep when measured from the buccal cavosurface margin of the access preparation.
4	**Internal Form**	The internal form of the access preparation leaves at least 1.0 mm of supported lateral tooth structure at any point of the preparation and tapers to the canal orifices with no or slight gouges.	The internal form of the access preparation leaves less than 1.0 mm of lateral supported tooth structure at any point of the preparation and/or tapers to the canal orifices with gross ledges that will inhibit access to the root canal orifices.
5	**Perforation**	No portion of the tooth is perforated.	Any portion of the tooth is perforated.
6	**Tooth Fracture**	No portion of the tooth is fractured.	Any portion of the tooth is fractured.

Fixed Prosthodontics: PFM Crown # 5

Treatment Management		ACCEPTABLE	UNACCEPTABLE
1	**Damage to adjacent/opposing teeth**	Damage to the adjacent tooth/teeth and/or opposing teeth can be removed by polishing without adversely altering the shape of the contour and/or contact.	There is damage to adjacent tooth/teeth and/or opposing teeth requiring a restoration.
2	**Damage to simulated gingiva and/or typodont**	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
Cervical Margin		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Location (mm from CEJ or Crest of Free Gingival Margin)**	The cervical margin is less than 0.5 mm below or no greater than 1.5 mm above the simulated free gingival margin. If greater than 0.5mm there is no visual damage.	The cervical margin is greater than 0.5 mm below with visual damage or greater than 1.5 mm above the simulated free gingival margin.
2	**Margin Refinement**	The cervical margin is continuous but may be slightly rough and lacks some definition.	The cervical margin has no continuity and/or definition and will prevent fabrication of an adequate restoration.
3	**Margin Design**	The margin is a chamfer/rounded shoulder.	The cervical margin is cupped or j-shaped resulting in unsupported enamel that will prevent fabrication of an adequate restoration.
4	**Facial Cervical Margin (width mm)**	The facial margin is greater than 0.5 mm to 2.5 mm in width.	The facial margin is less than 0.5 mm or greater than 2.5 mm in width.
5	**Lingual Cervical Margin (width mm)**	The lingual margin is 0.5 mm to 2.0 mm in width.	The lingual margin is less than 0.5 mm, is feathered and/or not explorer detectable or more than 2.0 mm in width.
Walls, Taper, & Shoulder		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Axial Reduction - Facial (mm)**	The facial axial tissue removal is 0.5 mm to 2.5 mm.	Less than 0.5 mm or greater than 2.5 mm.
2	**Walls / Axial Refinement**	The walls may be slightly rough and lack some definition and/ or internal line angles and/or cusp tip areas are rounded and have a slight tendency of being sharp.	The walls are grossly rough and lack definition and/or internal line angles and/or cusp tip areas are sharp with no evidence of rounding.
3	**Taper (Degrees TOC)**	Taper, total occlusal convergence (TOC) is 16° or less.	Greater than 16° TOC.
4	**Undercuts**	Slight undercut(s) exists, but an adequate restoration can be fabricated.	Undercut(s) exists and an adequate restoration cannot be fabricated.
5	**Occlusal Reduction (mm)**	1.0 mm to 3.0 mm	Less than 1.0 mm; more than 3.0 mm.
6	**Crown Path of Insertion (Degrees From Long Axis)**	The path of insertion or line of draw deviates 10° to less than 30° from the long axis of the tooth.	The path of insertion or line of draw is unacceptable, deviating 30° or more from the long axis of the tooth.
Bridge Factor		Addressed on the Cast Metal-All Zirconia Crown Preparation Criteria Page	

Fixed Prosthodontics: Cast Metal / All Zirconia Crown # 3

Treatment Management		ACCEPTABLE	UNACCEPTABLE
1	**Damage to adjacent/ opposing teeth**	Damage to the adjacent tooth/teeth and/or opposing teeth can be removed by polishing without adversely altering the shape of the contour and/or contact.	There is damage to adjacent tooth/teeth and/or opposing teeth requiring a restoration.
2	**Damage to simulated gingiva and/or typodont**	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
Cervical Margin		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Location (mm from CEJ or Crest of Free Gingival Margin)**	Less than 0.5 mm below or no more than 1.5 mm above the simulated free gingival margin.	Greater than 0.5 mm below or greater than 1.5 mm above the simulated free gingival margin.
2	**Margin Refinement**	The cervical margin is continuous but may be slightly rough and lacks some definition.	The cervical margin has no continuity and/or definition and will prevent fabrication of an adequate restoration.
3	**Margin Design**	The cervical margin meets the external surface of the tooth at approximately a right angle.	The cervical margin is cupped or j-shaped resulting in unsupported enamel that will prevent fabrication of an adequate restoration.
4	**Cervical Margin (width mm)**	Is a chamfer/rounded shoulder and varies slightly in width and is less than 1.5 mm in width.	Is not a chamfer/rounded shoulder and/or is greater than 1.5 mm in width.
Walls, Taper, & Shoulder		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Axial Tissue Reduction (mm)**	Is greater than 0.5 mm but less than 1.5 mm.	Less than 0.5 mm or greater than 1.5 mm.
2	**Walls / Axial Refinement**	The walls are slightly rough and lack some definition and/or internal line angles and/or cusp tip areas are rounded and have a slight tendency of being sharp.	The walls are rough and lack definition and/or internal line angles and/or cusp tip areas are sharp with no evidence of rounding.
3	**Taper (Degrees TOC)**	(TOC) is 25° or less.	(TOC) is greater than 25°.
4	**Undercuts**	Slight undercut exists, but it will not interfere with fabrication of an adequate restoration.	Undercut(s) exists and an adequate restoration cannot be fabricated
5	**Occlusal Reduction (mm)**	Greater than 0.5 mm or less than 2.5 mm.	Less than 0.5 mm or more than 2.5 mm.
6	**Crown Path of Insertion (Degrees From Long Axis)**	Path of insertion or line of draw deviates 10° to less than 20° from the long axis of the tooth.	Path of insertion or line of draw is unacceptable, deviating 20° or more from the long axis of the tooth.
Bridge Factor		A line of draw exists whereby an adequate prosthesis may be fabricated.	An adequate prosthesis may not be fabricated without removal of additional tooth structure.

Fixed Prosthodontics: Ceramic Crown # 9

Treatment Management		ACCEPTABLE	UNACCEPTABLE
1	**Damage to adjacent/ opposing teeth**	Damage to the adjacent tooth/teeth and/or opposing teeth can be removed by polishing without adversely altering the shape of the contour and/or contact.	There is damage to adjacent tooth/teeth and/or opposing teeth requiring a restoration.
2	**Damage to simulated gingiva and/or typodont**	There is slight damage to simulated gingiva and/or typodont consistent with the procedure.	There is gross iatrogenic damage to the simulated gingiva and/or typodont inconsistent with the procedure.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
Cervical Margin & Draw		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Location (mm from CEJ or Crest of Free Gingival Margin)**	Less than 0.5 mm below or no more than 1.5 mm above the simulated free gingival margin. If greater than 0.5 mm below, there is no visual damage.	Greater than 0.5 mm below with visual damage or greater than 1.5 mm above the simulated free gingival margin.
2	**Margin Refinement**	The cervical margin is continuous but may be slightly rough and lacks some definition.	The cervical margin has no continuity and/or definition and will prevent fabrication of an adequate restoration.
3	**Margin Design**	The cervical margin meets the external surface of the tooth at approximately a right angle.	The cervical margin meets the external surface of the tooth at an angle greater than 120°. The cervical margin is cupped or j-shaped resulting in unsupported enamel that will prevent fabrication of an adequate restoration.
4	**Cervical Margin (width mm)**	0.5 mm to 2.0 mm in width.	Less than 0.5 mm or greater than 2.0 mm in width.
Walls, Taper, & Shoulder		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Axial Reduction (mm)**	1.0 mm to 2.5 mm	Less than 1.0 mm or greater than 2.5 mm
2	**Walls / Axial Refinement**	The walls may be slightly rough and lack some definition and/or internal line angles and/or incisal edge are rounded and have a slight tendency of being sharp.	The walls are grossly rough and lack definition and/or internal line angles and/or incisal edge are sharp with no evidence of rounding.
3	**Taper (Degrees TOC)**	(TOC) is 16° or less.	(TOC) is greater than 16°.
4	**Undercuts**	There may be a slight undercut but it will not interfere with fabrication of an adequate restoration.	Undercut(s) exists and an adequate restoration cannot be fabricated.
5	**Incisal Reduction (mm)**	1.0 mm to 3.5 mm.	Less than 1.0 mm; more than 3.5 mm.
6	**Lingual Wall**	Equal to or greater than1.0 mm in height.	Less than 1.0 mm in height.
7	**Crown Path of Insertion (Degrees From Long Axis)**	The path of insertion or line of draw deviates 10° to less than 30° from the long axis of the tooth.	The path of insertion or line of draw is unacceptable, deviating 30° or more from the long axis of the tooth.

Class III Anterior Composite Preparation

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Adjacent and/or Opposing Tooth**	Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact.	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage.
2	**Soft Tissue**	There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure.	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
EXTERNAL FORM		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Outline Form (Access Size)**	The outline form is sufficient in size to have access to remove caries or previous restorative material and to manipulate and finish the restorative material.	The outline form is under-extended, making it impossible to remove caries or previous restorative material or to manipulate and finish the restorative material.
2	**Outline Form (Mesial-Distal)**	May be extended mesiodistally up to 1.5 mm	Extended mesiodistally by more than 1.5 mm
3	**Outline Form (Incisal-Gingival)**	May be extended incisogingivally up to 5.0 mm	Outline form is extended incisogingivally by more than 5.0 mm
4	**Incisal Cavosurface Margin**	The incisal cavosurface margin does not compromise the incisal angle.	The incisal cavosurface margin is over-extended so that the incisal angle is compromised, removed or fractured. A Class IV restoration is now necessary without prior justification.
5	**Wall opposite the access**	If broken, may extend no more than 2.0 mm beyond the contact area.	The access opening extends more than 2.0 mm beyond the contact area.
6	**Caries or previous restorative material**	There is no caries remaining.	There is caries remaining.
7	**Cavosurface Margin**	The cavosurface margins may be slightly irregular but there is no explorer-penetrable decalcification remaining on the cavosurface margin.	The cavosurface margin does not terminate in sound natural tooth structure. There is explorer–penetrable decalcification at the cavosurface margin.
8	**Unsupported Enamel**	May be small area of unsupported enamel which is not necessary to preserve facial esthetics	Large or multiple areas of unsupported enamel that are not necessary to preserve facial aesthetics
9	**Enamel Cavosurface Margin Bevel**	Enamel cavosurface margin bevels, if present; do not exceed 1.0 mm in width.	Enamel cavosurface margin bevels, if present, exceed 1mm in width, are not uniform or are inappropriate for the size of the restoration
10	**Gingival Clearance**	The gingival clearance is open up to 2.0 mm.	The gingival clearance is open greater than 2.0 mm.
INTERNAL FORM		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Caries or previous restorative material**	Preparation is free of caries.	Preparation has remaining caries.
2	**Axial Wall Depth (mm) (Beyond the DEJ)**	The depth of the axial wall is no more than 2.5 mm beyond the DEJ.	The axial wall is greater than 2.5 mm beyond the DEJ.
3	**Pulp Exposure**	Properly managed justified pulp exposure.	Any pulp exposure that is not properly managed or unjustified.

Class III Anterior Composite Restoration

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Adjacent and/or Opposing Tooth**	Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact.	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage.
2	**Soft Tissue**	There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure.	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
CONTOUR, CONTACT, OCCLUSION		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Interproximal Contacts**	Interproximal contact is visually closed. Adequate in size, shape or position but may demonstrate little resistance to dental floss.	Interproximal contact is visually open or will not allow floss to pass through the contact area.
2	**Anatomy**	The restoration may not reproduce the normal lingual anatomy, proximal contours of the tooth or marginal ridge anatomy but would not be expected to adversely affect the tissue health.	The restoration does not reproduce the normal lingual anatomy, proximal contour of the tooth or marginal ridge anatomy and as such it would be expected to adversely affect the health of the surrounding soft tissue.
3	**Occlusion**	When checked with articulating paper, the restoration is in hyperocclusion. The restoration only requires minor occlusal adjusting.	There is gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant.
MARGIN INTEGRITY-SURFACE FINISH		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Marginal Deficiency**	No marginal deficiency or if present is no greater than 0.5 mm.	An open margin is detectable (either visually or with the tine of an explorer at the restoration tooth interface.
2	**Marginal Excess**	Marginal excess may be absent or detectable at the restoration-tooth interface, but it is ≤ 1.0 mm at the gingival margin and may extend greater than 0.5 mm in other areas.	Marginal excess is > 1.0 mm at the gingival margin which impinges on the gingival tissue and will be detrimental to the gingival health.
3	**Integrity of Restoration**	Restoration is not fractured, debonded and/or movable in the preparation.	Restoration is fractured, debonded and/or movable in the preparation.
4	**Enameloplasty**	There is no or minimal evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration (enameloplasty).	There is evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the tooth being restored (enameloplasty).

Class II Posterior Amalgam Preparation

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Adjacent and/or Opposing Tooth**	Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact.	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage.
2	**Soft Tissue**	There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure.	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
EXTERNAL FORM		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Proximal Contact Clearance at the Height of Contour (mm)**	Visibly open or extends no more than 3.0 mm on either one or both proximal walls.	Not visibly open or extends beyond 3.0 mm on either one or both proximal walls.
2	**Proximal Cavosurface Margin**	May deviate from 90° but is unlikely to jeopardize the longevity of the tooth or restoration; Includes small areas of unsupported enamel	Deviates from 90°. Will jeopardize the longevity of the tooth or restoration; Includes unsupported enamel
3	**Gingival Contact Clearance**	Visibly open or not greater than 3.0 mm.	Not visibly open or is greater than 3.0 mm.
4	**Isthmus (mm)**	≥ 1.0 ≤ 1/2 Intercuspal Width	< 1.0 > 1/2 Intercuspal Width
5	**Cavosurface Margin Termination**	The cavosurface margins should terminate in sound natural tooth structure, and may be slightly irregular, but there is no explorer-penetrable decalcification remaining.	The cavosurface margins do not terminate in sound natural tooth structure and there is explorer-penetrable decalcification.
6	**Outline Form**	The outline form does not compromise the marginal ridge.	The marginal ridge is undermined and/or less than 1.0 mm in width.
INTERNAL FORM		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Pulpal Floor (mm) (From the cavosurface margin)**	1.5 mm to 2.5 mm beyond the cavosurface margin.	Less than 1.5 mm or greater than 2.5 mm from the cavosurface margin.
2	**Axial Wall Depth (mm) (Beyond the DEJ)**	The depth of the axial wall is no more than 2.5 mm beyond the DEJ.	The axial wall is greater than 2.5 mm beyond the DEJ or is still in the enamel and does not include the DEJ.
3	**Wall Angulation**	The walls of the proximal box should be convergent but may be parallel. Internal retention is present.	The walls of the proximal box diverge occlusally, offering no retention and jeopardizing the longevity of the tooth or restoration.
4	**Caries or previous restorative material**	No evidence of caries.	Remaining caries.
5	**Retention**	Retention, when used, may not undermine the enamel, which is not likely to jeopardize the longevity of the tooth or restoration.	Retention excessively undermines the enamel, and is likely to jeopardize the longevity of the tooth or restoration.
6	**Refinement**	Prepared surfaces may be slightly rough, irregular, or sharp.	A prepared surface of the tooth are excessively rough, irregular or sharp and is likely to jeopardize the longevity of the tooth restoration.
7	**Pulp Exposure**	Properly managed justified pulp exposure.	Any pulp exposure that is not properly managed or unjustified.

Class II Posterior Amalgam Restoration

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Adjacent and/or Opposing Tooth**	Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact.	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage.
2	**Soft Tissue**	There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure.	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
CONTOUR, CONTACT, OCCLUSION		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Interproximal Contacts**	Interproximal contact is visually closed, and the contact may be deficient in size, shape or position but may demonstrate little resistance to dental floss, or shreds the floss.	Interproximal contact is visually open or will not allow floss to pass through the contact area.
2	**Occlusion**	When checked with articulating paper, the restoration may be in slight hyperocclusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth and the restoration may require adjustment.	Gross hyperocclusion so that the restoration is the only point of occlusion in that quadrant.
3	**Anatomy**	Restoration may not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy, but would not be expected to adversely affect the tissue health.	Restoration does not reproduce the normal occlusal anatomy, proximal contours of the tooth or marginal ridge anatomy and will adversely affect the tissue health.
MARGIN INTEGRITY-SURFACE FINISH		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Marginal Deficiency**	Marginal deficiency may be absent or detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, but it is no greater than 0.5 mm.	Marginal deficiency is detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, and is greater than 0.5 mm.
2	**Marginal Excess**	Marginal excess may be absent or detectable at the restoration-tooth interface, but it is no greater than 1.0 mm at the gingival margin and does not extend greater than 2.0 mm in other areas.	Marginal excess is greater than 1.0 mm at the gingival margin which impinges on the gingival tissue and will be detrimental to the gingival health and/or extends greater than 2.0 mm in other areas.
3	**Surface of Restoration**	The surface of the restoration may be slightly grainy or rough, but it is free of pits and voids.	The surface of the restoration is rough and exhibits significant surface irregularities, pits or voids.
4	**Integrity of Restoration**	Restoration is not fractured	Restoration is fractured
5	**Enameloplasty**	There is no or minimal evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the restoration (enameloplasty).	Evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the tooth being restored (enameloplasty).
6	**Margins**	No evidence of open margins.	Open margin detectable with the tine of an explorer.

Class II Posterior Conventional Composite Preparation

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Adjacent and/or Opposing Tooth**	Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact.	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage.
2	**Soft Tissue**	There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure.	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
EXTERNAL FORM		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Proximal Contact Clearance at the Height of Contour (mm)**	Closed, or visibly open and proximal clearance at the height of contour does not extend more than 2.5 mm on either one or both proximal walls.	Height of contour extends beyond 2.5 mm on either one or both proximal walls.
2	**Gingival Contact Clearance (mm)**	Closed, or is less than or equal to 2.0 mm.	Greater than 2.0 mm.
3	**Outline Form**	The outline form may be sharp and irregular. The outline form may be inappropriately over extended so that it compromises the remaining marginal ridge and/or cusp(s).	Outline form is grossly over-extended so that it compromises or undermines the remaining marginal ridge to the extent that the cavosurface margin is unsupported by dentin or the width of the marginal ridge is 0.5 mm or less.
4	**Isthmus (mm)**	At least 1.0 mm, and may not exceed one-half the intercuspal width.	Less than 1.0 mm or greater than one-half the intercuspal distance.
5	**Proximal Cavosurface Margin**	The cavosurface margin may deviate from 90° but is unlikely to jeopardize the longevity of the tooth or restoration; Includes small areas of unsupported enamel. This includes unsupported enamel and/or excessive bevel(s).	The cavosurface margin deviates from 90° and is likely to jeopardize the longevity of the tooth or restoration. This includes unsupported enamel and/or excessive bevel(s).
6	**Cavosurface Margin Termination**	The cavosurface margin should terminate in sound natural tooth structure and may be slightly irregular but there is no explorer-penetrable decalcification remaining.	The cavosurface margins do not terminate in sound natural tooth structure, are grossly irregular and there is explorer–penetrable decalcification.
7	**Outline Form**	There are no remaining non-coalesced fissure(s) that extend the DEJ and are contiguous with the outline form.	There are remaining non-coalesced fissure(s) that extend to the DEJ and are contiguous with the outline form.
INTERNAL FORM		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Pulpal Floor (mm) (From the cavosurface margin)**	Equal to or greater than 0.5 mm from the cavosurface margin, and the pulpal floor depth is no more than 4.0 mm from the cavosurface margin; there may be remaining enamel.	Pulpal floor depth is 4.0 mm or greater from the cavosurface margin or is less than 0.5 mm.
2	**Axial Wall Depth (mm) (Beyond the DEJ)**	The depth of the axial wall is no more than 2.5 mm beyond the DEJ.	The axial wall is greater than 2.5 mm beyond the DEJ.
3	**Proximal Walls**	Walls of the proximal box may be divergent or convergent, and which may result in some undermined enamel.	Walls of the proximal box are excessively divergent or convergent, resulting in excessively undermined enamel, that is likely to jeopardize the longevity of the tooth or restoration.
4	**Caries or previous restorative material**	No evidence of caries.	Remaining caries.
5	**Retention**	Retention, when used, may not undermine the enamel resulting in undermined enamel, which is not likely to jeopardize the longevity of the tooth or restoration.	Retention excessively undermines the enamel, and is likely to jeopardize the longevity of the tooth or restoration.
6	**Refinement**	Prepared surfaces may be rough, sharp, or irregular	Prepared surfaces of the tooth are excessively rough, irregular or sharp to jeopardize the longevity of the tooth restoration.
7	**Pulp Exposure**	Properly managed justified pulp exposure.	Any pulp exposure that is not properly managed or unjustified.

Class II Posterior Conventional Composite Restoration

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Adjacent and/or Opposing Tooth**	Any damage to adjacent tooth/teeth that can be removed by polishing or may require recontouring that does not adversely change the shape or contact.	There is evidence of gross damage and/or alteration to adjacent and/or opposing hard tissue inconsistent with the procedure which may require additional evaluation, intervention or treatment as a result of the damage.
2	**Soft Tissue**	There may be slight iatrogenic trauma to the soft tissue inconsistent with the procedure.	There is gross iatrogenic damage to the soft tissue inconsistent with the procedure and preexisting condition of the soft tissue, which may require additional evaluation, intervention or treatment as a result of the damage.
3	**Correct Tooth Treated**	Correct tooth treated.	Wrong tooth treated
CONTOUR, CONTACT, OCCLUSION		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Interproximal Contacts**	Interproximal contact is visually closed, but the contact may be deficient in size, shape or position, and may demonstrate little resistance to dental floss or shreds the floss.	Interproximal contact is visually open or will not allow floss to pass through the contact area.
2	**Occlusion**	When checked with articulating paper, the restoration may be in hyperocclusion inconsistent in size, shape and intensity with the occlusal contacts on surrounding teeth. The restoration requires adjustment.	Restoration is in gross hyperocclusion, such that the restoration is the only point of occlusion in that quadrant.
3	**Anatomy**	Restoration may not reproduce the normal occlusal anatomy, proximal contours of the tooth, or marginal ridge anatomy, but would not be expected to adversely affect the tissue health.	Restoration may not reproduce the normal occlusal anatomy, proximal contours of the tooth, or marginal ridge anatomy, and adversely affects tissue health.
MARGIN INTEGRITY-SURFACE FINISH		**ACCEPTABLE**	**UNACCEPTABLE**
1	**Marginal Deficiency**	Marginal deficiency may be absent or detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, but it is no greater than 0.5 mm.	Marginal deficiency is detectable (either visually or with the tine of an explorer) at the restoration-tooth interface, and is greater than 0.5 mm.
2	**Marginal Excess**	Marginal excess may be absent or detectable at the restoration-tooth interface, but it is no greater than 1.0 mm at the gingival margin and may extend greater than 0.5 mm in other areas	Marginal excess is greater than 1.0 mm at the gingival margin which impinges on the gingival tissue and will be detrimental to the gingival health.
3	**Integrity of Restoration**	Restoration is not fractured, debonded and/or movable in the preparation.	Restoration is fractured, debonded and/or movable in the preparation.
4	**Enameloplasty**	There is no or minimal evidence of unwarranted or unnecessary removal, or recontouring of tooth structure adjacent to the restoration (enameloplasty).	There is evidence of unwarranted or unnecessary removal, modification or recontouring of tooth structure adjacent to the tooth being restored (enameloplasty).
5	**Margins**	No evidence of open margins.	Open margin detectable with the tine of an explorer.

Periodontal

TREATMENT GOALS		
1	**Forms**	Patient Consent Form, Medical History, Post-Operative Care, and Progress Form are complete, accurate and current.
2	**Blood Pressure**	Both systolic and diastolic blood pressure are less than or equal to 159/94, or systolic and diastolic blood pressure are between 160/95 and 179/109 with a written medical clearance on physician's letterhead authorizing treatment during the examination.
3	**Radiograph Requirements**	Radiographs are of diagnostic quality and reflect the current clinical condition of the mouth. Panoramic or complete set have been exposed within the past three years. Radiographs are properly mounted and labeled with exposure date and patient's name.
4	**Calculus Requirements**	The Calculus Detection portion of the Periodontal Evaluation Form is properly completed, indicating: • Six to eight teeth selected, each with at least one surface of calculus charted • At least three posteriors (molars, premolars), including at least one molar, in the selection. All posterior teeth must have at least one approximating tooth within 2.0 mm distance. • Exactly 12 surfaces of subgingival calculus charted, including at least three surfaces of interproximal calculus on molars/premolars • At least eight of the surfaces on canines, premolars or molars (no more than four surfaces on incisors)

TREATMENT MANAGEMENT		TREATMENT GOALS
1	**Soft Tissue**	The patient has adequate anesthesia for pain control, is comfortable and demonstrates no evidence of distress or pain.
2	**Hard Tissue**	Instruments, polishing cups or brushes and dental floss are effectively utilized so that no unwarranted soft or hard tissue trauma occurs as a result of the scaling and polishing procedures.
3	**Calculus Removal**	All calculus has been removed from the candidate's 12 selected surfaces. No Plaque and/or stain remain on those selected 12 surfaces.

TREATMENT MANAGEMENT		ACCEPTABLE	UNACCEPTABLE
1	**Soft Tissue**	There is minor soft tissue trauma that is inconsistent with the procedure. Soft tissue trauma may include, but is not limited to, abrasions, lacerations or ultrasonic burns.	There is major damage to the soft and/or hard tissue that is inconsistent with the procedure and preexisting condition which may require additional evaluation, intervention or definitive treatment as a result of the damage. This damage may include, but is not limited to, such trauma as: • Amputated papillae • Exposure of the alveolar process • A laceration or damage that requires suturing and/or periodontal packing • One or more ultrasonic burns that require follow up treatment • A broken instrument tip in the sulcus or soft tissue
2	**Hard Tissue**	There is minor hard tissue trauma that is inconsistent with the procedure. Hard tissue trauma may include root surface abrasions that do not require additional definitive treatment.	There is major hard tissue trauma that is inconsistent with the procedure such as: • Root surface abrasion that requires additional treatment • Exposure of bone that requires further treatment
3	**Calculus Removal**	Calculus remaining on 3 or less surfaces with no plaque and/or stain remaining on those selected surfaces.	Calculus remaining on 4 or more surfaces and plaque and/or stain is remaining on those selected surfaces.

WREB
A National Dental and Dental Hygiene Testing Agency

WREB Dental and Dental Hygiene Licensing Examination COVID-19 Options for 2020

WREB is an independent testing agency that develops, administers, and reports the outcome of practical clinical examinations administered to candidates for licensing in dentistry and dental hygiene. While aware of the needs of students and dental education programs, WREB's sole purpose is to provide state boards with examinations that have high reliability and are supported by a strong validity argument—examinations state boards can rely on to inform licensing decisions. For this reason, WREB is highly responsive to the needs and wishes of state boards that recognize its examinations.

- WREB Dental Examination options are described below (pp. 1-4).
- WREB Dental Hygiene Examination options are described on pp. 5-6.

WREB Dental Licensing Examination COVID-19 Options for 2020

Following are options state boards could consider in response to COVID-19:

Dental Examination without Change

WREB's standard dental examination which includes two simulations (Endodontics and Prosthodontics) and two patient-based sections (Operative Dentistry and Periodontics) in addition to the Comprehensive Treatment Planning (CTP) section will continue to be offered as soon as test sites again are able to schedule this type of examination. This option may not address the needs of state boards attempting to respond to the concerns of dental candidates and schools who wish to complete the licensure process within the next several months. Even when re-established, examination administration may be subject to interim restrictions. States that specifically require two patient-based restorative procedures and wish to reduce the burden on licensure candidates imposed by COVID-19 could safely accept WREB's Operative Section as it is scored and validated, which has demonstrated that candidate competency can be reliably assessed with more than 40% fewer patient-based procedures.[i]

CTP Only

WREB's CTP (Comprehensive Treatment Planning) Section[ii] is an ASCE (Authentic Simulated Clinical Examination) which requires the candidate to construct responses (as opposed to an OSCE in which the candidate selects responses from options, locations, or choices provided). The CTP ASCE is open-ended and graded by independent, anonymous examiners. It reveals candidate thinking and requires candidates to perform tasks that dentists perform and to make decisions that dentists make, all without choices they can select or cues of any kind. If acceptance of only an OSCE examination is being considered, then acceptance of WREB's CTP ASCE which is an even more authentic demonstration of relevant candidate knowledge, skill, and ability, should be considered.

COVID-19 Alternative Performance-based Simulation

Patient-based assessment has high fidelity. WREB is not abandoning patient-based assessment but continues to evaluate the validity and viability of assessment alternatives, including simulation. WREB has been developing simulations that soon may be able to replace patient-based assessment for Operative Dentistry and Periodontics, the last two patient-based sections of its current dental examination. These simulations are in development and undergoing review.

In the meantime, the advent of COVID-19 has placed students and their education programs in a difficult and frustrating position. Students need to graduate, move on, obtain employment, or begin their advanced dental education residencies; their education programs need them to graduate and move on in order accept a new entering class and appropriately advance the classes below them. COVID-19 associated risk and social distancing currently completely obstruct student ability to challenge the traditional, patient-based examination. While WREB understands that COVID-19 is creating a crisis for students, for dental education programs, and even for the profession, its singular purpose is to support the needs of state boards in their regulatory role and charge to protect the public.

Students and program directors recently have appealed to state boards and, not knowing exactly how long COVID-19 risk and need for social distancing might continue, state boards in a few states now have appealed to WREB for potential solutions they might consider along with suggestions they've received that include waiving clinical examination requirements altogether, waiving the patient-based sections of the clinical examination, granting a provisional license until the applicant is able to complete the full examination, acceptance of the DLOSCE in lieu of a practical demonstration of clinical skills, and variations of these.

In response and in addition, WREB has field-tested an alternative, performance-based simulation that could be required in lieu of its traditional patient-based Operative Section. This alternative included the field-testing of social distancing for both candidates and examiners.

In the simulation, each candidate is required to successfully perform both preparation and finish of a conventional Class II restoration on a molar and a Class III restoration on a central incisor. All procedures are performed, like they are for the Endodontics and Prosthodontics sections, in full simulation and with rubber-dam isolation. Results are assessed using established Operative Section criteria. Certain critical errors are preserved, and the passing cut-point remains unchanged. The simulation involves social distancing for both candidates and examiners and uses materials (simulation teeth and arches) which are readily available and with which candidates and their programs already are familiar.

This alternative for the Operative Section is intended to be a provisional solution for 2020 (COVID-19) only and is intended neither to replace WREB's patient-based Operative Section in 2020 for states that continue to require it nor to be the simulation WREB intends to offer in the future

when social distancing is not a concern and the validity of a more realistic and involved simulation can be demonstrated.

The second patient-based section of the current WREB dental examination is the Periodontics Section. This section assesses a candidate's understanding of periodontal diagnosis and ability to physically perform initial periodontal therapy (periodontal scaling and root-planing). However, this section already is elective, is not required for licensing in some states, and tests a physical skill that, increasingly, dentists do not themselves perform.[iii] The Periodontics Section, while valued by many states, is, by far, the least discriminating section of the entire examination.[iv] Also, important aspects of periodontal diagnosis and treatment decision-making (things dentists do and are expected to know how to do) already are well covered in the unique CTP Section of WREB's dental examination. State boards may decide to waive or postpone the patient-based Periodontics section until such time as it again may become available to applicants.

These are dental examination options that WREB currently is making available for state board consideration in this highly unusual year. It is assumed that any waiver or exception a state grants due to COVID-19 might be restricted to matriculated students of CODA accredited dental education programs graduating in the spring of 2020 and would not necessarily set a precedent for future years or apply to any other group of applicants. WREB recognizes that all these and related decisions reside with the state and depend on the Board or on the Board's advice to the state authority empowered to grant a variance due to current, emergent COVID-19 circumstances.

Logistic detail regarding the implementation of WREB's dental examination or any of the described alternatives depends on the capacity, limitations, and COVID-19 restrictions imposed by or on any host site where an examination is conducted.

WREB's standard dental examination which includes the fidelity associated with two simulations (Endodontics and Prosthodontics) and two patient-based sections (Operative Dentistry and Periodontics) in addition to CTP will continue to be offered as soon as test sites again are able to host this type of examination.

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[i] Fewer patient-based procedures were required to determine 4,457 candidate pass/fail outcomes for the Operative Section in 2018 (42.0% fewer) and 2019 (41.1% fewer). No significant difference was found between first and second procedure performance for candidates who scored at or above the cut-score on the first procedure. The second procedure added no significant contribution to the assessment of these candidates. Only four of these candidates failed the section despite demonstrating competence on the first procedure; all four scored close to the cut-score and three have already passed upon retake.

[ii] The CTP Section is the most comprehensive section of the WREB Dental Examination. It tests candidate knowledge, skills and abilities that cannot be readily sampled in other ways and includes assessment of meaningful aspects of every other section of the Examination. The CTP Section is designed to integrate the disciplines of dentistry in a practical, clinical way. The construction of appropriately sequenced treatment plans and item responses requires broad understanding of diagnostic, preventive and restorative dentistry, of endodontics, periodontics, and prosthodontics, as well as oral surgical, radiological, pediatric dentistry, and patient-management procedures, and understanding of the relationships between these procedures and their clinical application under various patient conditions.

The CTP Section is open-ended; it's an authentic simulated clinical examination (ASCE)—a practical, performance-based examination. It requires candidates to construct their responses unaided by cues, choices, or locations they can select. In many instances it requires candidates to perform the very tasks dentists perform and, for this reason, has extraordinary fidelity for a computer-based examination. Rigorous examiner training and calibration contributes to high outcome reliability for the CTP examination. And the large reservoir of examination cases, frequent case modification, and the permutation of cases in the forms used every year significantly enhance test security for the CTP examination. All combine to create a strong validity argument for using results of WREB's CTP examination to inform licensing decisions.

[iii] In 2013 74.6% of general practitioners in solo practice employed one or more dental hygienists. For general practitioners in nonsolo practice (including various forms of group practice, "corporate" practice, etc.) 92.2% work in situations where dental hygienists perform scaling and root-planing services. -ADA, Science and Research – Health Policy Institute, Data Center, Dental Practice.

Authors Thomas Wall, M.A., M.B.A.; Albert H. Guay, D.M.D. in their article *Very Large Dental Practices Seeing Significant Growth in Market Share*. Health Policy Institute – Research Brief. August 2015. Point out that:

- From 2002 to 2012, market share increased for dental firms with 20 employees or more, while dental firms with fewer than five employees experienced a decline in market share.
- During the same period, very large dental firms – those with 500 employees or more – also saw increases in number of establishments, number of employees and annual receipts.

The national 2018 Dental Practice Analysis conducted jointly by WREB and CRDTS suggests that dentists, themselves, now are performing very few scaling and root-planing procedures compared to dental hygienists. The 2017 Dental Hygiene Practice Analysis survey specifically asked how often certain procedures were performed by the dentist and 84.6% of respondents said the dentist performed these tasks Rarely or Never.

The average of all general dentists employing dental hygienists in 2013 was 77.2%. From 1990 to 2013 the average number of dental hygienists per dentist in the primary practice (among dentists employing dental hygienists) steadily increased. This trend has been continuing. More and more dentists are having dental hygienists perform basic periodontal services and are using more dental hygienists per capita to do this. Dentists, themselves, are doing fewer and fewer of these tasks. Assessing these skills for dentists, now, may not be supported by the practice (task) analyses that underpin the design of a valid dental licensing examination.

[iv] Evidence in favor of non-requirement includes exceptionally high proportions of candidates performing extremely well on the Periodontics section. Most of the candidates who do fail the Periodontics section multiple times have also failed at least one other section multiple times. Only four (4) out of almost 13,000 (i.e., 0.03%) candidates from 2011 to 2016 remained unsuccessful due to Periodontics Section failure.

WREB Dental Hygiene Licensing Examination COVID-19 Options for 2020

The following are options state boards could consider in response to COVID-19:

Dental Hygiene Clinical Examination (patient-based)

WREB's standard dental hygiene examination includes the following components:

- Patient Qualification
- Extraoral/Intraoral Examination
- Calculus detection and removal
- Tissue Management
- Periodontal Assessment
- Professional judgment

Many Candidates are still faced with completing educational requirements and CODA has approved alternative methods to have students complete their didactic and clinical requirements. The COVID-19 pandemic has touched everyone; however, some dental hygiene programs are seeing more restrictive state policies being implemented than similar programs in other states. Because of these inconsistencies, the time period for completion of dental hygiene requirements will vary by state; some programs are being postponed for several weeks and others for several months.

In the interim, and at the request of educators, WREB has rescheduled all Dental Hygiene, Local Anesthesia, and Restorative examinations. Taking a clinical examination is still a viable option, as WREB anticipates Candidates will still want an examination that allows them greater portability than licensure in a single state.

WREB is acutely aware of the risks associated with COVID-19 but is well prepared and capable of adjusting our exam protocol to adhere to national and state regulations without risking the integrity of the exam or the safety of the candidates, patient, and examiners.

Comprehensive Written Dental Hygiene OSCE Component

WREB understands that for many states, the current patient-based clinical examination may not fit the current needs of state boards seeking alternative pathways for dental hygiene licensure. COVID-19 associated risks along with social distancing, impede a student's ability to challenge the traditional, patient-based examination. WREB understands that COVID-19 is creating a crisis for students, for dental hygiene education programs, and even for the profession, and is prepared to serve as a resource for our member state boards and committees during this crisis and provide alternative testing methods while still maintaining the fidelity of our examinations.

WREB is developing a dental hygiene written OSCE that includes dental hygiene components that are essential for safe practice while testing a candidate's knowledge about dental hygiene care. This examination is an accumulation of beta-tested dental hygiene items that have been used in

other WREB examinations and are psychometrically sound. The examination may serve as an alternative to a patient-based examination for licensure. WREB is prepared to administer this examination on site at each school with our own equipment utilizing social distancing protocols Utilizing testing centers will not be necessary.

The process of treating a patient's oral health not only requires good instrumentation skills, but also possessing an aptitude for making correct treatment decisions. Critical thinking skills are important in the assessment of the patient's needs and to accurately develop a care plan that reflects a patient's individualized care. These steps form the foundation for dental hygiene treatment which ultimately leads to healthy outcomes and improvement in health.

The WREB Dental Hygiene OSCE is a multiple-choice written component that assesses these multi-faceted components of dental hygiene care. This is a comprehensive overview of dental hygiene knowledge, radiographic interpretation, AAP staging and grading, extra and intra oral assessment and risk assessment, care plan development, and assessment and treatment of the periodontium. The exam is an avenue to test the skills of an entry-level student, either replacing the current clinical examination or in conjunction with a clinical licensure exam should a state board want an additional assessment examination.

WREB
A National Dental and Dental Hygiene Testing Agency

2020

Comprehensive Treatment Planning

exam candidate guide

Mission Statement

The mission of WREB is to develop and administer competency assessments for State agencies that license dental professionals.

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COMPREHENSIVE TREATMENT PLANNING

Examination Overview

The Comprehensive Treatment Planning (CTP) examination is a computer-based examination administered at Prometric test centers. The exam consists of three (3) patient cases of varying complexity, one of which is a pediatric patient. For each case, Candidates assess patient history, photographs, radiographs, and clinical information in order to create and submit a treatment plan. Candidates are required to answer questions, construct responses, and perform tasks related to each case. These include constructing appropriate pharmacy prescriptions and case specific dental laboratory work authorizations, when required. Candidates are allowed three (3) hours to complete the CTP exam. A 15-minute tutorial is provided prior to the beginning of the examination. Candidate scoring is completed by calibrated examiners utilizing published scoring criteria rating scales.

Communication at any time with other individuals regarding the contents of the CTP examination is considered unethical conduct. If a Candidate engages in Improper Performance or Unethical Conduct, in addition to dismissal from the exam, failure of the exam, or reduction in an exam score, WREB reserves the right to take any other reasonable action WREB deems appropriate, including, but not limited to reporting the Candidate to: (i) the various state licensing boards, (ii) the Candidate's dental school, (iii) other dental or dental hygiene testing organizations, or (iv) other professional organizations.

For each patient case, the following will be provided:

- Personal Profile that provides a brief overview of the patient
- Patient Information form
- Medical History form
- Dental Chart indicating existing restorations
- Periodontal Chart, for adult patients, highlighting key periodontal findings
- Photographs showing intraoral and extraoral images of the patient
- Intra and/or extraoral radiographs
- Clinical findings, located at the bottom of the medical history form, indicating conditions that may not be clearly demonstrated in the images but would be found during a patient examination

Also provided:

- The CTP Candidate Guide
- Space for recording the Candidate's Treatment Plan submission
- Space for recording the Candidate's answers to specific case questions

Test Content

The CTP examination is designed to integrate the various disciplines of dentistry as done in actual practice. The following list indicates the major areas of dentistry that are tested on the exam:

- Restorative Treatment
  - Single Units/Operative
  - Multiple Units
    - Fixed Prosthodontics
      - Interim Restorations
    - Removable Prosthodontics
      - Partial Dentures
      - Complete Dentures
      - Implant-Supported Restorations

- Periodontal Treatment
  - Phase I (Non-Surgical) Therapy
  - Re-evaluation
  - Surgery/Referral
  - Maintenance

- Endodontic Treatment

- Surgery
  - Exodontia
  - Pre-prosthodontic
  - Periodontal
  - Implant Placement

- Prescription Writing
  - Pharmacy - commercially available forms and dosages
  - Dental Laboratory

- Follow-up/Prognosis/Maintenance

Diagnosis, Etiology, and Treatment Planning are integrated throughout the exam and overlap the test specifications listed above. Also included are principles of pediatric dentistry, local anesthetic dosing, orthodontics, pharmacology, and specialist referrals when appropriate.

Treatment Plans

The Candidate is required to develop a complete treatment plan for each assigned patient case. The treatment plan can be edited or modified until final submission. After final submission of the treatment plan, it will be available for review only; no further changes can be made. Following submission of the treatment plan, additional questions or tasks related to the treatment of the patient become accessible. The treatment plan submitted by the Candidate will be available for review while navigating through these additional items but cannot be modified.

The treatment plan must:

- Appropriately address the patient's chief complaint or concern.
- Include appropriate treatment modifications if there are medical conditions that may affect the delivery of dental care. If medications are required, the modification must include drug, dose, and directions for use.
- Recommend additional diagnostic tests or specialist referrals as part of the treatment plan, if indicated. If referring to a specialist, a diagnosis and proposed treatment must be indicated.
- Contain a comprehensive and appropriately sequenced list of procedures that address the patient's dental needs.
- Be succinct, organized, and readily interpreted.

Candidates are to consider only what they can actually see in the diagnostic records and what they are given as clinical findings. However, Candidates are responsible for identifying and recommending appropriate treatment or management for all oral diseases and conditions that are present. Pit and fissure occlusal, lingual, buccal or facial restorations are not to be included unless there is an obvious cavitation on the photographs and/or radiolucency on the radiographs, or tactile evidence of caries is noted in the "Clinical Findings" section of the patient record. See Definitions, Pages 5-6. Interproximal carious lesions must reach the dentino-enamel junction radiographically in order to justify restoration.

Candidates must appropriately recommend treatment for caries, fractures, missing teeth, defective or failing restorations, infection, and/or other pathology. Candidates are not required to specify the material but must specify whether the restoration will be a direct or an indirect restoration. Bases, build-ups, pins, and posts need not be specified in the treatment plan. Guidelines for periodontal therapy are provided on Page 5.

Oral Hygiene Instructions do not need to be listed on the treatment plan. It is assumed that oral hygiene instruction will be provided for every patient. Topical fluoride application is not included in the definition of dental prophylaxis. Therefore, if indicated, fluoride should be listed separately.

Costs of dental treatment are not to be considered when developing the treatment plan. All patients are considered to be cooperative and compliant unless otherwise noted.

Candidates should not sign their name on treatment plans or the supplemental questions.

Supplemental Questions and Tasks

Following submission of the treatment plan, additional questions or tasks related to the case are presented. The first case will have four to five items, the second will have seven to eight, and the third will have four to five. Time should be managed accordingly. Candidates can navigate through and complete the items in any order. It is not necessary to answer questions in full sentences. Responses should be clear, succinct, and easily understood by an Examiner.

The response you write for the questions will be scored based on everything that is written. If more information than required is given, all information will be considered in scoring.

There may be more than one acceptable treatment plan; questions should be answered as asked.

Scoring

Three Examiners grade each Candidate's submission independently. Each treatment plan is evaluated on the five criteria listed below:

1. Treatment modifications.
2. Is the treatment plan inclusive?
3. Does the treatment plan exhibit overtreatment?
4. Is the treatment sequence appropriate?
5. Is the treatment plan concise, well organized, and easily interpreted?

For each parameter, the Examiner compares the Candidate's submission to a WREB-developed answer key and uses a five (5) point scale to assign a score. Candidates' responses to additional items are scored in a similar manner. (Scoring Criteria is listed on Pages 9-10.)

The median (middle) score of the three Examiners for each of the five categories (listed above) of the treatment plan and each of the questions/tasks are added and averaged to obtain the overall score. Each category of the treatment plan and each question are of equal value. An average score of 3.00 or higher is required for passing.

It is important to submit a response for every question or task; unanswered items receive a score of 1. Responses should be checked for accuracy. Examiners will score exactly what is written.

Equating procedures are used to address variation in difficulty among the various cases and forms of the examination. Equating ensures that Candidates of comparable competency are equally likely to pass the examination.

Critical Errors

There are certain critical errors that result in failure of this exam regardless of the average accumulated score. Critical errors are those likely to cause life-threatening harm or severe morbidity that may require hospitalization.

Prescribing medications contrary to patient medical histories and/or dosages exceeding safe guidelines may constitute a critical error.

Local anesthetic administration exceeding the manufacturer's recommended dose (MRD), as found in the American Academy of Pediatric Dentistry (AAPD) guidelines, constitutes a critical error.

Critical errors require validation by two Examiners independently, as well as agreement by the Lead Examiner.

Definitions and Documentation Instructions

Caries: Caries has definite resistance to the perpendicular withdrawal of the explorer and may have a dry leathery appearance.

Dental prophylaxis (prophy) means removal of plaque, calculus and stain, to control local irritational factors and frequently involves scaling of coronal and subgingival surfaces of the teeth.

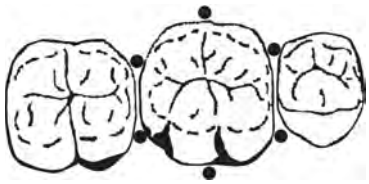
Application of fluoride is not included in the definition of dental prophylaxis. It must be listed separately, if indicated.

Periodontal treatment should be stated by quadrant, including number of teeth. Examples of this are:

Prophylaxis
S/RP 4 quads of 4 or more teeth
S/RP 4 quads of 1-3 teeth
Prophylaxis, S/RP: UR and LL 1-3 teeth
Prophylaxis, S/RP: UL 4 or more teeth

A decision to treat should be based on clinical attachment loss (CAL), periodontal pocket depth (PD), and evidence of inflammation (bleeding on probing). Teeth having CAL with pocket depths $\geq$ 5 mm or $\geq$ 4 mm with BOP require SRP.

Pocket Depth (PD) Measurements are provided for the six sites shown below:



Bleeding on Probing (BOP) will be designated on the chart by a red dot indicating sites which bleed within 30 seconds of probing.

Furcation Involvement will be noted where present and classified as:

Class 1 (/\)
Incipient involvement: tissue destruction extends 1.0 mm but not more than 2.0 mm measured horizontally from the most coronal aspect of the furcation.

Class 2 (Δ)
Cul-de-sac involvement: tissue destruction extends deeper than 2.0 mm, measured horizontally from the most coronal aspect of the furcation, but does not totally pass through the furcation.

Class 3 (▲)

Through-and-through involvement: tissue destruction extends through the entire furcation. A blunt instrument passed between the roots can emerge on the other side of the tooth.

Mobility will be noted where present and classified as follows:

Class 1
Total facial-lingual tooth movement of less than 1.0 mm.

Class 2
Total facial-lingual tooth movement from 1.0-2.0 mm, without movement in a vertical direction.

Class 3
Total facial-lingual tooth movement of more than 2.0 mm, and/or movement in a vertical direction (i.e., depressible).

Clinical Attachment Level (CAL) is the distance from the cemento-enamel junction (CEJ) to the base of the sulcus/pocket. In health, the base of the sulcus is at or very near the CEJ, i.e. CAL = 0.

Periodontal Prognosis is the forecast of the likely response to treatment and the long-term outlook for maintaining a healthy and functional dentition.

Good Prognosis – involves one or more of the following: health or slight CAL, adequate periodontal support, no mobility, no furcation involvement, and control of etiological factors to assure the tooth would be relatively easy to maintain, assuming full patient compliance.

Fair Prognosis – involves one or more of the following: CAL to the point that the tooth could not be considered to have a good prognosis, which would include slight or moderate CAL, and/or Class 1 mobility or furcation involvement. The location and depth of the furcation would allow proper maintenance with full patient compliance.

Poor Prognosis – involves one or more of the following: severe CAL resulting in a poor crown to root ratio, poor root form, Class 2 furcations not easily accessible to maintenance, or Class 3 furcations, Class 2 or 3 mobility, significant root proximity.

Hopeless Prognosis – involves one or more of the factors listed in poor prognosis with inadequate attachment to maintain the tooth in health, comfort and function. Extraction is suggested, as active periodontal therapy (non-surgical or surgical) is unlikely to improve the current status of the tooth.

Suggested Abbreviations

Use of the appended abbreviations is encouraged. These abbreviations are understood by Examiners and will facilitate Examiner interpretation of the treatment plan.

Abbreviations and acronyms other than those listed may not be understood by Examiners, resulting in a possible score reduction.

UL - Upper Left	**UR -** Upper Right
LL - Lower Left	**LR -** Lower Right

Restorative Designation

Surface/Area	Type
O - Occlusal	Direct/Indirect
M - Mesial	Crown
D - Distal	Inlay/Onlay
L - Lingual	Implant
F - Facial	Bridge/FPD (specify teeth)
I - Incisal	Pontic

Other Abbreviations

Apico - Apicoectomy

CR - Crown

EXT - Extraction

Prophy - Dental Prophylaxis

RCT - Root Canal Therapy

Re-eval - Reassessment or re-evaluation after completion of a treatment phase

RPD - Removable Partial Denture (specify teeth replaced and rests)

S/RP - Scale and Root Plane

SSC - Stainless Steel Crown

Charting

WREB recognizes the American System of tooth identification. Tooth numbers are recorded clockwise from the posterior of the upper right quadrant to the posterior of the lower right quadrant: 1-32 for permanent teeth; A-T for primary teeth.

References

The complete guidelines for antibiotic coverage in patients having some form of cardiac disease or repair. (2008). The Journal of the American Dental Association 139(1), Special Supplement: 3S-24S.

Sollecito TP, Abt E, Lockhart PB, et al. (2015). The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints. Journal of the American Dental Association 146(1), 11-16.

Wynn RL, Meiller TF, & Crossley HL. (2015-2016). Drug Information Handbook for Dentistry (21st ed). Lexicomp.

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Stefanac, SJ & Nesbit, SP. (2007) Treatment Planning in Dentistry (2nd ed). Mosby Elsevier.

American Academy of Periodontology. (2015) Task Force Report on the Update to the 1999 Classification of Periodontal Diseases and Conditions. J. Periodontal. (2015) 86(7):835-838.

AAPD for both anesthetic and antibiotic pediatric dosages.

CTP GLOBAL SCORING CRITERIA					
	5 **Optimal**	**4** **Appropriate**	**3** **Acceptable**	**2** **Inadequate**	**1** **Unacceptable**
Treatment Modification	All needed modifications are appropriately noted (medication, referral, etc.). Specific medication and dosage is required.	The modifications are not optimal, but appropriate.	Not all modifications are noted, but the patient's health is not compromised. Modifications are noted at the minimally acceptable level.	Not all modifications are noted, and or the modifications are incorrect or incomplete. The patient's health may be compromised.	Modifications are ignored or incorrect and the patient's health is compromised. Severe morbidity requiring hospitalization.
Is the Treatment Plan Inclusive?	All items that must be addressed are addressed. Chief complaint correctly addressed.	Most items that need to be addressed are addressed. Those that may be missing have little or no impact on the well-being of the patient. Chief complaint correctly addressed.	Missing items (one or more) do not pose a short-term threat. Missing items (one or more) might affect patient well-being if the next regular periodic exam is missed. Chief complaint not fully addressed.	Important items (one or more) are missing. If not corrected, patient well-being is at risk in the near term. Chief complaint wrongly addressed.	Critical items (one or more) are missing. Patient well-being is currently at risk. Chief complaint not addressed.
Does the Treatment Plan Exhibit Overtreatment?	Only those item(s) that must be addressed are addressed.	There are some (one or more) items that do not need to be addressed, but do not pose a risk to the patient.	There are some (one or more) items for which justification is questionable, but that pose little risk to the patient.	There are some (one or more) items that are not justified; if performed, they would result in limited physical damage to the patient.	There are multiple items that are not justified; if performed they would damage the patient.
Is the Treatment Sequence Appropriate?	The sequence is optimal.	The sequence is not optimal but will accomplish treatment goals.	The sequence is not correct, but can be corrected as treatment progresses. Rationale for the proposed sequence is unclear.	The sequence has definite flaws that are likely to result in backtracking and additional treatment.	The sequence has serious flaws and will not accomplish treatment goals.
Is the Treatment Plan Concise, Well Organized and Easily Interpreted?	The treatment plan is concise, well organized, and easily interpreted.		The treatment plan, as presented, may be confusing, but can be interpreted.		The interpretation of the plan cannot be determined.

CTP CONSTRUCTED RESPONSE SCORING CRITERIA				
5 **Optimal**	**4** **Appropriate**	**3** **Acceptable**	**2** **Inadequate**	**1** **Unacceptable**
All essential elements are addressed and/or no errors are present. Response reflects optimal planning, rationales, and/or procedures.	Most essential elements are addressed and/or minor errors are present. Response is not optimal, but reflects an appropriate level of planning, rationales, and/or procedures.	Response is missing more than one essential element or contains moderate errors, but reflects planning, rationales, and/or procedures that are not likely to put the patient at risk.	Response is missing several essential elements or contains significant errors. Response reflects planning, rationales, and/or procedures that are likely to put the patient at risk.	Response is absent, missing most or all essential elements, or is mostly in error. Response reflects planning, rationales, and/or procedures that will harm the patient.

Sample Treatment Plan Formatting

NOTE: The following sample treatment plan does not relate to any specific case.

SAMPLE #1 TREATMENT PLAN

Treatment Modifications:

Antibiotic Prophylaxis (Amox. 2g. 1hr prior to procedure), avoid latex

Sequenced Treatment Plan:

#1 EXT (addressing the patient's chief complaint)
Prophylaxis LR
S/RP: UR and LL 1-3 teeth
S/RP: UL 4 or more teeth

#14 RCT (retreatment)
#19 RCT
#20 DO Direct
#3 MO Direct
#4 MOD Indirect
#27 F Direct
#30 MODF Direct

#12-14 bridge

#18 crown
#19 crown

#29 EXT Refer for implant placement
#32 EXT Refer to oral surgeon
#29 implant and crown

SAMPLE

NOTE: The following sample treatment plan does not relate to any specific case.

SAMPLE #2 TREATMENT PLAN

Treatment Modifications:

Avoid Penicillin, Consultation with oncologist re: timing of treatment

Sequenced Treatment Plan:

Smoking Cessation

Prophy
#9 cosmetic contouring (in lieu of restoration) (addressing the patient's chief complaint)

#2 MO Direct
#6 DL Direct

#14 OL Direct
#15 O Direct

#31 O Direct

EXT #'s 1, 16, 17, 32

Refer for orthodontic consultation regarding malocclusion

SAMPLE

NOTE: The following sample treatment plan does not relate to any specific case.

SAMPLE #3 TREATMENT PLAN

Treatment Modifications:

None

Sequenced Treatment Plan:

Prophy and Fluoride

#S Extract
#T MO Direct

#S band and loop space maintainer

#A MO Direct
#B SSC and pulpotomy
#C, F Direct

#I SSC and pulpotomy
#J MO Direct

#K MO Direct
#L DO Direct

Refer to orthodontist/pediatric dentist for evaluation of posterior cross-bite

SAMPLE

Sample Questions with Answers

Note: The following sample questions, with answers scored a "5", do not relate to any specific case.

Answers to the sample questions are noted in blue.

1. **You estimate this patient will require 3-4 dental appointments. Write the prescription for prophylactic antibiotic coverage for the patient.**

   RX:

   Amoxicillin 500mg

   16 capsules

   Take 4 capsules one hour prior to appointment

   Refills: *0*

2. **List the reasons for an indirect full coverage restoration on tooth #19.**
   - *Fractured porcelain on the mesial, open contact, and food impaction*
   - *Large root canal access opening through the current crown*
   - *Recurrent caries (facial margin)*

3. **What risk factors may have contributed to the periodontal disease evident in this patient?**
   - *Smoking*
   - *Diabetes*
   - *Poor oral hygiene*
   - *Irregular professional dental care*

4. **List the reasons and provide the benefits to the patient for your proposed treatment and replacement for tooth #12.**

   Reason (for removal):
   - *Possible root perforation*
   - *Draining fistula*
   - *Periodontal defect*
   - *Poor long-term prognosis*

   Benefits (of implant placement):
   - *Conserves adjacent teeth*
   - *Preserves bone*
   - *Good long-term prognosis*

Taking the Exam at Prometric

After you have registered for the WREB exam and your application has been processed, scheduling information for your Comprehensive Treatment Planning (CTP) Exam will be included in your CTP eligibility letter. Please review this information carefully. Failure to schedule within your assigned window or meet Prometric's appointment requirements will result in additional fees.

If you experience technical issues during your exam, please notify the Prometric Exam Proctor immediately and request a report number. You will also need to contact the WREB office directly as soon as possible after the incident and provide the report number for further investigation.

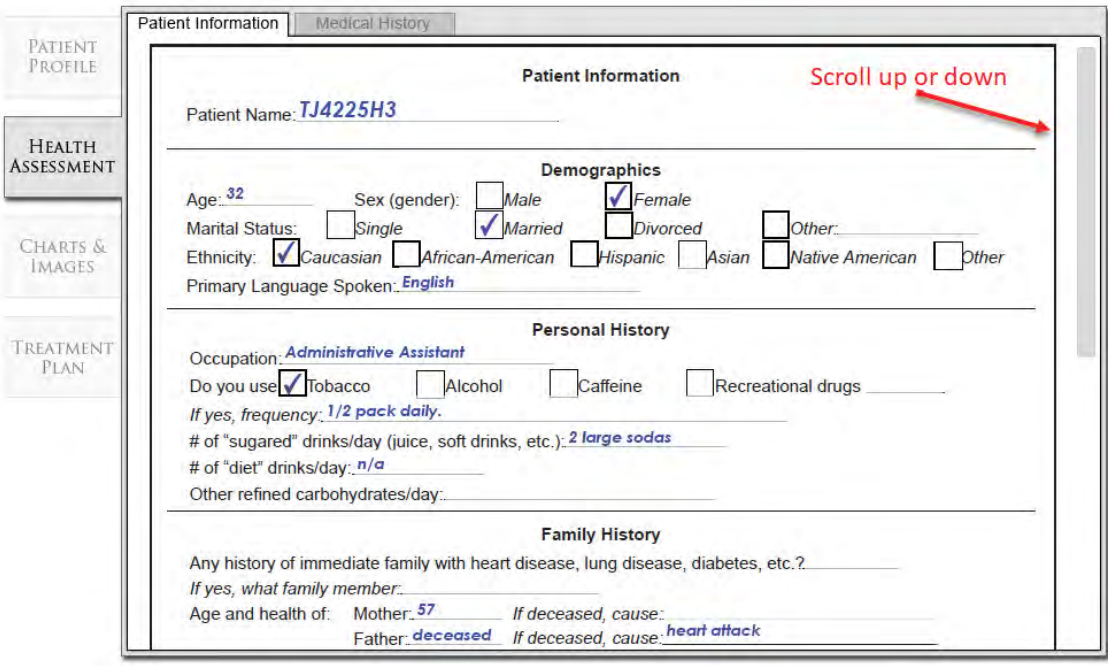
For testing center locations, payment information, and identification requirements, please visit Prometric's website at prometric.com/en-us/clients/wreb/Pages/landing.aspx.

Guide to Interactive Features of the Exam

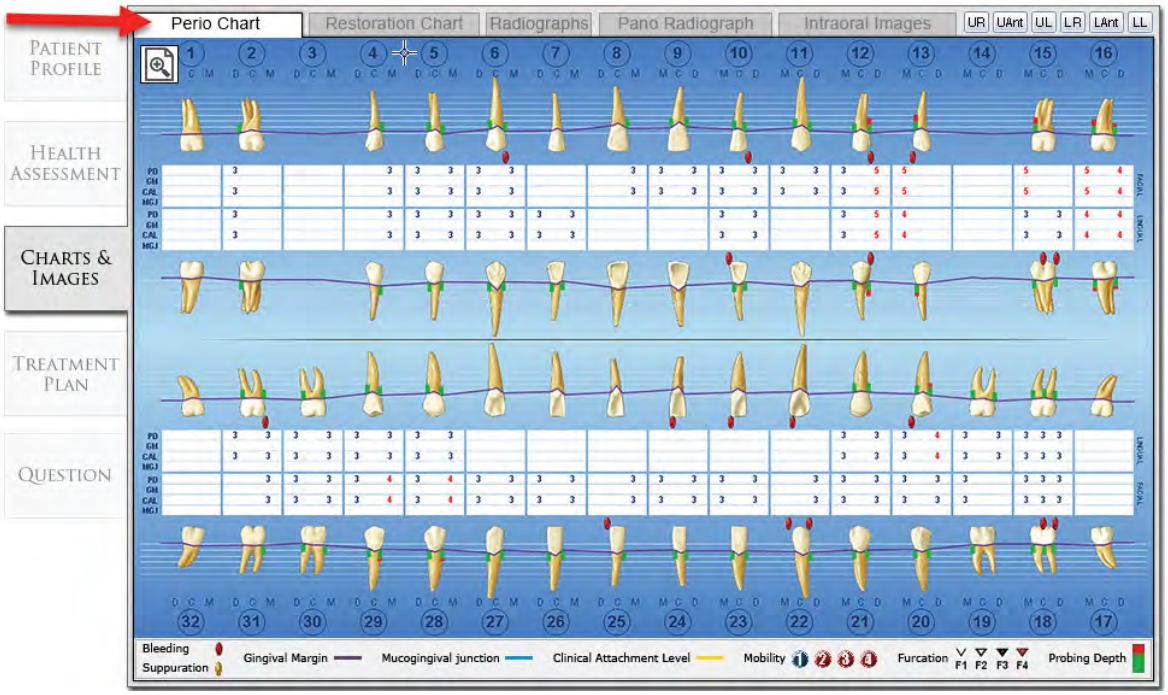
This is an interactive computer-based examination. Access to information on the computer is needed to develop a treatment plan. The following information provides an overview of the functions available. A tutorial available online (wreb.org) shows how each function works. Review it carefully. An interactive tutorial at the beginning of the exam provides the opportunity to practice using the functions before the actual timed exam begins.

Folders are displayed along the left of the viewing screen. These folders contain information needed to develop the treatment plan. Candidates must determine the information needed, access the information, and appropriately interpret it. To do this efficiently requires navigation between folders. Spending time practicing with the tutorial prior to the examination will ensure that you can do this easily and comfortably.

Some windows contain more information than can be viewed on the screen. To see all information, hold and drag the mouse button on the scroll bar on the right of the screen.

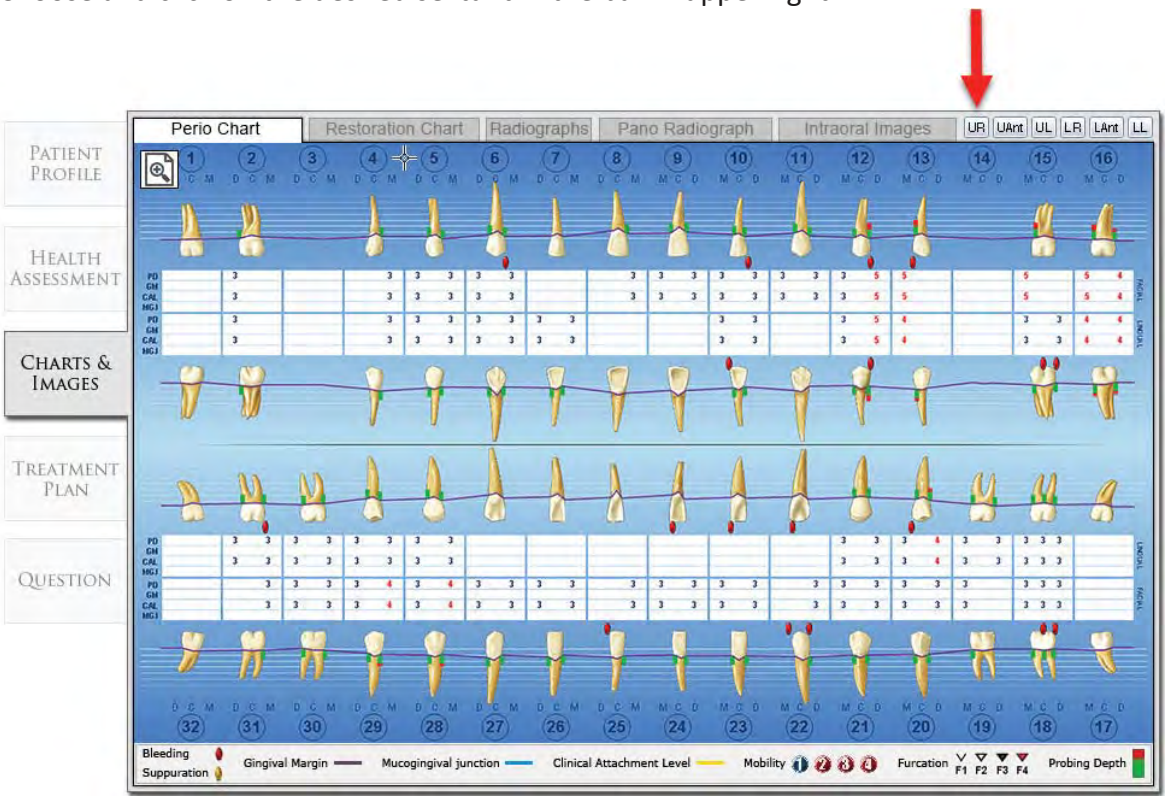


After accessing the Charts and Images Folder, select the desired chart or image by clicking on the options at the top of the screen.

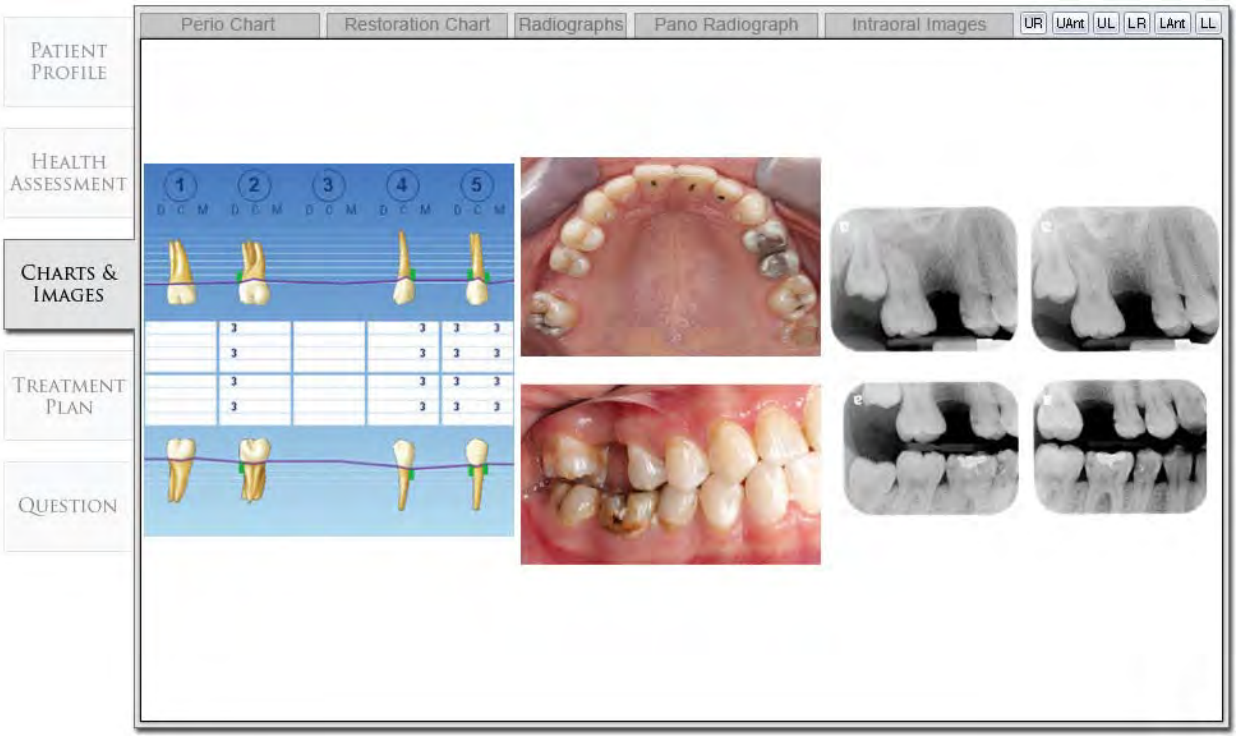


To expedite navigation, be familiar with the sextant views which show the periodontal chart, photographs and radiographs simultaneously.

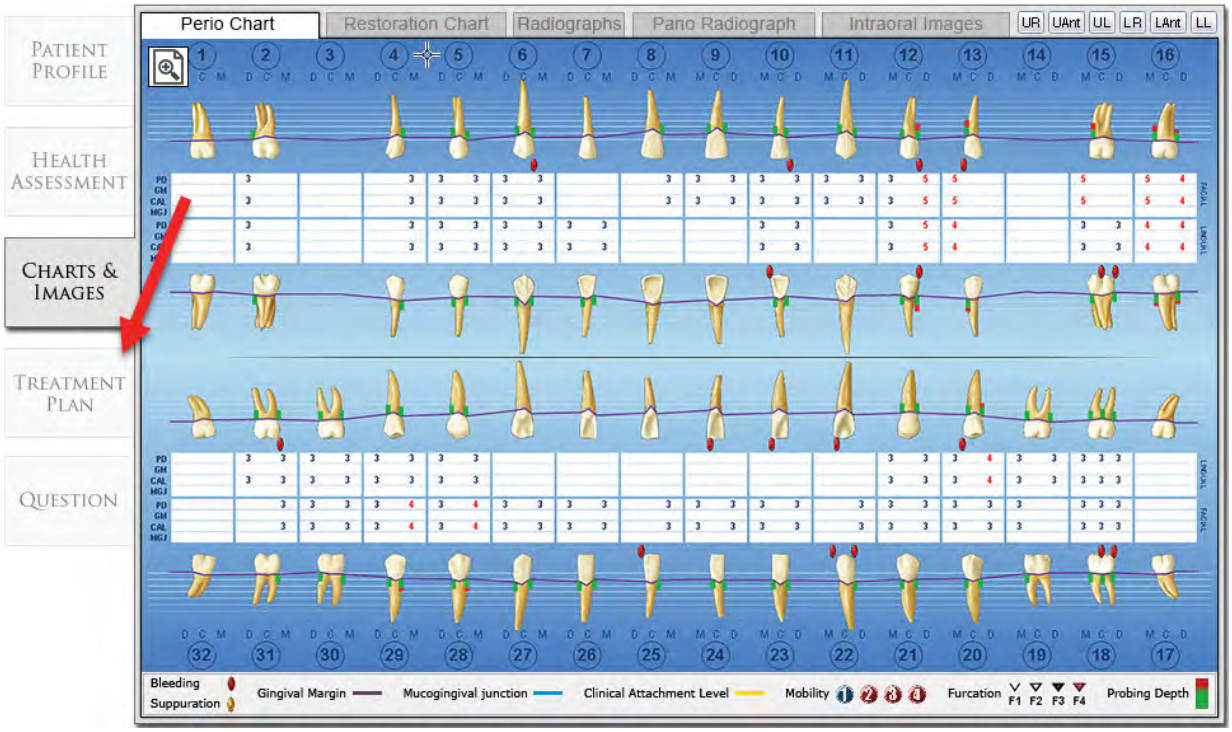
Choose and click on the desired sextant in the bar in upper right.



The appropriate sextant view will appear showing the periodontal chart, photographs and radiographs for that sextant. To return to full-screen mode, click anywhere on the image.

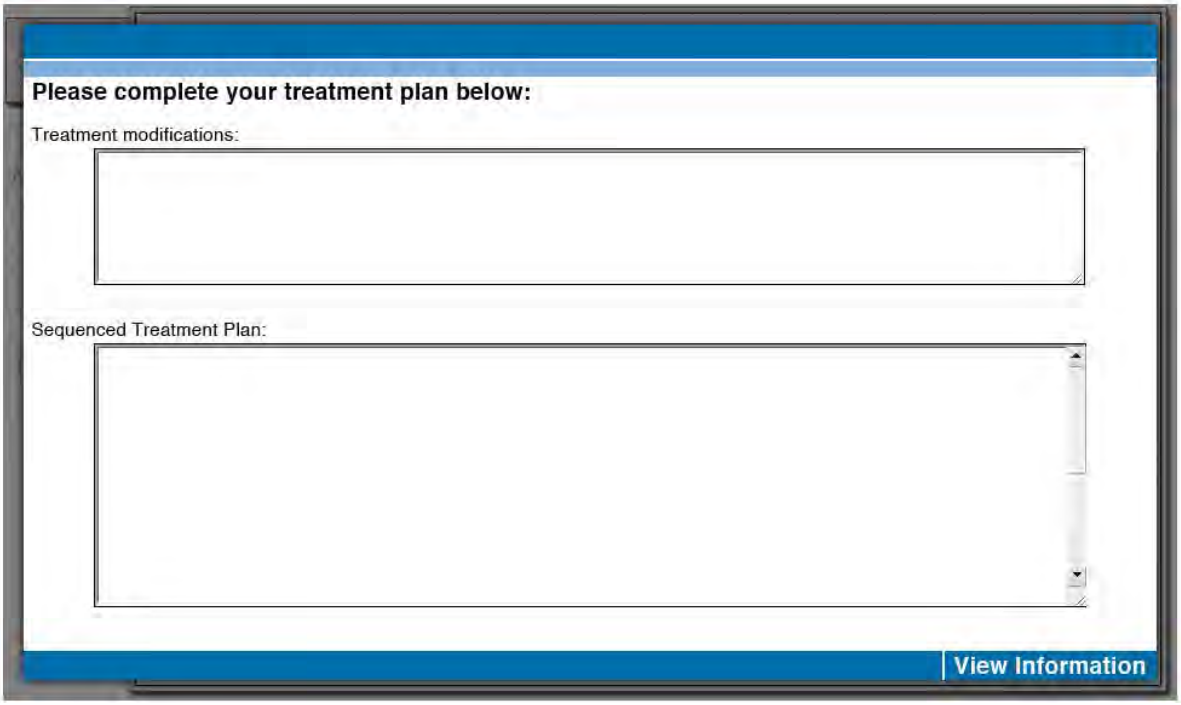


To record your treatment plan, click on "Treatment Plan" on the left of the screen.



There are two sections to the plan. Treatment modifications are recorded in the first box.

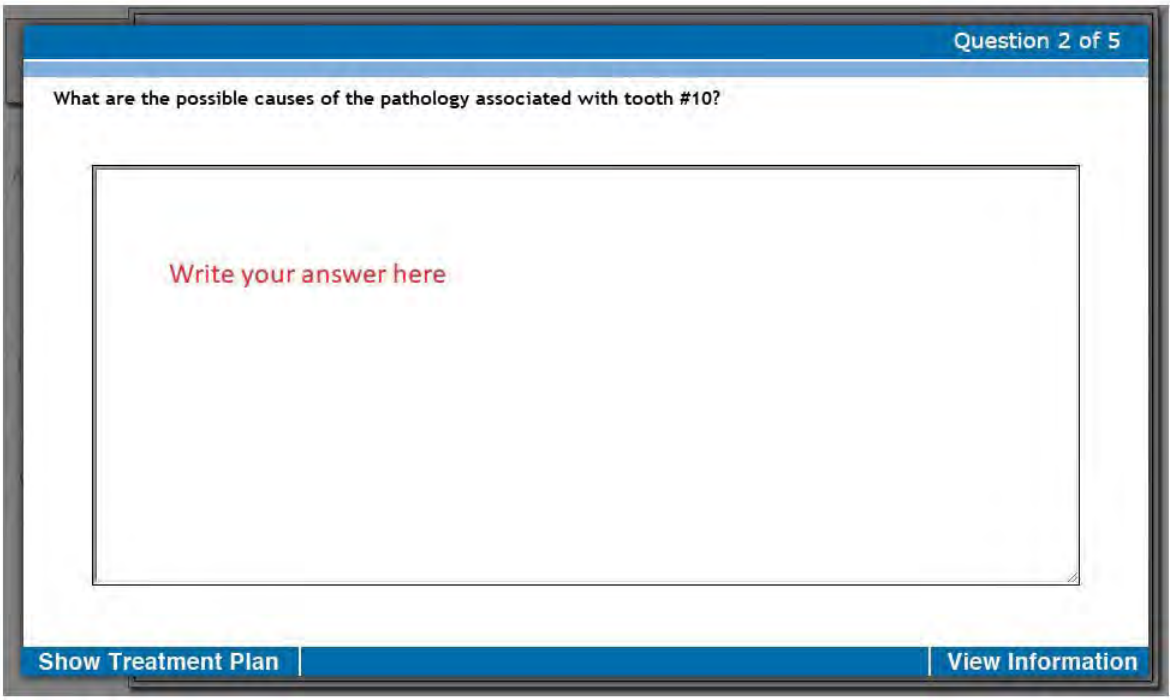
The sequenced treatment plan is recorded in the second box. Use the right scroll button to scroll down for additional lines.



To return to the case information, select the "View Information" button in the lower right. This will return to the last screen opened.

After completing the treatment plan, select the "Next" button. This will take you to the questions for the case. Once you select "Next" you will be locked out of the treatment plan, so **be sure you are ready to move on**. Your treatment plan will be available for reference, but you will not be able to make any changes. All of the case information will still be available.

Each question will appear at both the top and the bottom of the screen. Write your answer in the box as shown. To return to the case files, select "View Information". Selecting the "Question" folder will return you to the question box. If you wish to refer to your treatment plan, do so by selecting "Show Treatment Plan". Selecting "Next" will open the next question.



You may select the "Mark for Review" box in the upper right corner of the screen to flag items to which you would like to return before exiting the exam. After the last question for the case, a Review Screen allows you to review any of the items. It will indicate items that you flagged for review.

After you have completed the Review Screen, select the "End Review" button. This will open the next case and you will no longer have access to the first case. Complete the second and third cases as you did the first.

Patient Information

Patient Name:_____

Demographics

Age:_____ Sex (gender): ☐ *Male* ☐ *Female*

Marital Status: ☐ *Single* ☐ *Married* ☐ *Divorced* ☐ *Other:*_____

Ethnicity: ☐ *Caucasian* ☐ *African-American* ☐ *Hispanic* ☐ *Asian* ☐ *Native American* ☐ *Other*

Primary Language Spoken:_____

Personal History

Occupation:_____

Do you use ☐ Tobacco ☐ Alcohol ☐ Caffeine ☐ Recreational drugs _____

*If yes, frequency:*_____

of "sugared" drinks/day (juice, soft drinks, etc.):_____

of "diet" drinks/day:_____

Other refined carbohydrates/day:_____

Family History

Any history of immediate family with heart disease, lung disease, diabetes, etc.?_____

*If yes, what family member:*_____

Age and health of: Mother:_____ *If deceased, cause:*_____

Father:_____ *If deceased, cause:*_____

Does either parent have dentures?_____ ☐ Mother ☐ Father

At what age:_____

Dental Concerns - Reason for Visit

☐ Cleaning/Exam ☐ Bleeding gums ☐ Lost filling ☐ Missing teeth

Other:_____

Are you in pain?_____ If so, where?_____

# of months since last visit:_____ What procedure was done:_____

Past Dental Treatment

☐ Fillings ☐ Crowns ☐ Extraction(s) ☐ Dentures

☐ Root Canal(s) ☐ Braces ☐ Implant(s) ☐ Other:_____

Current Oral Hygiene Practices (frequency and type)

Frequency of brushing:_____ Type of toothbrush and toothpaste:_____

Frequency of flossing:_____ Mouth rinse:_____

Frequency of cleaning/check-ups:_____

Other: _____

SAMPLE

Patient Medical History

Patient Name:_____

Height:_____ Weight:_____

Blood Pressure:_____/_____ Repeat BP:_____/_____ Pulse:_____

Do you have or have you ever experienced any of the following conditions?

Rheumatic Fever	☐ Yes	☐ No	Diabetes	☐ Yes	☐ No
Heart Condition	☐ Yes	☐ No	Kidney/Renal Disease	☐ Yes	☐ No
Heart Murmur	☐ Yes	☐ No	Hepatitis/Jaundice	☐ Yes	☐ No
Heart Surgery	☐ Yes	☐ No	HIV Positive	☐ Yes	☐ No
Valve Replacement	☐ Yes	☐ No	Epilepsy/Seizures	☐ Yes	☐ No
Pacemaker	☐ Yes	☐ No	Joint Replacement	☐ Yes	☐ No
Stroke	☐ Yes	☐ No	Cancer	☐ Yes	☐ No
High Blood Pressure	☐ Yes	☐ No	Ulcers/Colitis	☐ Yes	☐ No
Bleeding Disorder	☐ Yes	☐ No	Sexually Transmitted Disease	☐ Yes	☐ No
Tuberculosis	☐ Yes	☐ No	Psychiatric Care	☐ Yes	☐ No
Asthma/Lung/Respiratory Conditions	☐ Yes	☐ No			

Are you taking any medication, pills or drugs, prescribed or not?If yes, please list and reason for use: ☐ Yes ☐ No

Are you allergic to any medicines, drugs, latex or other things?If yes, please list: ☐ Yes ☐ No

Have you ever received intravenous bisphosphonates for bone cancer or severe osteoporosis? ☐ Yes ☐ No

Are you under the care of a physician at the present time or have you been treated by a physician in the past six months? If yes, for what condition: ☐ Yes ☐ No

Do you have any disease, condition or problem not listed above that we should know about? If yes, please list: ☐ Yes ☐ No

Women only, are you pregnant? If yes, expected due date: ☐ Yes ☐ No

Clinical Findings:

SAMPLE

Pediatric Patient Information

Child's Name: _____

Demographics

Age: _____ Sex (Gender): ☐ Male ☐ Female

Ethnicity: ☐ Caucasian ☐ African American ☐ Hispanic ☐ Native American ☐ Other

Primary Language Spoken: _____

Personal and Family History

Any immediate family history of heart disease, lung disease, diabetes, etc? ☐ Yes ☐ No

If yes, which family member? _____

Age and Health of: Mother: _____

Father: _____

Does either parent have dentures? ☐ Mother ☐ Father ☐ Neither

of "sugared" drinks/day (juice, soft, drinks, etc.) _____

of "diet" drinks/day: _____

Type of "snacks" and # per day: _____

Dental History

What is the reason for your visit today? ☐ Cleaning/Exam ☐ Pain ☐ Lost Filling ☐ Loose Tooth ☐ Orthodontic Concerns ☐ Other

If your child is in pain, where is the pain present and how long has it been present? _____

When was your child's last dental visit? _____

What was done? _____

What oral habits did or does your child have? ☐ Thumb Sucking ☐ Finger Sucking ☐ Pacifier Use

Oral Hygiene Practice

Frequency of brushing: _____ Frequency of flossing: _____

Does your child use a mouth rinse? ☐ Yes ☐ No

Do you help with your child's homecare? ☐ Yes ☐ No

Pediatric Medical History

Child's Height: _____ Child's Weight: _____

Child's Blood Pressure: _____/_____ Pulse: _____ Respirations: _____

Is your child in generally good health? ☐ Yes ☐ No

Does your child have or had any of the following:

Yes	No		Yes	No	
		Allergy/Hay Fever			Diabetes
		Asthma/Lung/Respiratory Conditions			Kidney/Renal Disease
		Rheumatic Fever			Hepatitis/Jaundice
		Eye Problems			HIV Positive/AIDS
		Heart Conditions			Epilepsy/Seizures
		Heart Murmur			Cancer/Chemotherapy
		Heart Surgery			Blood Disorder
		High Blood Pressure			Bleeding Disorder
		Thyroid Problems			Nervousness/Psychiatric Care
		Tuberculosis			Hospitalizations/Surgery

	Yes	No
Is your child taking any medications, prescribed or not?		
If yes, list the medication and reason for use: _____		
Has your child experienced any unfavorable reactions to any medications, drugs, latex, or other materials?		
If yes, please list: _____		
Does your child have any known physical or mental conditions?		
If yes, please list: _____		
Is your child under the care of a physician presently or has your child been treated by a physician in the last 6 months?		
If yes, please list: _____		
Does your have any learning, speech, or hearing disorder that may affect your child's dental treatment?		
If yes, please list: _____		
Does your child have any disease, condition or problem not listed above that we should know about?		
If yes, please list: _____		

Clinical Findings:

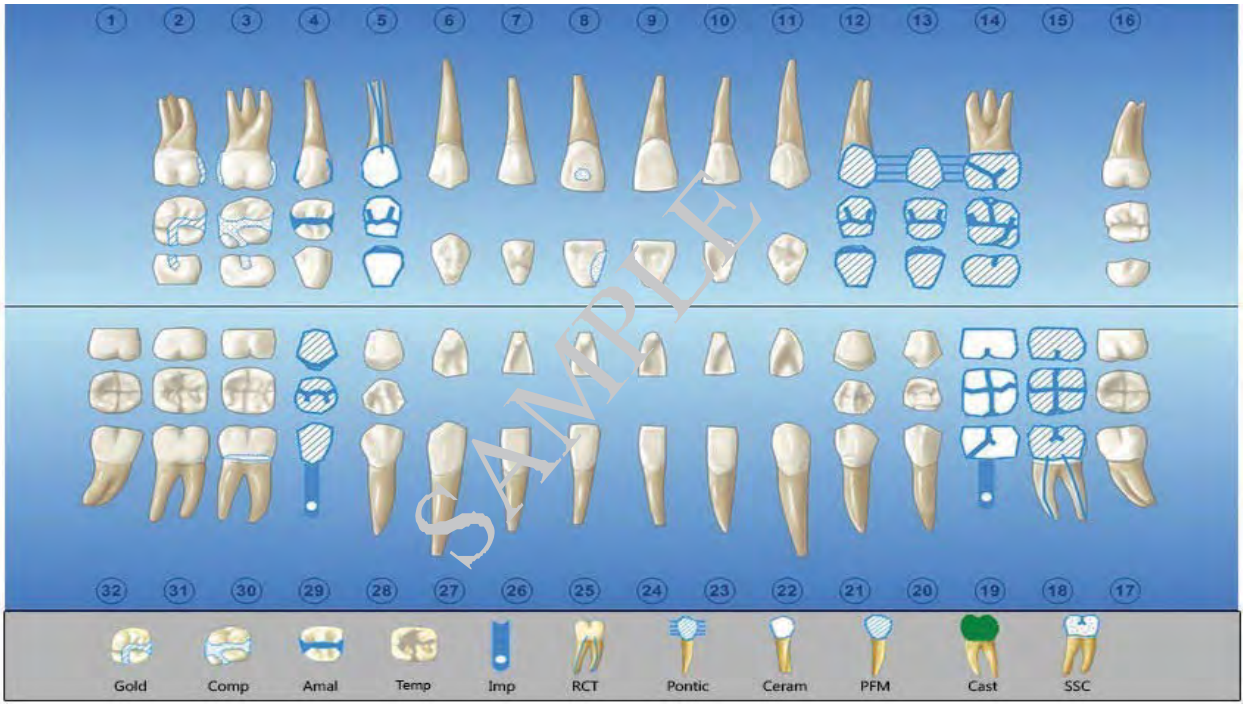
SAMPLE

SAMPLE

EXISTING RESTORATION CHART

Adult Chart

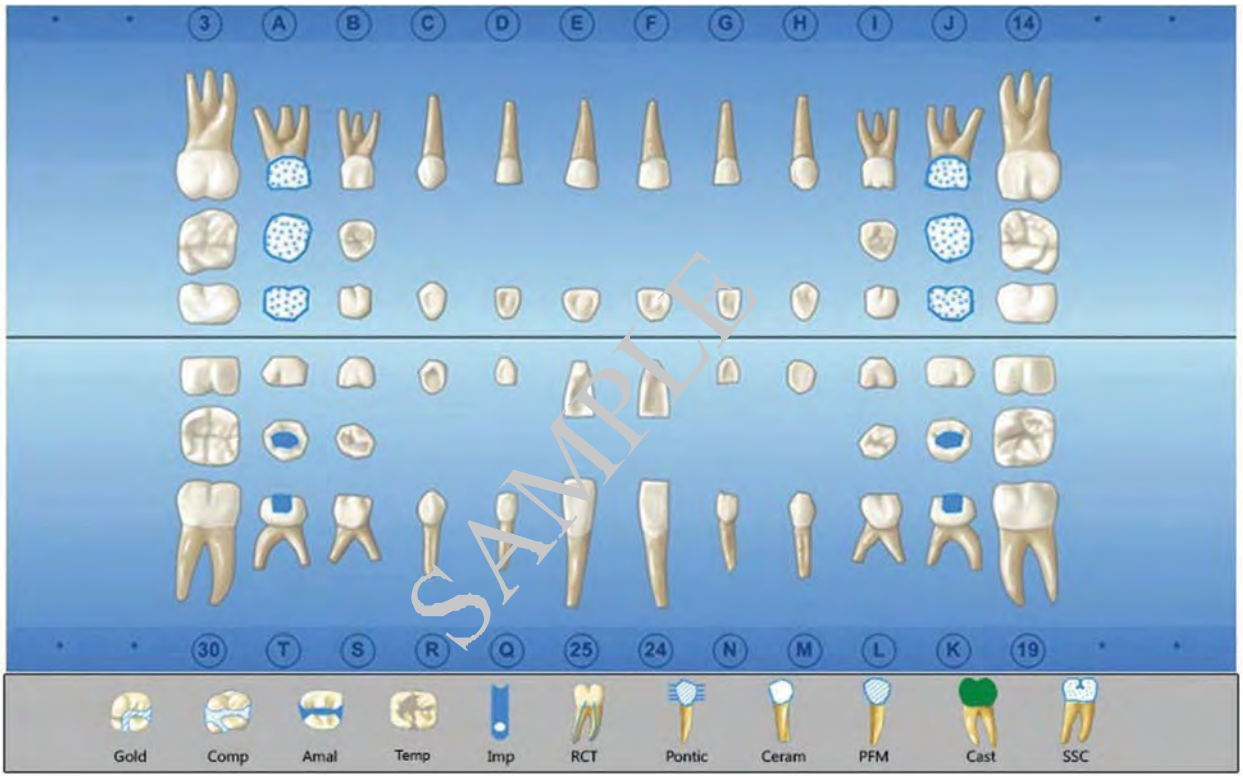
Right Left



SAMPLE

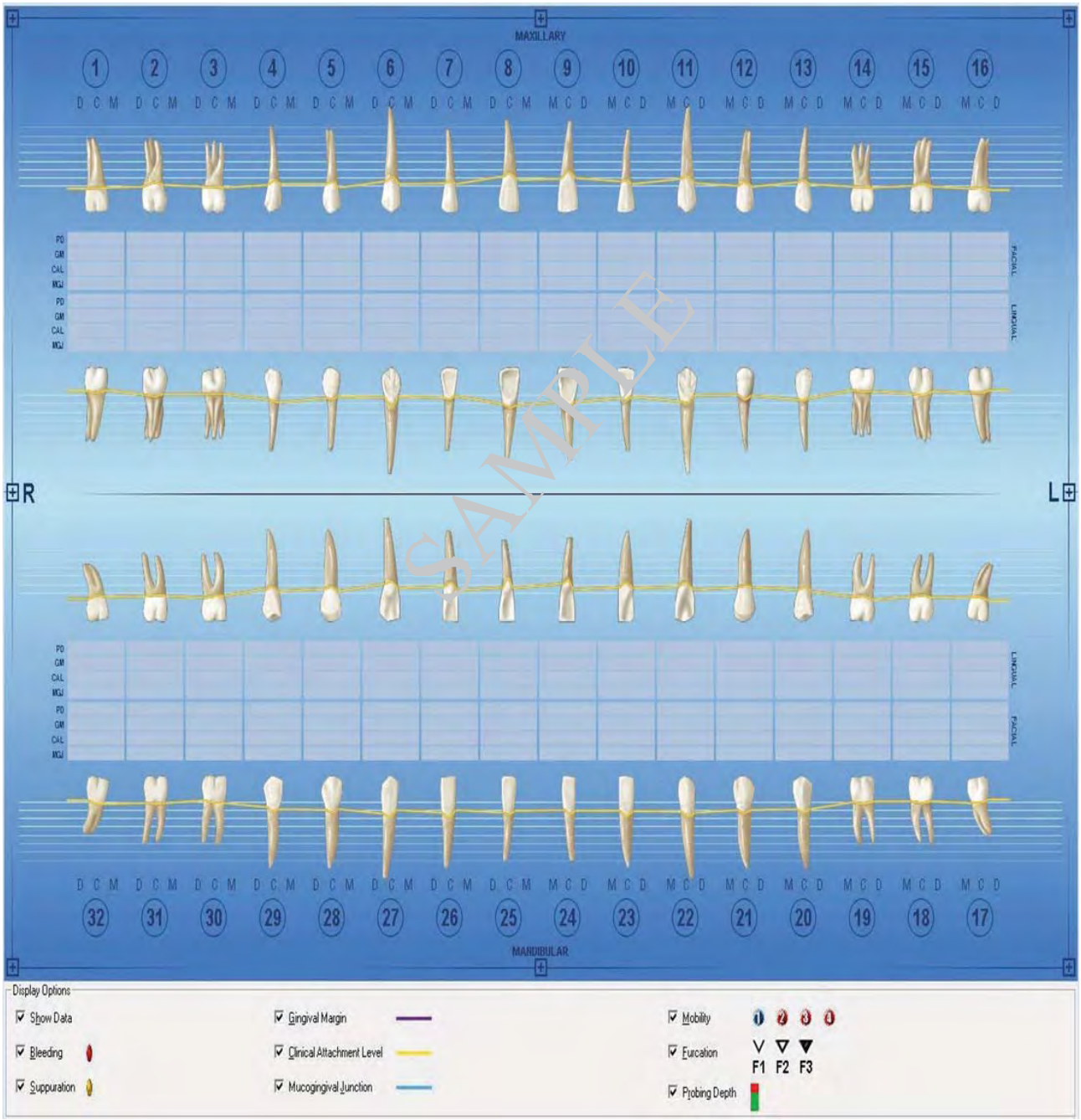
Pediatric Chart

Right Left



SAMPLE

PERIODONTAL CHART



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2020 Comprehensive Treatment Planning Candidate Guide
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2020 COVID-19 ALL-SIMULATION DENTAL EXAM
GENERAL SUPPLEMENT

Introduction

This document provides additional information for the WREB 2020 COVID-19 All-Simulation Dental Exam that supplements information found in the General Section of the standard *2020 Dental Exam Candidate Guide.* Like sections of the Candidate Guide for the standard Dental Exam, candidates may refer to this document during the exam.

Exam Content: Required Sections

For the 2020 COVID-19 All-Simulation Dental Exam, candidates are required to complete the following:

Comprehensive Treatment Planning (CTP) – A three (3) hour computer-based Authentic Simulation Clinical Exam using case materials provided by WREB. The exam is administered through Prometric Testing Centers. The exam consists of three (3) patient cases of varying complexity, one of which is a pediatric patient. For each case, candidates assess patient history, photographs, radiographs, and clinical information; create and submit a treatment plan; and then answer questions related to each case.

Operative Simulation – A three and a half (3.5) hour exam during which two (2) operative (restorative) procedures are performed on simulated teeth. For purposes of the simulation, the procedures are divided into two tasks: Preparation and Restoration:

1. **Preparation** consists of <u>preparing</u>:
   - a **Class III** (ML in tooth 9)
     The Class III preparation must include the proximal contact area where caries would be expected.
   - a **Class II** (conventional design MO in tooth 14)
     The Class II preparation must include a pulpal floor and can, but need not, cross the tooth's oblique ridge
2. **Restoration** consists of <u>restoring</u>:
   - a **Class III** (ML) preparation in tooth 9 with composite
   - a **Class II** (conventional MO) preparation in tooth 14
     The restorative material for the Class II is the candidate's choice and can be either amalgam or composite.

Endodontics – A three (3) hour exam consisting of two (2) procedures on simulated teeth:

1. Anterior Tooth Procedure: Treat one maxillary central incisor including access, instrumentation, and obturation.
2. Posterior Tooth Procedure: Access one mandibular first molar. Access on the posterior tooth must allow Grading Examiners to identify all canal orifices.

Exam Content: Elective Sections

Candidates may also elect to complete the following, (if the state(s) to which they are applying for licensure requires this section):

Prosthodontics – A three and a half (3½) hour exam consisting of two (2) procedures on simulated teeth:

1. Preparation of an anterior tooth for a full-coverage crown.
2. Preparation of two abutments to support a posterior three-unit fixed partial denture prosthesis.

NOTE: The standard, patient-based **Periodontal Treatment** section will not be available for the WREB COVID-19 All-Simulation Dental Examination. Some state boards accept the Comprehensive Treatment Planning (CTP) Exam in lieu of periodontal treatment. Candidates should review the requirements of the state(s) for which they want to be licensed to ensure that all state requirements are satisfied.

Additional details regarding general requirements and for the CTP Authentic Simulation Clinical Exam (ASCE), Operative Simulation, Endodontics, and Prosthodontics sections are provided in WREB's *2020 CTP Candidate Guide* or the respective sections of the *2020 Dental Exam Candidate Guide*.

The Operative Simulation Section may satisfy state board requirements for licensure. Candidates should review the requirements of the state to which they will apply for licensure to ensure all requirements will be satisfied. If both patient-based **Operative** and **Operative Simulation** options are available at an exam site, candidates will need to declare by an advance deadline the format they plan to take and will be committed to this format.

Passing Requirements

Completion of the exam requires passing the three (3) core sections (CTP, Operative (or Operative Simulation), and Endodontics) within a twelve-month period. The Operative Simulation section is a core exam substitute for the Operative section. The twelve (12) month window begins with the first attempt at the clinical (or clinical simulation) exam. The CTP Section is typically taken in the fall prior to the clinical exam. If any of the three core sections is failed, the WREB Exam is failed until the failed section(s) is/are passed. If all core sections are not passed within twelve (12) months of the first clinical (or clinical simulation) attempt, all three core sections must be taken again.

Failure of one (1) clinical section allows the opportunity to retake just the failed section within the twelve (12) month window. Exceptions to this policy will apply when the twelve (12) month period spans different testing years and significant changes to the exam occur.

If candidates complete and pass the core exam requirements with the Operative Simulation section, they can challenge the standard patient-based Operative Section in the future and append the results to their Individual Score Report (if needed for licensure).

A candidate can challenge the standard patient-based Operative Section, score 3.0 or better on their first Class II and pass the section with one patient-based procedure. The candidate later could challenge the Operative Simulation Section also if, for example, a simulated Class III as well as a patient-based Class II procedure were needed for licensing. However, a candidate would not be able to take only the Class III in the Operative Simulation Section; they would need to challenge and pass the entire Operative Simulation Section to add a simulated Class III procedure to their Individual Score Report.

Results for all sections attempted, core and elective, whether passing or failing, will be reported to state boards. Reports to state boards will clearly indicate whether the section was completed on a patient or in simulation. State requirements vary. Candidates are responsible for knowing the licensing requirements of the state(s) where they plan to practice.

Remediation

The same remediation requirements apply for every section of the All-Simulation Dental Exam as for the standard Dental Exam. (For additional detail see the General Section of the *2020 Dental Candidate Guide*.) Each attempt at Operative, whether patient or simulation, will count towards the Operative section attempts.

Scoring Information

Scoring for the All-Simulation Dental Exam parallels that for the sections of the standard Dental Examination. Like CTP, Operative, Endodontics, and Prosthodontics sections, the Operative Simulation section is scored on a criterion-referenced rating scale of 1 to 5 where a final score of three (3.00) or higher is required to pass. The Class II and Class III must both be completed to pass the Operative Simulation section. Additional detail regarding scoring is found in the General Section of the standard *2020 Dental Exam Candidate Guide*.

Operative Simulation

Provisional Results

As a result of COVID-19 mandates and site-specific requirements to reduce disease transmission, All-Simulation Dental Exam locations may not offer onsite grading. Provisional results and onsite retake opportunity will generally not be available at All-Simulation Dental Exams in 2020.

Final Results

The release of final results for the 2020 COVID-19 All-Simulation Exam may take up to four weeks. It is WREB policy to notify candidates of final exam results as soon as possible. Final results will be posted online and can be accessed with the candidate's username and password. Candidates will receive an email notice when their final results are available.

Postoperative Endodontic radiographs validated undiagnostic or missing by the Grading Examiners may delay the release of individual candidate results.

Exam results are confidential and will not be given over the telephone or by email. They will only be posted to candidate profile on the secure WREB website.

Notification of passing the WREB Exam does not constitute licensure in any of the participating states. It is illegal to render patient treatment until all state licensing requirements are met and the license certificate or letter is received from the state. Links to member states are posted on the WREB website.

Testing Candidates with Disabilities

The WREB Exam is designed to provide an equal opportunity for all candidates to demonstrate their knowledge and ability. Detailed information regarding WREB's policy regarding special accommodations is found in the General Section of the *2020 Dental Exam Candidate Guide*.

Dismissal for Improper Performance or Unethical Conduct

As for the standard Exam, the ways a candidate could be dismissed from the All-Simulation Dental Exam for improper performance or unethical conduct as well as potential consequences that could follow are clearly articulated in the General Section of the *2020 Dental Exam Candidate Guide.*

Appeals and Irregularities

Any candidate who does not pass the WREB Exam may appeal their results. For information regarding the Appeals Policy, contact the WREB office or visit the WREB website. Information about WREB's policy regarding irregularities is found in the General Section of the *2020 Dental Exam Candidate Guide*.

WREB Exam Security and Identification Verification

Each candidate MUST present acceptable and valid identification (ID) to be admitted to the All-Simulation Dental Exam. Questions about identification requirements should be directed to the WREB Dental Department BEFORE the exam.

Each candidate must provide a personal photo during the exam registration process. This becomes a component of their individual candidate profile at WREB and will be included on all score reports to schools and state licensing boards. The profile photo is used to create an individual WREB Candidate ID Badge for the exam. This profile photo and personal identification documentation will be used to verify candidate identity at the exam. The requirements for acceptable personal identification documentation are found in the General Section of the standard *2020 Dental Exam Candidate Guide*.

Display of the Candidate ID Badge is required for admission to any WREB clinic-based exam section or session of the All-Simulation Dental Exam.

Admission to the exam does not imply that the identification presented was valid. If it is determined that the candidate's ID was fraudulent or otherwise invalid, this will be reported to the appropriate governing agencies or boards. Any candidate or other individual who misrepresents information or alters documentation to fraudulently access or attempt an exam, is subject to dismissal.

Exam Personnel and Anonymity

WREB has two (2) categories of examiners: Grading Examiners and Floor Examiners. If there is grading onsite, Grading Examiners are segregated from candidates. There is no direct contact between Grading Examiners and candidates. Candidates are required to assist in keeping the exam anonymous by observing all signs and instructions. Grading Examiners may not be onsite for the 2020 COVID-19 All-Simulation Exam.

Floor Examiners do not serve in a grading capacity so there is no anonymity between Floor Examiners and candidates. Floor Examiners facilitate administration of the exam. They answer questions, clarify procedures, approve certain phases of procedures, and can help solve any problems that arise during the exam. The number of Floor Examiners assigned to an exam may vary and depends on the size and character of the exam.

Among other things, Floor Examiners assist at All-Simulation exams by:

- Supplying extra forms, such as Worksheets
- Providing setup checks
- Monitoring proper candidate dress and identification
- Monitoring candidate use of Universal Precautions and simulation protocol
- Monitoring social-distancing and site-specific precautions to prevent disease transmission
- Distributing communication forms
- Assisting with the solution of problems that arise

Any Floor Examiner in the vicinity can assist a candidate. Candidates needing assistance should ask the first available Floor Examiner they see and should always bring their worksheet when asking questions regarding procedures.

General Guidelines

A. Only candidates are allowed in the simulation lab or session. Candidate ID badges must be visible on the chest or collar on the outer most layer (i.e., disposable gown) during the simulation. Assistants are not allowed for any section of the 2020 COVID-19 All-Simulation Exam. Candidates will not be allowed in the simulation lab for their scheduled exam sections without their Candidate ID Badge.

B. The exam uses the American System of tooth identification. Permanent teeth are recorded clockwise from the upper right quadrant to the lower right quadrant.

Right								Left							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17

C. Worksheets must be completed in ink – not pencil. If a worksheet is not neat, legible and in ink, a new worksheet may be required.

D. Electronic devices, including cell phones and smart watches, are prohibited in the Operative Simulation, Endodontics, and Prosthodontics exam sections.

E. Procedures presented for grading may be photographed or digitally scanned by WREB personnel. These photographs are for use in training and calibrating examiners. They have no relation to the grading process and cannot be released to patients or candidates.

F. The school provides information regarding the facility, supplies, hotels, and other topics which can assist in preparing for the exam. This information is provided directly by the school; WREB is not responsible for its accuracy. Links to specific "Site Information" are available at wreb.org, under [Dental Candidates].

Infection Control Guidelines

Candidates are expected to maintain acceptable professional standards during the exam. Failure to do so may result in dismissal from the exam.

For the 2020 COVID-19 All-Simulation Exam, Personal Protective Equipment (PPE) requirements may be adjusted, based on CDC recommendations, local availability, state mandates, and site-specific requirements. For patient-based examinations, more stringent requirements may be imposed including, but not limited to, the use of N95 masks and face shields or their equivalent. Candidates should be cognizant of social-distancing protocol and implementation of other features to minimize disease transmission throughout the exam.

Food and beverages (except bottled water) are prohibited in the simulation sessions.

Assistants are not allowed for any section of the 2020 COVID-19 All-Simulation Exam. Requirements regarding the use of assistants for any patient-based section of the exam are found in the General Section of the standard *2020 Dental Exam Candidate Guide*.

Each candidate is restricted to the use of their assigned operatory or dental unit.

Equipment and Materials

Equipment information specific to each school can be found in the "Site Information" at wreb.org, under [Dental Candidates]. Although schools supply some expendable materials, candidates are responsible for ensuring that they have all materials necessary to perform the required procedures, including high-speed and low-speed handpieces. Schools may have equipment available for rent if candidates choose not to bring their own. Information on rental equipment is included in the "Site Information." Instruments must be acceptable even if rented.

A. NOTE: Not all sites will provide PVS material for fabrication of the required matrices in the Prosthodontics Section. Candidates may need to supply their own. Expendable materials provided may also vary for the Operative Simulation section. Please refer to the expendable materials list in the "Site Information."
B. Materials provided are brands used by the school. Any candidate who wishes to use a specific brand, must bring their own. Candidates will need to provide any materials not specifically listed in the "Site Information."
C. Radiograph developer and fixer are supplied in the simulation lab at schools with conventional radiographic facilities. Automatic and/or hand developers are provided by the school. A list of other materials provided in the simulation lab can be found in the "Site Information." Candidates must supply any items needed to perform the Operative Simulation, Endodontics, and Prosthodontics section procedures which are not specifically listed in the "Site Information."
D. Each candidate will be furnished with a simulation station or operatory unit and operator's stool. Personnel are available throughout the exam to resolve malfunctions of units and equipment provided by the school. If candidates experience an equipment malfunction, they should notify maintenance personnel and a Floor Examiner immediately. The Floor Examiner may determine that the candidate is eligible for time compensation if the equipment malfunction cannot be resolved within 15 minutes. Time is not compensated for delays of less than 15 minutes. Time is determined from the point at which a Floor Examiner is notified. Many equipment malfunctions are due to improper use. Candidates should become familiar with the equipment prior to the exam and follow all directions carefully. WREB cannot be responsible and will not compensate candidates for time lost due to the malfunction of a candidate's personal equipment or rental equipment.

The white *Candidate Packet* that is distributed at the standard dental exam will not be provided at all-simulated sections. For the All-Simulation Exam, candidates will receive their Candidate ID badges at the time specified on their candidate exam schedule. Additional exam materials will be provided for each simulation section.

Clinical Examination Overview

The candidate's exam officially starts when they are handed the bag of materials in Operative Simulation, Endodontics, or Prosthodontics section. Withdrawal for any reason after this point constitutes failure of the applicable section.

Simulation Schedule (Operative Simulation, Endodontic, and Prosthodontic Procedures)

Candidates are divided into groups for the Operative Simulation, Endodontics, and Prosthodontics sections. These groups are designated by a Candidate ID Number which will be assigned and posted on wreb.org approximately three (3) weeks prior to the exam. The Exam Schedule will specify the exact dates and times assigned for the Operative Simulation, Endodontics, and Prosthodontics sections.

All simulation procedures for each section (Operative Simulation, Endodontics, Prosthodontics) are accomplished in a single session. Refer to the specific section procedures in the *2020 Dental Exam Candidate Guide* for more information.

For the 2020 COVID-19 All-Simulation Exam, the number of clinic days may be expanded or reduced depending on the size of the exam and capacity of the test site. *Once Candidate ID Numbers and Exam Schedules are posted, they cannot be changed; there are no exceptions.*

For the Operative Simulation, Endodontics, and Prosthodontics sections, either cell-phone time or a separate official clock will be designated in the simulation lab. Exam schedules and finish deadlines may vary depending on the exam site. Candidates complete the All-Simulation Exam when they submit their materials for their last simulation section.

Onsite Retakes

Onsite retakes generally will not be available for the 2020 COVID-19 All-Simulation Exam.

Late Penalties

Late penalties for sections of the 2020 COVID-19 All-Simulation Dental Exam are the same as for the standard dental examination and are specified here along with detail found the in the standard *2020 Dental Exam Candidate Guide* for each section.

Operative Simulation, Endodontics, and Prosthodontics:

1 to 5 minutes late:	0.2 deduction
6 to 10 minutes late:	0.4 deduction
11 to 15 minutes late:	0.6 deduction
16 or more minutes late:	Loss of all points for the section.

Termination

It is possible that the exam might be terminated due to a situation beyond the control of WREB, such as loss of power or act of nature, terrorism, or war. If this should occur, incomplete procedures cannot be carried over to a future exam. WREB cannot be held liable for terminating the exam under these circumstances.

OPERATIVE SIMULATION

Operative Simulation Overview

The Operative Simulation Section consists of one extended session during which two (2) operative (restorative) procedures are performed on simulated teeth. The procedures are:

1. **Preparation and restoration of an anterior tooth (Class III – 9 ML)**
2. **Preparation and restoration of a posterior tooth (Class II – 14 MO)**

For purposes of the simulation, the procedures are divided into two tasks: **Preparation** and **Restoration**:

1. **Preparation** consists of preparing:
   - a **Class III** (ML in tooth 9)
     The Class III preparation must include the proximal contact area where caries would be expected
   - a **Class II** (conventional design MO in tooth 14)
     The Class II preparation must include a pulpal floor and can but need not cross the tooth's oblique ridge
2. **Restoration** consists of restoring:
   - a **Class III** (ML) preparation in tooth 9 with composite
   - a **Class II** (conventional MO) preparation in tooth 14
     The restorative material for the Class II is the candidate's choice and can be either amalgam or composite.

These procedures are performed on simulated teeth mounted in a manikin positioned to simulate working on a patient. The teeth have no simulated caries; no modification requests are needed. Candidates are asked to prepare the teeth as they ideally would for minimal caries requiring restoration beginning at the contact area and extending their preparations to satisfy WREB criteria for a score of "5", then stop. Both preparation and restoration (placement of the restorative material) must be accomplished under (with) a rubber dam. When treatment is completed, the arch containing the prepared or restored teeth is submitted for grading. Occlusion is not functionally evaluated.

Time allocated for the simulation is three and a half (3.5) hours. Candidates are allowed an additional 30 minutes to set up before the session begins.

WREB provides the maxillary arches containing the teeth needed for preparation and restoration. The candidate provides everything needed that is not provided by the test site (school), including a suitable opposing arch. Following preparation, the arch containing the prepared teeth is submitted for grading and a second arch is provided with teeth already prepared for restoration. When placement of the finish restorations is completed, this second arch is also submitted for grading.

WREB examines candidates with varying educational backgrounds and schools may teach different preparation and restoration techniques. WREB does not look for one specific technique and scores performance according to the applicable *Operative Simulation Scoring Criteria Rating Scale* found later in this document.

Supplies

The Acadental ModuPRO® One arch and teeth will be used for the Operative Simulation Section. Candidates will receive a ziplock bag in the simulation lab containing:

1. An *Operative Simulation Worksheet* (sample, pp. 21-22)
2. A maxillary Acadental ModuPRO® One arch containing the teeth to be treated.

Candidates will need to provide:

1. The mandibular ModuPRO® One or similar opposing arch.
2. The articulator, if applicable.

Exam Procedure

Candidates will report to the simulation lab at the appointed time and must bring with them their personal handpieces, burs, and anything else needed to complete preparations or restorations on the simulated teeth, including the ModuPRO® One opposing arch or equivalent needed to set up the simulation. All electronic devices, including cell phones and smart watches, are prohibited in the simulation lab.

This *Guide,* as well as the *2020 Dental Exam Candidate Guide,* may be brought into the simulation lab and referred to during the exam. Notes, textbooks, or other informational material must not be brought into the simulation lab. No magnification other than loupes is allowed.

Upon entering the lab, each candidate will learn their assigned station or unit, go to their unit, deposit their things, and begin to set up (lay out their instrumentation). Each will receive a zip-lock bag containing an *Operative Simulation Worksheet* and maxillary ModuPRO® One arch containing the teeth to be prepared.

The candidate may not leave the simulation lab without the express permission of the Floor Examiner.

The candidate will write their Candidate ID on the lingual aspect of the maxillary arch with an indelible pen (Sharpie® or equivalent), then properly mount the arches in the manikin (with or without the articulator), place the manikin head in a normal position to simulate a patient, and fill out the *Operative Simulation Worksheet* indicating their choice of restorative material (amalgam or composite) for the Class II restoration. When the arch is marked, correctly mounted, and the *Worksheet* is completed, the candidate will turn on their unit light to signal that they are ready for the setup check. Although both preparations and finishes are to be completed with rubber dam isolation, it is not required for a setup check.

Candidates have thirty (30) minutes to set up their workstations, ensure handpieces are working, mark and mount the sextants and arches in the manikin, fill out the *Worksheet*, and obtain the

required setup check before the simulation session officially starts. Candidates should be mindful of the social-distancing protocol specified for the exam site when interfacing with a Floor Examiner or receiving a setup check. If mechanical problems with a unit or workstation are encountered, the Floor Examiner must be immediately notified.

The Floor Examiner will perform the setup check and initial the *Operative Simulation Worksheet*. Needed for the setup check are:

1. The *Operative Simulation Worksheet* properly completed with Candidate ID legibly written and restorative material choice clearly designated.
2. The maxillary arch, properly mounted, with the Candidate ID indelibly written on its lingual aspect.
3. A mandibular arch properly mounted to complete set up of the simulation.
4. Both arches appropriately mounted (with or without the articulator) in the manikin.
5. The manikin in a normal patient head position and not overextended but open no more than a normal vertical dimension.
6. Workstation (operatory) light on.
7. Mirror available for Floor Examiner use.

If anything needs to be corrected, the Floor Examiner will ask the candidate to make the necessary correction and return to recheck things before initialing the *Worksheet*. If everything is in order, the Floor Examiner will verify the candidate's material choice, initial the *Worksheet*, and ask the candidate to turn off the light and wait to begin until start of the exam is announced.

The setup check is required but does not constitute start of the exam. Candidates must not start treatment until they have received the setup check initials of the Floor Examiner <u>and</u> the Floor Examiner has announced the start of the exam. The Floor Examiner's announcement will be something like, "You may now begin your preparations." Starting to prepare teeth before being authorized to begin will result in failure of the Operative Simulation Section.

After receipt of the setup check, the arch is not to be removed from the manikin head until the preparations or restorations are completed and ready to submit. Removal of the arch at any other time requires the permission of the Floor Examiner. Candidates who need to leave the simulation for any reason must notify the Floor Examiner. Any candidate who leaves the simulation lab or removes the arches at any time during the exam is subject to failure if permission of the Floor Examiner was not first obtained.

The Floor Examiner will be available throughout the session to answer questions relative to administration of the exam and the proper completion of forms. The Floor Examiner is also responsible for monitoring exam security; they will circulate through the simulation lab and observe candidates while the exam is underway. The Floor Examiner will monitor the session to ensure that candidates:

- Adhere to required simulation protocol
- Employ Universal Precautions and appropriately use their PPE
- Perform all treatment (preparation and restoration) using rubber dam isolation
- Work independently

Candidates should inform the Floor Examiner immediately if a problem arises. For example, they should immediately notify a Floor Examiner if there is clinic equipment malfunction/failure. Lost time due to school equipment failure may be compensated if it is more than fifteen (15) minutes from the time it is reported to the Floor Examiner. There is no compensation if less than 15 minutes is lost or if the problem is the candidate's own equipment failure. Similarly, if a tooth loosens in the arch or any other problem arises, the candidate should stop treatment and inform the Floor Examiner immediately.

Assistants are not permitted for the Operative Simulation Section. Candidates may not assist each other. This includes critiquing another candidate's work or discussion of treatment. All candidates are expected to pass the exam on their own merit without assistance.

Candidates are to work independently, observe Universal Precautions, and work in a manner that simulates performing procedures on a patient throughout the simulation. Any unprofessional, unethical, or inappropriate behavior could result in immediate dismissal and failure of the Operative Simulation Section. If, after receiving notice of a violation, a candidate repeatedly violates simulation protocol or Universal Precautions, they will be dismissed from the simulation and will fail the Operative Simulation Section.

The finish deadline for each exam session is fixed. Candidates who report late to an assigned session will have less than the allotted time to complete their treatment. WREB cannot extend the time for individual candidates. Candidates who complete their treatment early may submit their materials (*Worksheet* and arch) to the Proctor at the check-in desk and leave the simulation lab.

Completion

When preparation treatment is completed, the candidate will:

- remove the rubber dam,
- remove the maxillary arch containing the teeth that have been prepared,
- place this, along with the *Worksheet*, back in the zip-lock bag, and
- return these materials to the Proctor at the check-in desk.

After submission of the arch with preparations, an arch with pre-prepared teeth ready for restoration will be dispensed to the candidate. This also will need to be marked with the Candidate ID using an indelible pen and then mounted in the manikin. An additional set-up check from the Floor Examiner will be needed before continuing. When the restorations are completed and both the arch used for the preparations and the arch used for placement of the restorations have been submitted, the candidate then is free to gather their materials and leave the simulation lab.

When submitting completed materials, it is the candidate's responsibility to make sure the zip-lock bag contains:

1. The completed *Operative Simulation Worksheet*.
2. The maxillary arch (with Candidate ID written on the lingual with permanent black marker) containing the teeth that have been prepared or restored

Candidates who leave the simulation lab will be subject to failure of the Operative Simulation if any of the required items are missing.

The Simulation Floor Examiner will announce to remind candidates still working of remaining time at intervals of approximately 30 minutes, 15 minutes, 5 minutes, and 1 minute before the submission deadline; however, completing the exam and submitting everything required on time remains wholly the candidate's responsibility. Late penalties will be assessed if the allotted time is exceeded. A penalty will be deducted from the Operative Simulation score for every five (5) minutes beyond the deadline the submission is late. After 15 minutes, all points for the Operative Simulation are forfeited.

Cavity Preparation

Beveling for composite preparations is not a WREB requirement. However, if placed, bevels will be considered part of the outline and extension of the preparation.

Treatment of the preparation with chemical agents of any kind is prohibited.

The Class II preparation design must be conventional and include a pulpal floor.

Restoration

Placing a material other than what was indicated on the *Worksheet* will result in failure of the Operative Simulation Section.

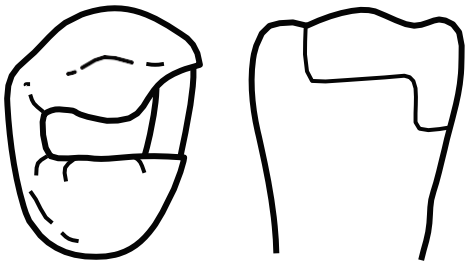
Grading Examiners will check interproximal contacts with Floss Singles®.

Definitions

The following definitions are provided to assist your understanding of the scoring criteria.

Retentive Grooves: For the amalgam preparation, there may be distinct retentive grooves of no more than 0.5 mm depth that follow the DEJ and extend from the gingival floor up to and/or include the occlusal surface.

Class II Conventional Preparation: The conventional Class II preparation has a pulpal floor and extends from the proximal box into some or all the grooves and fissures of the occlusal surface.



Fissure: A developmental cleft resulting from the incomplete fusion of adjoining dental lobes that is usually found at the base of a groove.

Fissurotomy: The selective, shallow removal of demineralized or healthy dental enamel in the vicinity of a fissure to facilitate cleansing and to reduce the harboring of bacteria and risk of caries extension. Sometimes performed in preparation for the placement of a preventive resin restoration or sealant, a fissurotomy is not acceptable for the WREB Operative Section or its Operative Simulation.

Major Tissue Trauma: Any undue iatrogenic damage to extraoral and/or intraoral tissues resulting in significant injury to the simulated patient. Examples include lacerations greater than 3.0 mm, amputated papillae, and large tissue tags, unanticipated damage to the simulated gingiva, or arch, or damage to the adjacent tooth.

Reference Material

Roberson, Heymann, & Swift. *Sturdevant's Art and Science of Operative Dentistry, (5th ed.),* Mosby Publishing Co.

Summitt J.B., Robbins J.W., Hilton T.J., & Schwartz R.S. (eds). (2013). *Fundamentals of Operative Dentistry: A Contemporary Approach (4th ed)*. Quintessence Publishing Co.

OPERATIVE SIMULATION SCORING

The Operative Simulation Exam is graded by three (3) independent Grading Examiners. The examiners grade according to the applicable *Simulated Scoring Criteria Rating Scales* on pages 17-20. Examiners may utilize 2.5 X magnification or greater for grading. The recorded score for each category is based on the median (middle) score of the three (3) scores assigned by the Grading Examiners. The median grades are weighted and summed for the preparation and finish respectively, then averaged for the total procedure score. The average of the two procedure scores must be 3.00 or higher to pass the section. No onsite retakes are available for the Operative Simulation Exam.

PREPARATION WEIGHTING		FINISH WEIGHTING	
Outline and Extension:	46%	Anatomical Form:	36.5%
Internal Form:	39%	Margins:	36.5%
Operative Environment:	15%	Finish, Function, and Damage:	27%

LATE PENALTIES	
1 to 5 minutes late	0.2 deduction
6 to 10 minutes late	0.4 deduction
11 to 15 minutes late	0.6 deduction
More than 15 minutes late minutes late	The applicable procedures (preparations or restorations) will not be graded. No points earned.

CRITICAL ERRORS

The following critical errors result in failure of the Operative Simulation Section:

- Preparing the wrong tooth
- Major tissue trauma (validated by two or more Grading Examiners)
- Restoring with a material other than indicated at the beginning of the simulation.

Scoring continues on next page.

UNUSUAL SITUATIONS
• Preparing the wrong surface (If a wrong surface is prepared, the assigned preparation must be included in the submission.) = Loss of all points for outline and extension and internal form for that preparation • After completion of the setup check, the candidate fails to compete the simulated treatment or submit all the required materials. = Failure of the Operative Simulation The following unusual situations result in failure of the Operative Simulation Section: • Candidate leaves the simulation lab without Floor Examiner permission • Candidate starts without a setup check or before start of the exam is announced • Candidate repeatedly fails to use Universal Precautions • Candidate repeatedly violates simulation protocol

OPERATIVE SIMULATION CLASS II – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing and does not weaken tooth in any manner.	Outline is slightly irregular but does not weaken tooth. Isthmus is slightly wider than required.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit.	Outline is grossly improper and/or lacks any definite form. Unapproved surface prepared.
	Proximal and gingival extensions are visually open less than 1.0 mm	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are equal to or slightly greater than 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Pulpal floor depth as determined by the lesion or defect does not exceed 2.0 mm from the cavosurface. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Pulpal floor and/or axial wall is slightly shallow or deep.	Pulpal floor and/or axial wall is moderately shallow or deep.	Pulpal floor and/or axial wall is critically shallow or critically deep.	Walls and/or floors are grossly deep. Gross removal of tooth structure jeopardizes the tooth or pulp. Unapproved surface prepared.
	Conventional design: Internal form is smooth and flowing and has no sharp angles that could weaken or cause voids in the final restoration.	Conventional design: Internal form is mostly smooth and flowing, but some minor roughness and/or sharp angles are present.	Conventional design: Internal form is generally smooth and flowing, but some moderate roughness and/or sharp angles are present.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

OPERATIVE SIMULATION CLASS III – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline provides optimal convenience form (access for caries removal and insertion of restorative material). Gingival extension is visually open up to 0.5 mm. Facial (or lingual) extension may break proximal contact up to 0.5 mm. Incisal contact is not broken. Includes proximal contact area.	Outline is slightly over or under extended. Outline is slightly irregular but does not weaken the tooth. Includes proximal contact area with slight variation.	Outline is moderately over or under extended. Outline is moderately irregular but does not weaken the tooth. Gingival margin is moderately overextended. Includes proximal contact area with moderate variation.	Outline is severely over or underextended. Gingival wall is in contact or obviously overextended. Incisal extension has broken contact. Mostly below proximal contact area where caries would be expected.	Outline is grossly improper and/or lacks any definite form. Gingival wall is grossly overextended. Unapproved surface prepared. Wholly below proximal contact area where caries would be expected.
	Cavosurface forms a smooth continuous curve with no sharp angles.	Cavosurface is slightly irregular and rough; no sharp angles.	Cavosurface is moderately irregular and rough. A few sharp angles are present.	Cavosurface is severely irregular and/or with sharp angles.	Cavosurface has multiple gross irregularities that will cause the restoration to fail.
	There are no acute cavosurface angles.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration.	Cavosurface angles possibly compromise the integrity of the tooth or restoration.	Cavosurface angles will lead to enamel fracture or fracture of the restoration.	Cavosurface angles are grossly inappropriate for the situation and will lead to fracture of the restoration.
INTERNAL FORM	Axial wall follows external contour of tooth. Depth does not exceed 1.0 mm beyond the DEJ.	Axial wall generally follows external contour of tooth. Depth does not exceed 1.5 mm beyond the DEJ.	Axial wall does not follow contour of tooth. Depth does not exceed 2.0 mm beyond the DEJ.	Axial wall depth exceeds 2.0 mm beyond the DEJ.	Gross removal of tooth structure jeopardizes the tooth or pulp. Unapproved surface prepared.
	Internal line angles are rounded and smooth. Internal walls are well defined.	Internal walls are well defined and rounded but have some slight irregularities.	Internal walls are rounded, but moderately rough, irregular, and not defined. Moderately sharp line angles are present.	Internal walls are severely irregular and not defined. Angle of walls undermines enamel, jeopardizes incisal angle, or encroaches on the pulp.	Grossly irregular and sharp line angles show total disregard for the health of the tooth.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

OPERATIVE SIMULATION CLASS II – AMALGAM PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing and does not weaken tooth in any manner.	Outline is slightly irregular but does not weaken tooth. Isthmus is slightly wider than required.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit.	Outline is grossly improper and/or lacks any definite form. Unapproved surface prepared.
	Proximal and gingival extensions are visually open less than 1.0 mm	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are approximately 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Proximal walls are clearly convergent occlusally.	Proximal walls are barely convergent occlusally.	Proximal walls are parallel or divergent in one area.	Proximal walls are critically divergent occlusally.	Proximal walls are grossly divergent occlusally.
	Pulpal floor is 1.5 mm-2.0 mm from the cavosurface and provides adequate bulk for strength of restorative material. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Axial wall and/or pulpal floor is slightly shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is moderately shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is critically shallow or deep and does not provide adequate bulk for strength of restorative material.	Walls and/or floors are grossly deep. Gross removal of tooth structure jeopardizes the tooth or pulp. Unapproved surface prepared.
	Conventional design: Internal form is smooth and has no sharp angles. Retentive grooves, if placed, are near ideal. Axial wall follows external contour of the tooth.	Conventional design: Internal form is mostly smooth, but some minor roughness and/or sharp angles are present. Retentive grooves, if placed, are adequate. Axial wall contour is near optimal.	Conventional design: Internal form is generally smooth, but some moderate roughness and/or sharp angles are present. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location. Axial wall contour is not optimal.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location, and will compromise the tooth or restoration.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure. Gross disregard for proper placement of retentive features will compromise the tooth and restoration.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

OPERATIVE SIMULATION FINISH RESTORATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
ANATOMICAL FORM	Anatomical form is consistent and harmonious with contiguous tooth structure.	Slight variation in normal anatomical form is present.	Moderate variation in normal anatomical form is present. Marginal ridge is improperly shaped.	Anatomical form is improper. Marginal ridge is poorly shaped. Anatomy is too deep or too flat.	There is gross lack of anatomical form.
	Proper proximal contour and shape are restored.	There is slight variation of proximal contour and shape.	There is moderate variation of proximal contour and shape.	Proximal contour is poor. Embrasures are severely over or under contoured.	Grossly improper proximal contour or shape.
	Normal proximal contact area and position are restored. Contact is visually closed and resists the passage of lightly waxed floss.	There is slight variation of normal contact area and position. Contact is visually closed and resists the passage of lightly waxed floss.	There is moderate variation of normal contact area and position. Lightly waxed floss will pass through the contact with slight resistance.	Contact is visually open; contour is pointed and sharp; or so broad, flat or tight that floss will not pass easily through the contact.	Contact is grossly open; contour terminates far from the adjacent tooth or the restoration is bonded to the adjacent tooth.
MARGINS	There are no excesses or deficiencies anywhere along margins.	Slight marginal excesses and/or deficiencies are present.	Moderate marginal excesses and/or deficiencies are present.	A deep open margin is present, or critical excesses or deficiencies are present. A marginal overhang catches floss.	Multiple open margins, or gross excesses, or deficiencies, are present. A gross marginal overhang shreds floss.
FINISH, FUNCTION & DAMAGE	The surface is smooth with no pits, voids or irregularities.	Slight surface irregularities, pitting, or voids are present.	Moderate surface irregularities, pitting, or voids are present.	Critical surface irregularities, pitting, or voids are present.	Gross surface defects are present and/or the restoration is grossly fractured.
	There is no damage to hard or soft tissue.	Minor damage to hard or soft tissue is evident.	Moderate damage to hard or soft tissue is evident.	Severe damage to hard or soft tissue is evident. Open contact risks trapping food debris or overly tight contact makes flossing difficult.	Gross mutilation of hard or soft tissue is evident. Grossly open contact exposes interdental col to potential trauma or fused teeth make flossing impossible.

FRONT

WREB

Use ink

OPERATIVE SIMULATION WORKSHEET

Candidate ID#: _____

Date: _____

PREPARATION

Class II
14 MO Preparation
Restorative Material
Choose and circle restorative material:
Composite **Amalgam**

Class III
9 ML Preparation
Restorative Material
Composite

_____
Floor Examiner Prep Setup Check

Note to Examiners (if necessary)	Grading Examiner Initials		

2020 This worksheet must be turned in with your preparations.

BACK

Setup Check

- ☐ Completed *Simulated Operative Worksheet*
- ☐ Maxillary arch has Candidate ID Number written on palate with permanent black marker
- ☐ Arches/articulator properly mounted in manikin
- ☐ Manikin in normal patient treatment position with normal vertical dimension
- ☐ Light on
- ☐ Mirror available

Checklist of required items after treatment (in ziplock bag)

- ☐ Completed *Simulated Operative Worksheet*
- ☐ Treated maxillary arch with Candidate ID Number written on palate with permanent black marker
- ☐ Deliver ziplock bag to the WREB Proctor.

FRONT

WREB

Use ink

SIMULATED OPERATIVE WORKSHEET

Candidate ID#: _____

Date: _____

FINISH RESTORATION

Class II	Class III
14 MO	9 ML

_____
Floor Examiner Prep Setup Check

Note to Examiners (if necessary)	Grading Examiner Initials		

2020 This worksheet must be turned in with your restorations.

BACK

Setup Check

- ☐ Completed *Simulated Operative Worksheet*
- ☐ Maxillary arch has Candidate ID Number written on palate with permanent black marker
- ☐ Arches/articulator properly mounted in manikin
- ☐ Manikin in normal patient treatment position with normal vertical dimension
- ☐ Light on
- ☐ Mirror available

Checklist of required items after treatment (in ziplock bag)

- ☐ Completed *Simulated Operative Worksheet*
- ☐ Treated maxillary arch with Candidate ID Number written on palate with permanent black marker
- ☐ Deliver ziplock bag to the WREB Proctor before leaving the simulation lab.

WREB
A National Dental and Dental Hygiene Testing Agency

WREB Interim Clinical Dental Examination: COVID-19 Performance-Based Simulation Examination

Psychometric Overview

May 6, 2020

WREB Interim Clinical Dental Examination:

COVID-19 Performance-Based Simulation Examination

Psychometric Overview

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WREB Interim Clinical Dental Examination:
COVID-19 Performance-Based Simulation Examination

Psychometric Overview

Introduction

Results from standardized assessments are one source of evidence used by licensing bodies to make decisions about a candidate's readiness for practice. Licensing examinations must be developed and administered in a valid, reliable, and legally defensible manner. The purpose of this report is to provide test users with an overview of descriptive and technical documentation regarding the nature and quality of the WREB Interim Clinical Dental Examination to support inferences based on examination results.

WREB examinations are developed, administered, and scored in accordance with the *Standards for Educational and Psychological Testing* (AERA, APA, NCME; 2014) and *Guidance for Clinical Licensure Examinations in Dentistry* (AADB, 2005). An overview and description of activities conducted to evaluate the technical quality of the WREB Interim Clinical Dental Examination, with a focus on the new Operative Simulation Section, are provided, including psychometric and statistical results of field-testing. Details of additional activities and research studies relevant to the Interim Clinical Dental Examination are also maintained and available for review by test users, test takers, and other stakeholders.

Background and Overview of the Interim Examination

WREB has been researching and evaluating the validity and viability of alternatives to patient-based assessment for several years. For example, simulations that could substitute for Operative Dentistry and Periodontics, the two patient-based sections of WREB's standard dental examination, are currently in development and undergoing review. WREB had not planned to implement any of these assessment alternatives during the 2020 dental examination season.

The advent of health risks due to the COVID-19 (SARS-CoV-2) virus and the social-distancing directives that have been in place since March of 2020 has put pressure on many state licensing boards to consider temporary alternatives to the traditional patient-based dental

examination. Several state licensing boards have requested that WREB propose temporary examination alternatives that could be administered during the COVID-19 crisis.

WREB has developed an interim alternative examination that includes existing simulation sections (i.e., Comprehensive Treatment Planning [CTP], Endodontics, and Prosthodontics) and a new, field-tested, restorative dentistry simulation that can serve as a temporary replacement for the patient-based Operative Section while the challenges posed by COVID-19 limit patient-based options. A brief overview of temporary changes to existing examination sections will be provided, followed by a more detailed description of the development and collection of validity evidence for the new Operative Simulation Section.

Existing Examination Sections

Comprehensive Treatment Planning (CTP) Section. WREB's existing Comprehensive Treatment Planning (CTP) Section is a performance-based ASCE (Authentic Simulated Clinical Examination) which requires the candidate to construct responses (as opposed to an OSCE in which the candidate selects responses from options, locations, or choices provided). The CTP Section is open-ended and graded by independent, anonymous examiners. It reveals candidate thinking and requires candidates to perform tasks that dentists perform and to make decisions that dentists make, all without choices they can select or cues of any kind. The construction of appropriately sequenced treatment plans and item responses requires broad understanding of diagnostic, preventive, restorative, endodontic, periodontal, prosthodontic, oral surgical, radiological, pediatric dentistry, and patient-management procedures, as well as the relationships between these procedures and their clinical application under various patient conditions. The CTP examination can result in failure if a candidate commits a critical error, i.e., constructs a response that could result in life-threatening harm, such as administering more than the upper limit of a safe dose of local anesthetic for the weight of a pediatric patient. The CTP Section has been administered to dental licensure candidates since 2014 and will be a required, unchanged section on the WREB Interim Clinical Dental Examination. Details and results of technical analyses and candidate results for the CTP Section have been documented in annual technical reports (e.g., WREB, 2019a).

Over 2,000 dental candidates have already completed the CTP examination for the 2020 season, including 192 from dental schools in Iowa and its bordering states. For any candidates

who have not yet challenged the CTP Section, Prometric testing centers are opening for testing in May 2020 with guidelines for social distancing and safety (https://www.prometric.com/corona-virus-update).

Endodontics Simulation Section. WREB's existing Endodontics Section is a performance-based clinical simulation examination. The candidate is required to perform two endodontic procedures on simulated teeth mounted in a segmented arch which is mounted in a manikin that is positioned to simulate working on a patient. Candidates must maintain the simulated patient position and adhere to Standard (Universal) Precautions throughout the examination. The anterior tooth procedure requires treatment of a maxillary central incisor simulated tooth, including access, instrumentation and obturation. The posterior tooth procedure requires access of a mandibular first molar simulated tooth. Access of the posterior tooth must enable grading examiners to identify all canal orifices. Like all WREB Dental Examination sections, the Endodontics Section is graded by independent, anonymous examiners. The Endodontics Section has been administered since 1985 and will be a required section on the WREB Interim Clinical Dental Examination. Details and results of technical analyses and candidate results for the Endodontics Section have been documented in annual technical reports (e.g., WREB, 2019a).

The only changes to the Endodontics Section are specific COVID-19-related social distancing and infection prevention protocols that must be followed to ensure the safety of all individuals involved in the examination and examination-related activities. Besides adhering to the simulation protocol for patient position and Standard (Universal) Precautions, candidates also are required to follow any additional social-distancing and infection-prevention protocols imposed by the exam site.

Prosthodontics Simulation Section. WREB's existing Prosthodontics Section is a performance-based clinical simulation examination. The candidate is required to perform two prosthodontic procedures (three preparations) on simulated teeth in a mounted articulator and manikin that is positioned to simulate working on a patient. Candidates must maintain the simulated patient position and adhere to Standard (Universal) Precautions throughout the examination. Candidates are required to prepare an anterior tooth for a full-coverage crown and prepare two abutments to support a posterior three-unit fixed partial denture prosthesis (i.e., bridge). The three-unit bridge

must have a path of insertion that allows full seating of the restoration. Like all WREB Dental Examination sections, the Prosthodontics Section is graded by independent, anonymous examiners. The current version of the clinical Prosthodontics Section has been administered since 2018 and is required by most states accepting the WREB Interim Clinical Dental Examination. Details, technical analyses, and candidate results are documented in annual technical reports (e.g., WREB, 2019a).

As with the Endodontics Section, the only changes to the Prosthodontics Section specific COVID-19-related social-distancing and infection-prevention protocols that must be followed to ensure the safety of all individuals involved in the examination and examination-related activities. Besides adhering to the simulation protocol and Standard (Universal) Precautions, candidates also are required to follow any additional social-distancing and infection-prevention protocols imposed by the exam site.

Periodontics Patient-Based Section. WREB subject matter experts (SMEs) on the Operative and Periodontics Examinations Committee have recommended that due to COVID-19 the patient-based Periodontics Section of the Clinical Dental Examination be waived for 2020 since WREB is unable to demonstrate that a valid replacement is viable. The following evidence supports the decision to recommend temporary waiver or postponement of the Periodontics Section: a) critical aspects of periodontal diagnosis and treatment decision-making are covered throughout the CTP examination, b) the patient-based Periodontics section is the least discriminating section of the Dental Examination due to the very high rate of examination success, and c) recent practice analyses conducted jointly by WREB and CRDTS (WREB, 2019b; WREB, 2020) found that while the practices assessed on WREB's Dental patient-based Periodontics Section and Dental Hygiene Examination continue to be rated as frequently performed and important, these practices are most frequently performed by dental hygienists and rarely or never performed by dentists. Still, the ability of dental candidates to demonstrate competence on a valid, clinical examination of Periodontics continues to be valued by many states, and the patient-based Periodontics Section of WREB's standard patient-based Dental Examination will be available again when it can be administered safely.

Operative Simulation Section: Development and Field Testing

WREB has field-tested an alternative, performance-based restorative dentistry simulation (i.e., Operative Simulation Section) that could be required temporarily in lieu of the traditional patient-based Operative Section. The validation process for the simulated examination included the field-testing of social distancing for both candidates and examiners. The pre-planning and guidelines practiced with the social-distancing and infection-prevention protocols employed in the Operative Simulation Section field tests are described later and will be applied to other simulation sections (i.e., Endodontics and Prosthodontics) of the WREB Interim Clinical Dental Examination.

In the Operative Simulation Section, each candidate is required to successfully perform both preparation and finish of a conventional Class II restoration on a molar and a Class III restoration on a central incisor. All procedures are performed, like they are for the Endodontics and Prosthodontics sections, on simulated teeth, mounted in arches on a manikin with proper operational posture, appropriate employment of Standard (Universal) Precautions including Personal Protective Equipment (PPE), and with rubber-dam isolation. Results are assessed using established Operative Section scoring criteria. Certain critical errors are preserved, and the passing cut-point remains unchanged. The simulation involves social distancing for both candidates and examiners and uses materials (simulation teeth and arches) which are readily available and with which candidates and their programs are already familiar.

WREB maintains the position that any clinical restorative simulation testing, at this time, remains limited with respect to fidelity, which is a critical type of validity evidence. Even with a simulated tooth that attempts to replicate the hardness, texture, disease process, and internal anatomy of human teeth, the simulation does not fully replace the spontaneous judgments, patient management skill, and cognitive-motor coordination involved in treating a live human patient who exhibits an authentic response to local anesthesia, unpredictable movements, and has the ability to feel pain and discomfort. The alternative Operative Simulation Section that WREB is offering for 2020 is intended to be a provisional solution for COVID-19 only and is intended neither to replace WREB's patient-based Operative Section in 2020 for states that continue to require it nor to be the simulation WREB may offer in the future when the validity of a more realistic and involved simulation can be demonstrated.

The following sections will describe several aspects of the Operative Simulation Section, including a) administration procedures reflecting the additional precautions required to minimize

exposure to the COVID-19 virus, b) restorative content assessed, c) grading and scoring, d) examiner preparation and evaluation, and e) the results of field-testing conducted in early 2020.

Interim Social Distancing and Infection Prevention Protocol

Preventing infection by COVID-19 that may arise from airborne transmission or contact with potentially virulent surfaces is critical to ensuring the safety of candidates, dental school personnel, examiners and agency personnel during examination and examination-related activities. Field-testing for the Operative Simulation Section included broad attention to ensuring that a) individuals participating in the examination were sufficiently distant from each other at all times, b) individuals used appropriate PPE, and c) materials and areas remained clean and disinfected. Social-distancing and infection-prevention protocols were field tested for the Operative Simulation Section and will be implemented for all clinical sections of the WREB Interim Clinical Dental Examination. These protocols include but are not limited to the following examination features:

- Limits on numbers of personnel and candidates assigned to the examination at one time and in one location
- Distribution, required completion, and collection/review of a self-assessment survey instrument immediately prior to the examination (e.g., regarding symptoms, recent contact with suspected or known patient with COVID-19, and recent travel)
- Required capture and logging of each participant's temperature
- Assignment of separated arrival times
- Set-up, preparation, and monitoring for entry to the facility and examination area (e.g., survey completion and approval, donning face mask and eye protection, temperature capture, hand sanitization, etc.)
- Installation of floor and location markings throughout examination areas to ensure adherence to social distancing
- Location of assigned simulation stations that conform to social distancing guidelines
- Pre-provision of supplies and examination materials at simulation stations to reduce unnecessary movement

- Specific instructions regarding how to move around laboratory when necessary, how to turn in materials, and how to leave space and building upon completion without congregating
- Monitoring of social distancing, use of PPE, and contact with objects and surfaces throughout the simulation
- Appropriate cleaning and disinfection of all simulation stations and involved surfaces immediately before and following every simulation session

The features described reflect protocols that were in place for the March 30 – April 2 field-tests. These examination protocols may be augmented according to updates for infection prevention from the Center for Disease Control (CDC) or more stringent school-specific requirements. In any case the protocols employed will reflect or exceed CDC guidelines. If the test site has stricter guidelines than the CDC, then the protocol employed will reflect the test site requirements. For example, the CDC guidelines for social distancing stipulated maintaining a minimum distance of at least six feet from other individuals; one of the field-test sites required a minimum distance of ten feet, which was implemented throughout the field test.

WREB will coordinate with each site hosting an examination to develop a document communicating the social-distancing and infection-prevention protocol for that examination site. Prior to the exam this document will be provided to candidates, on-site examiners, and any other individuals who will be involved in examination. Candidates will be expected to conform to the social distancing and infection prevention protocol and may risk dismissal and failure of the examination for gross, willful, or repeated protocol violation.

Scoring sessions where grading examiners evaluate candidate performance on the submitted arches also will be subject to social-distancing and infection-prevention protocols. Similar safety features, including self-assessment and screening, number of grading examiners per room and building, social distancing, surface and material disinfection, and specific instruction regarding safe entry, movement, task performance, and exit of the facility will be provided.

Administration and Security

Time allocated for the simulation is three and one-half (3.5) hours. Candidates are allowed an additional 30 minutes to set up before the session begins.

At the exam site, candidates must provide two valid, non-expired forms of personal identification. Admittance to the exam does not imply that the identification presented was valid. If it is determined that a candidate's identification is fraudulent or otherwise invalid, WREB will report to the appropriate governing agencies or board. Any candidate or other individual who has misreported information or altered documentation in order to fraudulently attempt an examination, will be subject to dismissal and reporting.

Candidates report to the assigned simulation area at the appointed time and must bring with them their personal handpieces, burs, and anything else needed to complete preparations or restorations on the simulated teeth, including the ModuPRO® One opposing arch or equivalent needed to complete the simulation.

Candidates may bring the Operative Simulation Candidate Guide and Dental Exam Candidate Guide into the simulation lab for reference. Notes, textbooks, or other informational material must not be brought into the simulation lab. No magnification other than loupes is allowed. All electronic devices, including cell phones and smart watches, are prohibited in the simulation lab. Unique markings are applied to each arch to prevent manipulation and reinforce examination security.

Assistants are not permitted for the Operative Simulation Section. Candidates may not assist each other. This includes critiquing another candidate's work or discussion of treatment. All candidates are expected to pass the examination on their own merit without assistance.

WREB provides the maxillary arches containing the teeth needed for preparation and restoration. The candidate provides everything needed that is not provided by the test site (school), including a suitable opposing arch. Following preparation, the arch containing the prepared teeth is submitted for grading and a second arch is provided with teeth already prepared for restoration. When placement of the finish restorations is completed, the second arch is submitted for finish grading.

Candidates are to work independently, observe Standard (Universal) Precautions, and work in a manner that simulates performing procedures on a patient throughout the simulation. Any unprofessional, unethical, or inappropriate behavior could result in immediate dismissal and failure of the Operative Simulation. If, after receiving notice of a violation, a candidate repeatedly violates simulation protocol, Standard (Universal) Precautions, or the social distancing and infection

prevention protocol for the exam site, they will be dismissed from the simulation and will fail the Operative Simulation Section.

Additional details of administration procedures and security guidelines are included in the Operative Simulation Candidate Guide, Dental Exam Candidate Guide, Operative Simulation Examiner Manual, and Dental Exam Examiner Manual.

Operative Simulation Test Specifications and Grading Criteria

The Operative Simulation Section consists of one extended examination session during which two (2) operative (restorative) procedures are performed on simulated teeth. The procedures are:

1. Preparation and restoration of a conventional Class II (MO) in tooth 14.
    - The candidate may choose the restorative material (amalgam or composite).
    - The preparation can but need not cross the tooth's oblique ridge.
2. Preparation and restoration of a Class III (ML) in tooth 9 with composite.

The procedures are performed on simulated teeth mounted in a manikin positioned to simulate working on a patient. The simulated tooth has the same anatomy and polymers as the teeth that are required for the Prosthodontics Simulation Section. Vendor supply is available for both testing and candidate practice despite current factory closures. The teeth have no artificial decay that could introduce testing variables not encountered in candidates' current curriculum and training. Additional field testing and candidate clinical experience will be necessary for reliable implementation with artificial decay.

No modification requests are needed, which supports social distancing and infection prevention measures by reducing the handling of materials and number of examiners required to be onsite. Candidates are asked to prepare the teeth as they ideally would for minimal caries requiring restoration and so that their preparations satisfy WREB criteria for a score of "5" and then stop. The Class II preparation design must be conventional and include a pulpal floor. Both preparation and restoration (placement of the restorative material) must be accomplished with a rubber dam. When treatment is completed the arch containing the prepared or restored teeth is submitted for grading. Occlusion is not functionally evaluated.

Current dental terminology (CDT) codes that reflect the range of procedures that may be attempted are listed in Table 1.

Table 1. *Simulated Operative Section Procedure Options with CDT Codes*

Operative Section Restorative Procedure	**CDT Code(s)**
Direct posterior Class II amalgam restoration (MO, DO or MOD)	D2150, D2160
Direct posterior Class II composite restoration (MO, DO or MOD)	D2392, D2393
Direct anterior Class III composite restoration (ML, DL, MF, DF)	D2331, D2332

WREB examines candidates with varying educational backgrounds and schools may teach different preparation and restoration techniques. WREB does not look for one specific technique and scores performance according to the Operative Simulation scoring criteria described later in this section.

The scoring criteria are based on the scoring criteria employed for the conventional patient-based Operative examination section, with minor revisions, reviewed and approved by the SMEs on the Operative examination committee. The preparation criteria are Outline and Extension, Internal Form, and Operative Environment. The finish criteria are Anatomical Form, Margins, and Finish, Function and Damage. Each grading criterion is defined at five levels of performance for each procedure, with a grade of "3" representing minimal competence. A grade of "5" is defined generally to represent optimal performance, with grades of 4, 3, 2, and 1 corresponding to appropriate, acceptable, inadequate, and unacceptable performance, respectively. The performance level definitions for each type of preparation (i.e., Class II amalgam, Class II composite, and Class III composite) and for the restoration finish are published in the candidate guide and provided in Figures 1 through 4.

OPERATIVE SIMULATION CLASS II – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing and does not weaken tooth in any manner.	Outline is slightly irregular but does not weaken tooth. Isthmus is slightly wider than required.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit.	Outline is grossly improper and/or lacks any definite form. Unapproved surface prepared.
	Proximal and gingival extensions are visually open less than 1.0 mm	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are equal to or slightly greater than 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Pulpal floor depth as determined by the lesion or defect does not exceed 2.0 mm from the cavosurface. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Pulpal floor and/or axial wall is slightly shallow or deep.	Pulpal floor and/or axial wall is moderately shallow or deep.	Pulpal floor and/or axial wall is critically shallow or critically deep.	Walls and/or floors are grossly deep. Gross removal of tooth structure jeopardizes the tooth or pulp. Unapproved surface prepared.
	Conventional design: Internal form is smooth and flowing and has no sharp angles that could weaken or cause voids in the final restoration.	Conventional design: Internal form is mostly smooth and flowing, but some minor roughness and/or sharp angles are present.	Conventional design: Internal form is generally smooth and flowing, but some moderate roughness and/or sharp angles are present.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

Figure 1. Scoring criteria definitions for the Simulation Class II Composite Preparation, 2020.

OPERATIVE SIMULATION CLASS II – AMALGAM PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline is generally smooth and flowing and does not weaken tooth in any manner.	Outline is slightly irregular but does not weaken tooth. Isthmus is slightly wider than required.	Outline moderately weakens marginal ridge or a cusp. Isthmus is too wide or too narrow.	Outline severely weakens marginal ridge or a cusp. Outline is misshapen and/or forces improper angle of exit.	Outline is grossly improper and/or lacks any definite form. Unapproved surface prepared.
	Proximal and gingival extensions are visually open less than 1.0 mm	Proximal and/or gingival extensions are slightly overextended.	Proximal and/or gingival extensions are moderately overextended.	Proximal and/or gingival extensions are in contact or obviously overextended.	Proximal and/or gingival extensions are grossly overextended.
	Optimal treatment of fissures.	Near optimal treatment of fissures.	Adequate treatment of fissures. Neither the tooth nor restoration is compromised.	Inadequate treatment of fissures will compromise the tooth or restoration.	Lack of treatment of fissures will seriously compromise the tooth and restoration.
	Proximal cavosurface angles are approximately 90°. The integrity of both tooth and restoration is maintained.	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration. Cavosurface has small areas of minor roughness.	Cavosurface angles possibly compromise the integrity of the tooth or restoration. Cavosurface is moderately rough but will not adversely affect the final restoration.	Improper cavosurface angles or rough cavosurface will cause the final restoration to fail.	Cavosurface angles are grossly improper. Cavosurface has multiple major areas of roughness and/or enamel weakness that will cause the restoration to fail.
INTERNAL FORM	Proximal walls are clearly convergent occlusally.	Proximal walls are barely convergent occlusally.	Proximal walls are parallel or divergent in one area.	Proximal walls are critically divergent occlusally.	Proximal walls are grossly divergent occlusally.
	Pulpal floor is 1.5 mm-2.0 mm from the cavosurface and provides adequate bulk for strength of restorative material. Axial wall depth at the gingival floor is 1.0 mm-1.5 mm.	Axial wall and/or pulpal floor is slightly shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is moderately shallow or deep, but still provides adequate bulk for strength of restorative material.	Axial wall and/or pulpal floor is critically shallow or deep and does not provide adequate bulk for strength of restorative material.	Walls and/or floors are grossly deep. Gross removal of tooth structure jeopardizes the tooth or pulp. Unapproved surface prepared.
	Conventional design: Internal form is smooth and has no sharp angles. Retentive grooves, if placed, are near ideal. Axial wall follows external contour of the tooth.	Conventional design: Internal form is mostly smooth, but some minor roughness and/or sharp angles are present. Retentive grooves, if placed, are adequate. Axial wall contour is near optimal.	Conventional design: Internal form is generally smooth, but some moderate roughness and/or sharp angles are present. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location. Axial wall contour is not optimal.	Conventional design: Internal form is rough and unfinished with major areas of roughness or sharp angles that will lead to restoration failure. Retentive grooves, if placed, are too deep or too shallow, or placed in an incorrect location, and will compromise the tooth or restoration.	Conventional design: Internal form is grossly rough and/or has gross sharp angles that will lead to restoration failure. Gross disregard for proper placement of retentive features will compromise the tooth and restoration.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

Figure 2. Scoring criteria definitions for the Simulation Class II Amalgam Preparation, 2020.

OPERATIVE SIMULATION CLASS III – COMPOSITE PREPARATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
OUTLINE & EXTENSION	Outline provides optimal convenience form (access for caries removal and insertion of restorative material). Gingival extension is visually open up to 0.5 mm. Facial (or lingual) extension may break proximal contact up to 0.5 mm. Incisal contact is not broken. Includes proximal contact area.	Outline is slightly over or under extended. Outline is slightly irregular but does not weaken the tooth. Includes proximal contact area with slight variation.	Outline is moderately over or under extended. Outline is moderately irregular but does not weaken the tooth. Gingival margin is moderately overextended. Includes proximal contact area with moderate variation.	Outline is severely over or underextended. Gingival wall is in contact or obviously overextended. Incisal extension has broken contact. Mostly below proximal contact area where caries would be expected.	Outline is grossly improper and/or lacks any definite form. Gingival wall is grossly overextended. Unapproved surface prepared. Wholly below proximal contact area where caries would be expected.
	Cavosurface forms a smooth continuous curve with no sharp angles..	Cavosurface is slightly irregular and rough; no sharp angles.	Cavosurface is moderately irregular and rough. A few sharp angles are present.	Cavosurface is severely irregular and/or with sharp angles.	Cavosurface has multiple gross irregularities that will cause the restoration to fail.
	There are no acute cavosurface angles..	Cavosurface angles are not optimal, but do not compromise the integrity of the tooth or restoration.	Cavosurface angles possibly compromise the integrity of the tooth or restoration.	Cavosurface angles will lead to enamel fracture or fracture of the restoration.	Cavosurface angles are grossly inappropriate for the situation and will lead to fracture of the restoration.
INTERNAL FORM	Axial wall follows external contour of tooth. Depth does not exceed 1.0 mm beyond the DEJ.	Axial wall generally follows external contour of tooth. Depth does not exceed 1.5 mm beyond the DEJ.	Axial wall does not follow contour of tooth. Depth does not exceed 2.0 mm beyond the DEJ.	Axial wall depth exceeds 2.0 mm beyond the DEJ.	Gross removal of tooth structure jeopardizes the tooth or pulp. Unapproved surface prepared.
	Internal line angles are rounded and smooth. Internal walls are well defined.	Internal walls are well defined and rounded but have some slight irregularities.	Internal walls are rounded, but moderately rough, irregular, and not defined. Moderately sharp line angles are present.	Internal walls are severely irregular and not defined. Angle of walls undermines enamel, jeopardizes incisal angle, or encroaches on the pulp.	Grossly irregular and sharp line angles show total disregard for the health of the tooth.
OPERATIVE ENVIRONMENT	No damage to the adjacent tooth.	Minor damage to the adjacent tooth can be removed by polishing without changing the shape of the contact.	Damage to the adjacent tooth can be removed by polishing, but the shape of the contact will be changed.	Damage to the adjacent tooth will be difficult to polish out and still maintain appropriate proximal contour. The adjacent tooth will likely require restoration.	Damage to the adjacent tooth will require restoration.

Figure 3. Scoring criteria definitions for the Simulation Class III (Composite) Preparation, 2020.

OPERATIVE SIMULATION FINISH RESTORATION
SCORING CRITERIA RATING SCALE

	5–Optimal	4–Appropriate	3–Acceptable	2–Inadequate	1–Unacceptable
ANATOMICAL FORM	Anatomical form is consistent and harmonious with contiguous tooth structure.	Slight variation in normal anatomical form is present.	Moderate variation in normal anatomical form is present. Marginal ridge is improperly shaped.	Anatomical form is improper. Marginal ridge is poorly shaped.. Anatomy is too deep or too flat.	There is gross lack of anatomical form.
	Proper proximal contour and shape are restored.	There is slight variation of proximal contour and shape.	There is moderate variation of proximal contour and shape.	Proximal contour is poor. Embrasures are severely over or under contoured.	Grossly improper proximal contour or shape.
	Normal proximal contact area and position are restored. Contact is visually closed and resists the passage of lightly waxed floss.	There is slight variation of normal contact area and position. Contact is visually closed and resists the passage of lightly waxed floss.	There is moderate variation of normal contact area and position. Lightly waxed floss will pass through the contact with slight resistance.	Contact is visually open; contour is pointed and sharp; or so broad, flat or tight that floss will not pass easily pass through the contact.	Contact is grossly open; contour terminates far from the adjacent tooth or the restoration is bonded to the adjacent tooth.
MARGINS	There are no excesses or deficiencies anywhere along margins.	Slight marginal excesses and/or deficiencies are present.	Moderate marginal excesses and/or deficiencies are present.	A deep open margin is present, or critical excesses or deficiencies are present. A marginal overhang catches floss.	Multiple open margins, or gross excesses, or deficiencies, are present. A gross marginal overhang shreds floss.
FINISH, FUNCTION & DAMAGE	The surface is smooth with no pits, voids or irregularities.	Slight surface irregularities, pitting, or voids are present.	Moderate surface irregularities, pitting, or voids are present.	Critical surface irregularities, pitting, or voids are present.	Gross surface defects are present and/or the restoration is grossly fractured.
	There is no damage to hard or soft tissue.	Minor damage to hard or soft tissue is evident.	Moderate damage to hard or soft tissue is evident.	Severe damage to hard or soft tissue is evident. Open contact risks trapping food debris or overly tight contact makes flossing difficult.	Gross mutilation of hard or soft tissue is evident. Grossly open contact exposes interdental col to potential trauma or fused teeth make flossing impossible.

Figure 4. Scoring criteria definitions for the Simulation Class II and Class III Finishes, 2020.

Scoring and Results Reporting

Performance for each preparation and finish, is graded by three independent and anonymous examiners who are calibrated to the scoring criteria prior to every examination. Each preparation or finish is scored on the applicable criteria according to rating scales presented above. Examiners are trained to assign a particular grade on the scale only when *all* aspects of performance described for that level have been demonstrated. For example, if performance on the criterion under review meets most aspects of the definition for a grade of "3" but does not quite meet the standard for even one aspect of the definition, then the grade assigned will be a "2," at most. This holds for all six criteria per restoration.

The median of the three examiner grades is computed for each criterion and is weighted to reflect the level of criticality relevant to minimally competent treatment, e.g., Outline and Extension accounts for 46% of the preparation score and Operative Environment accounts for only 15%. The criterion weights are provided in Tables 2a and 2b.

Tables 2a and 2b. *Operative Simulation Scoring Criteria and Weighting: Preparation, Finish*

Preparation Criteria and Weighting	
Outline & Extension	46%
Internal Form	39%
Operative Environment	15%

Finish Criteria and Weighting	
Anatomical Form	36.5%
Margins	36.5%
Finish, Function & Damage	27%

The mean of the preparation and finish scores is the restoration procedure score. The mean of the two procedure scores, after any applicable penalties or deductions, is the final Operative Simulation Section score.

The passing cut score on the Operative Simulation Section is 3.00, which reflects minimally competent performance within the five-point rating scale for all criterion grades that contribute to the final section score. Each performance level definition for a score of 3.00 on a criterion has been worded to describe performance that would be deemed minimally competent via consensus of the subject matter experts on the Operative section examination committee. While methods of standard setting applied to selected-response assessment often rely on SMEs evaluating each test question based on how each SME believes a minimally competent examinee would

perform, standard setting for many performance-based assessments involves defining minimum expectations that can be observed directly in the candidate's performance. The performance level definitions (Figures 1 through 4), as developed by the examination committee, are critical to guiding examiner grading. The definitions are used to describe examples of clinical performance reviewed during examiner training and calibration, which provides performance benchmarks to facilitate examiner adherence to the criteria and a high degree of examiner agreement.

While limitations on travel and group activity size due to COVID-19 remain in effect, the grading of candidate performance will take place in grading sessions after the examination. While this reduces the number of examiners traveling to and grading at the examination site, it also prevents candidates from receiving onsite results immediately. Candidates and state licensing boards will receive results as soon as possible after grading sessions are held. Results reports will indicate clearly whether the Operative Examination was a simulation or involved the treatment of a patient. As with all WREB examinations, results of all examination attempts, regardless of pass or fail outcome, will be available to state licensing boards.

Examiner Training and Calibration

Most examiners are members or designees of their state boards. A small proportion (e.g., approximately twenty percent of examiners in 2019) are dental educators. All examiners must be actively licensed and in good standing, with no license restrictions, and submit proof of license renewal annually. Under social distancing restrictions, the only examiners that may be present at the Operative Simulation Section may be the Chief Examiner and one or more Floor Examiners, depending on the layout and size of the examination environment. There will not be any grading examiners at the examination site unless social distancing and travel guidelines have been eased enough to allow this. Under the current restrictions, grading examiners will grade candidate performance in grading sessions, separate from the examination environment. Grading examiners still will need to complete examiner self-assessments and calibration testing prior to grading.

Clinical examination scores are dependent upon the judgments of grading examiners. A high degree of examiner agreement is critical to assessing candidate ability in a reliable and fair manner. As with the conventional Operative Examination, scoring judgments on the Operative Simulation Section are made by three independent examiners. The median of the three grades

assigned contributes to the candidate's score. The median is more robust to extreme grades assigned than the mean (i.e., conventional average).

Having multiple examiners helps to moderate the effects of varying levels of examiner severity; however, it is essential that all examiners are trained and calibrated to an acceptable level of agreement with respect to the scoring criteria for the examinations in which they participate. Examiners must participate in orientation and calibration sessions that take place before every examination or grading session. During calibration, examiners take assessments (tests) in which they grade examples of clinical performance according to the grading criteria. Their judgments are compared to scores that have been previously selected by the examination committees as representative of the defined levels in the criteria. The examiner team completes calibration tests until they each have demonstrated that they understand and can consistently apply WREB criteria in their assessments. All calibration tests are reviewed regularly for content and psychometric quality by WREB examination committees.

Examiners receive feedback on their performance after each examination. Examiners with low percentages of agreement, high percentages of harshness or lenience, or erratic grading patterns are counseled, remediated, and monitored to ensure increased understanding of criteria definitions. Continued lack of agreement results in dismissal from the examination pool.

The two main approaches employed to evaluate examiner performance include a review of examiner agreement which reflects the degree of exact and adjacent agreement and an estimation of examiner severity employing a probabilistic statistical model which is designed to account for and quantify potential sources of construct-irrelevant variance such as rater bias and error. With three examiners there are multiple ways to define and track examiner agreement. WREB uses a conservative computation of exact and adjacent agreement which involves comparing each examiner rating, i.e., each individual grade assigned to a particular criterion, to the mean of the other two raters' grades assigned for the same criterion, within the same examination attempt. Examiner ratings that may be adjacent to the rating of another rater may still be categorized as harsh or lenient since agreement is defined as the rating falling within one scale point of the *mean* of the other two ratings. Examiner severity is estimated using the Many-faceted Rasch Model (Linacre, 1994; Rasch, 1960/1980) and allows examiner performance to be compared to the performance of all other examiners within the examiner pool along a continuum of harshness to lenience and provides statistical information regarding rater errors such as erratic grading or

grading that shows too little discernment among performance levels (e.g., assigning all or mostly "3"s). Additional details regarding methods and results of examiner evaluation are provided in the WREB Dental Examination Technical Report (WREB, 2019a)

Field Testing of the Operative Simulation Section: Overview

Two Operative Simulation field-tests were planned and conducted between March and May of 2020. A total of 79 dental students from two dental schools participated; three students attempted the examination twice resulting total of 82 attempts. These students planned in advance to challenge the field test examination twice.

The planning of the field tests included the review and revision of the Operative scoring criteria, creating a candidate guide for field test candidates, coordinating with each school to produce social distancing and infection prevention protocols, and developing examiner training and calibration materials.

One field test was conducted on March 30, 2020 at the University of Oklahoma with 20 dental students. A second field test was held on April 1 and 2, 2020 at the University of Utah with 59 dental students. WREB has already been conducting conventional clinical dental examinations at these two schools and their campuses were reasonably accessible to WREB's dental consultants, given the limitations and recommendations regarding travel due to COVID-19. Oklahoma and Utah are the states of residence of WREB's two consulting SME dentists, who oversee examination development and administration. The field test conducted at the University of Oklahoma used a simulated tooth constructed of a harder material which generated student concerns reflected in the post-examination candidate survey comments. The second field test, conducted at University of Utah, employed the final choice of material which did not elicit these concerns.

Initial Field Test Results: Faculty-graded

The performance of the 20 field test candidates who attempted the Operative Simulation at the University of Oklahoma were initially graded by their faculty to partially fulfill program competency requirements. The 20 scores based on the University of Oklahoma faculty grading ranged from 2.94 to 4.37, with a mean score of 3.72 (SD = 0.41). Candidate scores (N = 57) from the same university taking the WREB Operative section during the 2019 season ranged from 3.13

to 4.87, with a mean score of 3.90 (*SD* = 0.40). The field test results were not as high as the examination results from 2019, but an independent samples *t*-test conducted to compare the results indicated that the difference is not significant, with a value of t ($df = 75$; $\alpha = 0.05$) = 1.67 and mean difference of 0.17 ($p = 0.10$; 95% CI: -0.03, 0.38). The comparison is based on a small sample but provides an initial indication of comparability. There was also no notable difference between mean scores of the anterior tooth (3.73, SD = 0.51) and the posterior tooth (3.71, SD = 0.44) for the faculty-graded teeth.

After the examination and the grading conducted by faculty, some of the teeth that had been treated by the candidates at the University of Oklahoma field test were modified to reflect specific descriptors in the scoring criteria. These modified teeth and examples of candidate performance were then used in developing examiner training materials. The resulting preparations and finished restorations were photographed and used as exemplars in examiner training and calibration testing. The modified teeth will be graded along with the field-test performances from the other field test examination site, but will also be analyzed separately, as they do not represent the candidates' original performance.

Treatment Times

Candidates were allowed up to four hours to complete the Operative Simulation Field Test. The time spent preparing the preparations and the finishes was recorded for each field-test attempt to determine if the initial time allotted was sufficient. The average total time used for the 82 field test attempts was 2 hours, 10 minutes (130 minutes). The least amount of time needed was 1 hour, 22 minutes and the longest amount of time needed was 3 hours, 52 minutes. All but four candidates (4.8%) completed their procedures in less than 3 hours and 30 minutes. The University of Oklahoma site used more treatment time due to additional time needed for set-up between the preparation and finish procedures. The need for this additional time was eliminated with the use of a single tooth material for the second field test. The time allotted for the examination going forward was reduced to 3 hours and 30 minutes. Table 3 shows the treatment times per field test site.

Table 3. Operative Simulation Treatment Times in Minutes by Field Test Site.

Field Test Site	*N* Attempts	Minimum Treatment Time	Maximum Treatment Time	Mean Treatment Time (*SD*)
Univ. of Oklahoma	20	106 min	232 min	174 min (37.5)
Univ. of Utah	62	82 min	190 min	116 min (20.7)
Total	82	82 min	232 min	130 min (35.6)

Field-Test Candidate Survey Results

Students who participated in one of the two Operative Simulation field tests were sent a link to an online survey. The response rate was 53% (42 out of 79 individual field-test candidates); with a slightly higher response rate for University of Oklahoma participants (65%) than University of Utah participants (49%). Survey responses assisted the development of the examination by prompting improvements to the Candidate Guide and examination schedule and by supporting the final determination of simulated tooth material.

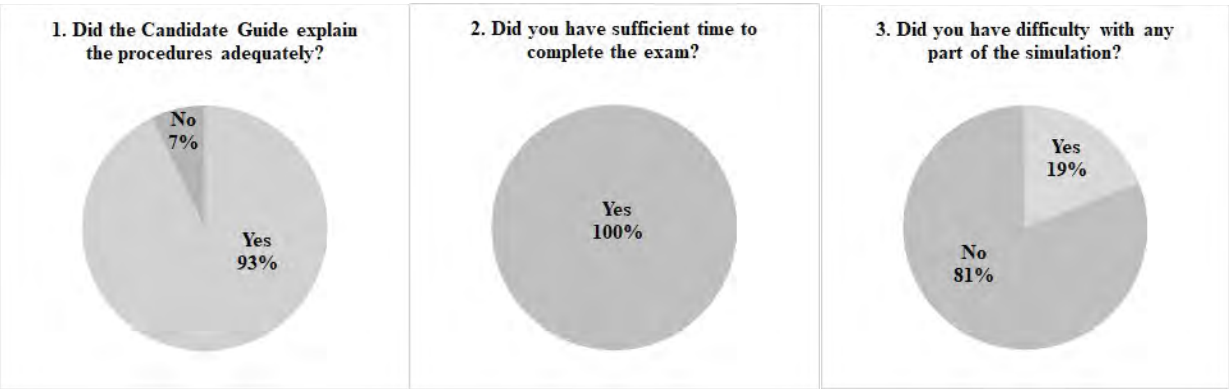
There were seven main questions and all questions offered the option to provide comments. There was a section for additional comments or suggestions at the end. Results for the seven questions are listed below, with a summary of responses and examples of comments.

The first three questions asked about the Candidate Guide, time allotted and whether the field-test candidate had any difficulty with any part of the simulation:

1. Did the Candidate Guide explain the procedures adequately?
2. Did you have sufficient time to complete the exam?
3. Did you have difficulty with any part of the simulation?

Only three of the 42 field-test candidates (93%) responded “No” to Question 1 (Figure 5a) regarding the Candidate Guide. All three noted that the guide could be more clear regarding the depth and extension of the preparation without needing to request extensions and wording to make this clear has been added to the Candidate Guide. All 42 field-test candidates responded that they

had sufficient time to complete the examination (Figure 5b). Eight of the 42 respondents (19%) expressed difficulty with part of the simulation (Figure 5c). In the optional comments, most of these concerns were about the difficulty of adjacent teeth having differing degrees of hardness; all were from field-test candidates at the University of Oklahoma, where a different tooth material was tested. The material that was employed at the second field test did not elicit these concerns and is the final choice of material planned for the Operative Simulation Section.



Figures 5a, b, c. Proportion of Yes or No responses to Field-Test Survey Questions 1, 2 and 3.

Question 4 asked about the level of challenge posed by the examination, overall.

4. Overall, was the exam easy, moderate, or difficult?"

Most respondents (37 of 42 or 88%) answered "Moderate" to Question 4 (Figure 6). Most comments offered regarding Question 4 compared the simulated teeth to natural teeth, e.g., "Going back to cutting on typodonts is always a readjustment! But definitely a valid test of hand skills. Certain aspects are more difficult and certain aspects are less difficult compared to treating human patients" and "The teeth were much softer, so probably required more dexterity than doing it on an actual person but very doable."

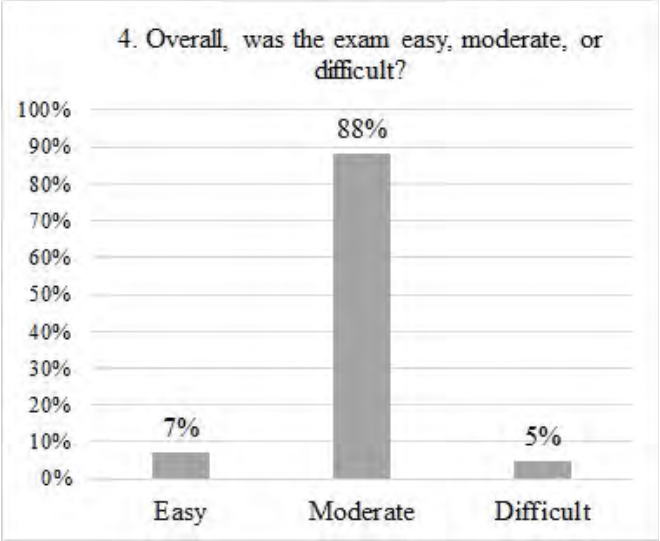


Figure 6. Proportion of different responses to Field-Test Survey Question 4.

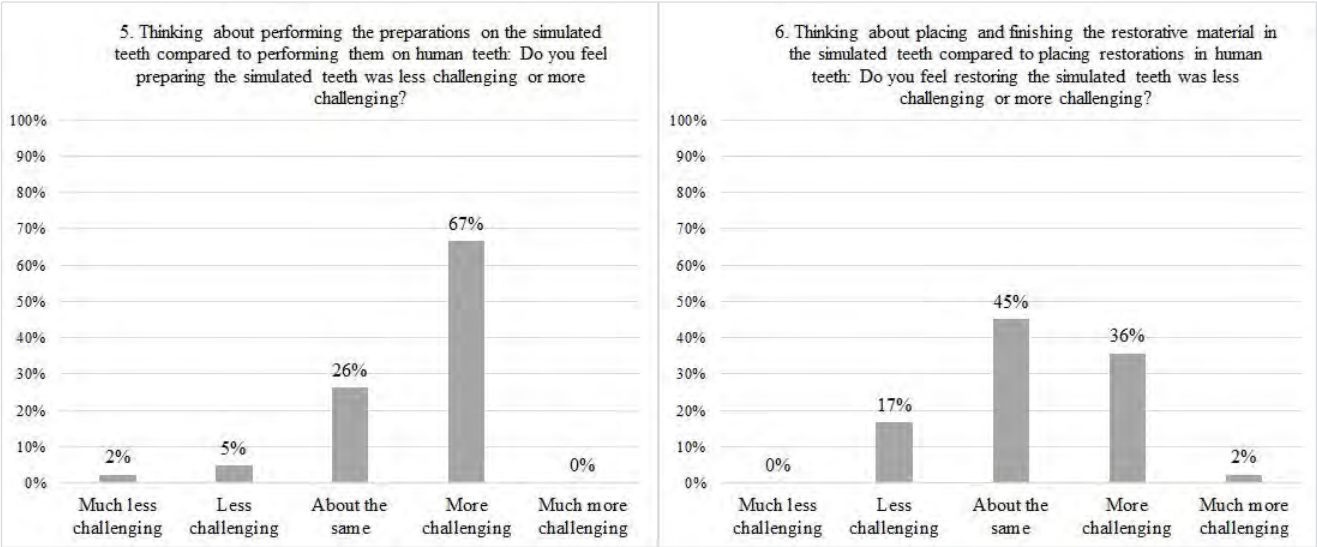
Questions 5 and 6 asked about the degree of challenge specifically regarding the preparation and the finish, respectively. Five response options were provided, ranging from Much Less Challenging to Much More Challenging.

5. Thinking about performing the preparations on the simulated teeth compared to performing them on human teeth: Do you feel preparing the simulated teeth was less challenging or more challenging?
6. Thinking about placing and finishing the restorative material in the simulated teeth compared to placing restorations in human teeth: Do you feel restoring the simulated teeth was less challenging or more challenging?

Many field-test candidates responded "About the Same" or "More Challenging" to Questions 5 and 6, with 93% (Question 5 regarding preparations) and 81% (Question 6 regarding placing and finishing) responding in one of these two categories (Figures 7a and 7b). The preparations were considered "More Challenging" by 28 of 42 (67%) and respondents' comments were similar to those made about tooth material on Question 4, e.g., "Because simulated teeth are much softer, I feel it takes more skill, accuracy and care to complete the exam" and "You have to have a lot better hand skills on the typodont teeth due to the fact that they are softer. You have to really be good at placement and control of the burr. It also requires better restorative placement as it's easier to

accidentally remove tooth while finishing and polishing." An example comment from one of the eleven (26%) respondents who selected "About the Same" stated, "More challenging due to the lack of recent practice on teeth with this hardness, but less challenging due to known parameters and no need for modifications."

Nineteen of 42 (45%) respondents felt that the placing and finishing of the teeth was "About the Same" but only a few offered comments, e.g., "Less challenging due to no need for etching, more challenging from the difference in stability (possible loose screws, extremely tight contacts, no wedging ability)." The source of the loose screws was identified and remedied prior to the second field test. Most comments were associated with the fifteen (36%) responses of "More Challenging," and involved the tooth material, e.g., "I felt placing the material was the same but polishing and removing flash was much more difficult on typodont teeth" and "Polishing composite on real teeth is MUCH easier than polishing on typodont teeth." The few comments that accompanied the seven (17%) responses of "Less Challenging" reflected dryness and isolation, e.g., "Obviously, there isn't any saliva, so keeping a dry field is simple" and "Better isolation."



Figures 7a, b. Proportion of different responses to Field-Test Survey Questions 5 and 6.

Question 7 asked about the ability to maintain social distancing at the examination.

7. How difficult was it for you to maintain social distancing during the examination?

Most field-test candidates (39 of 42 or 93%) responded that it was "Easy" to maintain social distancing during the examination (Figure 8). All but one comment were associated with responses of "Easy." Examples include "Really strict and functional rules in place. Wasn't a problem at all" and "I was at least ten feet away from anyone else in the room at all times." The other comment, associated with a response of Moderate, stated, "During the announcement portion of the exam, prior to the beginning, it was moderately difficult to maintain social distancing and adequately hear the announcements and questions." Plans have been implemented for additional information to be provided early to candidates, allowing for questions by phone or email prior to the examination to reduce the need for multiple announcements and possible reasons to encourage crowding.

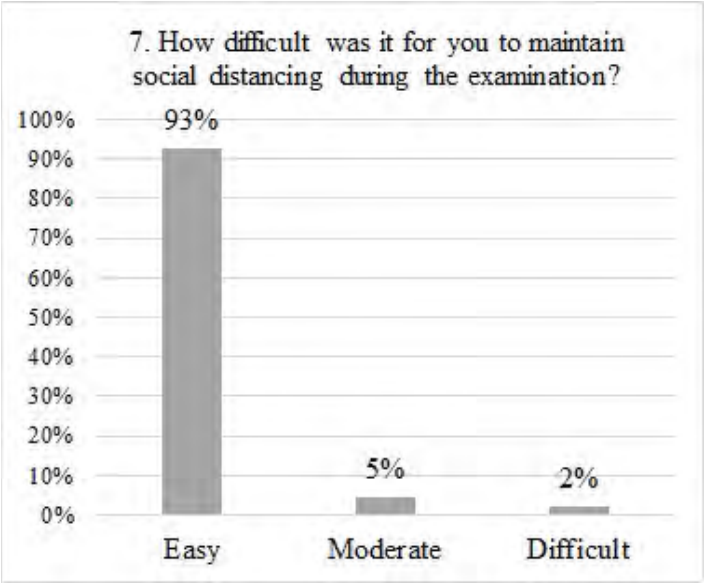


Figure 8. Proportion of different responses to Field-Test Survey Question 7.

Field-test candidates could offer additional comments or suggestions at the end of the survey. Many comments were generally positive or expressed thanks, e.g., "Overall it was great!" and several expressed their interest that this type of restorative examination be an acceptable option

going forward, e.g. “Replace patient exams with typodonts!” Some comments were concerned with the current situation related to COVID-19, e.g., “I think this is a great way to test in a safe environment given the circumstances of the class of 2020.” Most comments reinforced earlier comments regarding tooth material that, as noted above, will not apply, given the final choice of tooth material for the simulation examination. Suggestions regarding the schedule of treatment within the examination were offered by field-test candidates at the first field test; the timing in the second field-test was structured without interruption between the completion of preparations and finishes and is the final schedule planned for the examination.

Field-Test Grading Session Overview

Seven examiners participated in the April 30 – May 1 Operative Simulation field-test grading session, completing calibration exercises and tests prior to grading. Social distancing and infection prevention measures were followed, to ensure the safety of examiners and staff while using electronic scoring equipment and handling arches during grading.

On the first day, five examiners were able to complete the grading of all 82 attempts on the Operative Simulation field tests, with three sets of grades per attempt. On the second day, two additional examiners regraded the attempts, resulting in a total of four sets of grades per attempt. Candidate results and examiner performance were analyzed for the first day, which reflects conventional grading procedures, i.e., three examiners per attempt, as well as with the additional sets of grades from the second day combined, to obtain additional information, statistics and feedback regarding e.g., the effectiveness of calibration, the generalizability of grading criteria, and the performance of field-test candidates.

Field-Test Examiner Performance

Field-test examiner performance was evaluated via two approaches: examiner agreement statistics and examiner severity estimation. Examiner agreement was computed on the examiner team that completed grading on the first day. Examiner severity was conducted with and without the additional grades assigned on the second day. An overview of methods are described above on page 15 and in additional detail in technical reports, e.g., WREB Dental Examination Technical Report (WREB, 2019a).

Percentages of agreement were computed for the three sets of grades assigned on the first day of grading, as would be conducted for an actual examination after all three sets of grades per attempt have been assigned. Over the past ten years, percentages of agreement for the standard Operative Section have ranged from 88.4% to 89.9%, with comparatively balanced percentages of harshness and lenience. Examiner agreement over the years reflects examiner grading teams that have been selected for each examination based on their past examiner performance to ensure an optimal balance of examiner severity level. While nearly all examiners perform within recommended ranges of harshness and lenience percentages, to assign all the examiners that have performed at one end of that continuum to a single examination could introduce a systematic bias. The examiners who participated in the field-test grading session were scheduled based on location and convenience, given the conditions posed by COVID-19. The field-test examiners also included two relatively new examiners, who would not be assigned to the same examination under conventional conditions. Despite these potential threats to optimal examiner team performance, examiner agreement statistics for the field-test grading session were comparable to percentages of agreement, harshness, and lenience for the standard Operative section in previous years. Table 4 provides examiner agreement percentages for the standard Operative Section from the 2019 season and for the Operative Simulation field test grading session.

Table 4. *Percentages of Examiner Agreement, Harshness, and Lenience: Standard Operative Section and Operative Simulation Field Test*

	N Examiners	% Harsh	% Lenient	% Agreement
Standard Operative Section 2019 Season	110	5.5%	5.3%	89.2%
Operative Simulation Field Test Day 1	5	5.6%	5.7%	88.7%

Examiner severity estimated with the many-faceted Rasch model, is reported in Table 5, which provides summaries of results in logit, i.e., log-odds, units. High negative logits reflect more lenience and high positive logits reflect more harshness. For the standard Operative Section examination, most examiners fall within one logit unit of the mean, i.e., between -1.00 and 1.00, and within recommended ranges with respect to infit and outfit mean-square fit statistics, i.e.,

between 0.50 and 1.50. Examiner severity estimates for the first day of the Operative Simulation field test and for all Operative Simulation field-test examiners reflect smaller ranges with no outlying values. Additional details of the Many-faceted Rasch Model analyses are provided later with the results of field-test candidate performance.

Table 5. *Many-Faceted Rasch Model Examiner Severity Analysis Indicators in Logits: Standard Operative Section and Operative Simulation Field Test (Number of examiners provided below each header)*

Indicator	Standard Operative Section 2019 Season (N_E = 110)	Operative Simulation Field Test Day 1 (N_E = 5)	Operative Simulation Field Test All (N_E = 7)
Severity Measure Logit (Range)	-0.88 – 1.06	-0.41 – 0.44	-0.33 – 0.52
Standard Error (Range)	0.05 – 0.16	0.05 – 0.07	0.05 – 0.07
Severity Measure Logit Mean[a]	0.0	0.0	0.0
Severity Measure Logit *SD*	0.42	0.33	0.31
Infit Mean-Square (Range)	0.54 – 1.77	0.71 – 1.25	0.66 – 1.38
Outfit Mean-Square (Range)	0.52 – 1.72	0.72 – 1.22	0.66 – 1.32

[a] Mean of examiner severity parameters constrained at 0.

Field-Test Examiner Survey Results

The seven examiners who participated in the Operative Simulation field test grading session were sent a link to an online survey. The response rate was 100%. There were eight main questions and all questions offered the option to provide comments. There was a section for additional comments or suggestions at the end. Results for the eight questions are listed below, with a summary of responses and examples of comments.

Examiners responded unanimously to the first five questions, which asked about materials, instrumentation provided, difficulty of the grading tasks, as well as their understanding of, and ability to follow, the social distancing protocol. Possible responses to the first five questions were

Yes or No, except for Question 3, with possible responses of Easy, Moderate, or Difficult. The first five questions and the common responses are provided in Table 6.

Table 6. *Operative Simulation Grading Session Field-Test Examiner Survey Questions 1 to 5 with Responses*

Questions 1 to 5	Unanimous Response
1. Did the Candidate Guide and Examiner Manual adequately explain the simulation and grading procedures?	Yes, 100%
2. Were the social (physical) distancing instructions clear and easy to understand?	Yes, 100%
3. How difficult was it for you to maintain appropriate social (physical) distancing while serving as an examiner?	Easy, 100%
4. Did you have difficulty with any of the grading tasks?	No, 100%
5. Was the instrumentation provided for your use, everything you needed?	Yes, 100%

Optional comments associated with the first five questions were positive, e.g., regarding ability to maintain social distancing, (Question 3), "I felt very safe" and regarding grading tasks (Question 4), "Calibration was well orchestrated and provided the preparation necessary for us as examiners to perform efficiently and effectively. Nice job!"

Question 6 asked the field-test examiners about how well the calibration exercises prepared them for grading. Figure 9 illustrates the percentages of each response. Five examiners (71%) responded "Very well." One commented, "It was my first time actually grading so it was very helpful to me." Two (29%) responded "Well enough" accompanied by the following two comments, "Too detailed which sometimes can create more issues than being useful" and "This was a new exam but we made do," which suggest that continued review and refinement may be useful. The criteria has already been evaluated and edited based on examiner feedback.

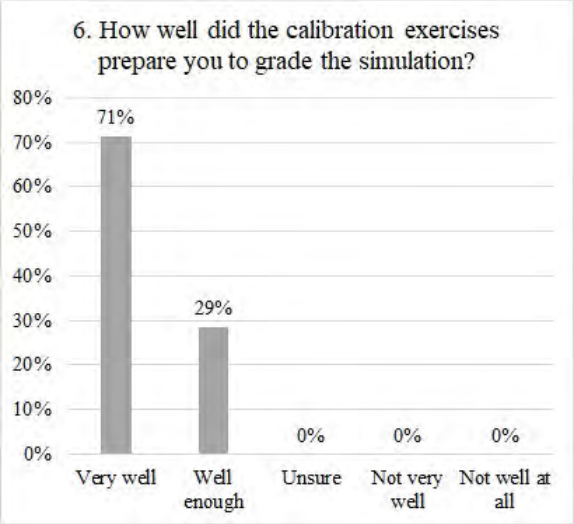


Figure 9. Proportion of different responses to Examiner Survey Question 6.

The grading criteria are nearly the same as the criteria used for the standard Operative Section, except for the removal of a few items, such as caries, pulp exposure and rubber dam isolation that do not apply for the Operative Simulation section. Question 7 asked the field-test examiners how well the modified criteria work for the simulation. Figure 10 shows the percentages of each response. Six examiners (86%) responded "Very well" or "Well enough," evenly split between the two responses. One examiner responded "Unsure." Only one comment was offered, "I think it's easier to see mistakes on a manikin than in the mouth."

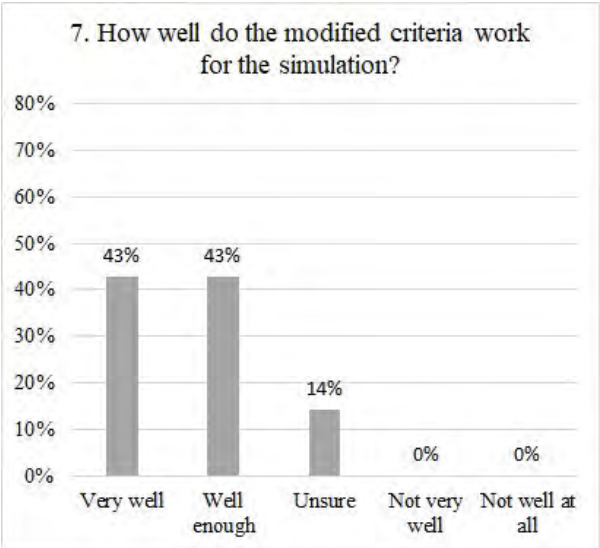


Figure 10. Proportion of different responses to Examiner Survey Question 7.

Question 8 asked field-test examiners whether they felt it was easier or more difficult to assess candidate performance with each candidate having received the same preparations. Figure 11 shows the percentages of each response. Five examiners (71%) felt it was easier, with four of them responding "Definitely easier" and one, "Somewhat easier." Two examiners (29%) responded "About the same." Comments included, "I would say that it levels the playing field and we still saw plenty of variation in performance for the finished restoration. Good simulation", "It was more fair to the candidates!", "Loved that part" and "As you see the same procedures over and over it becomes easy to compare and evaluate."

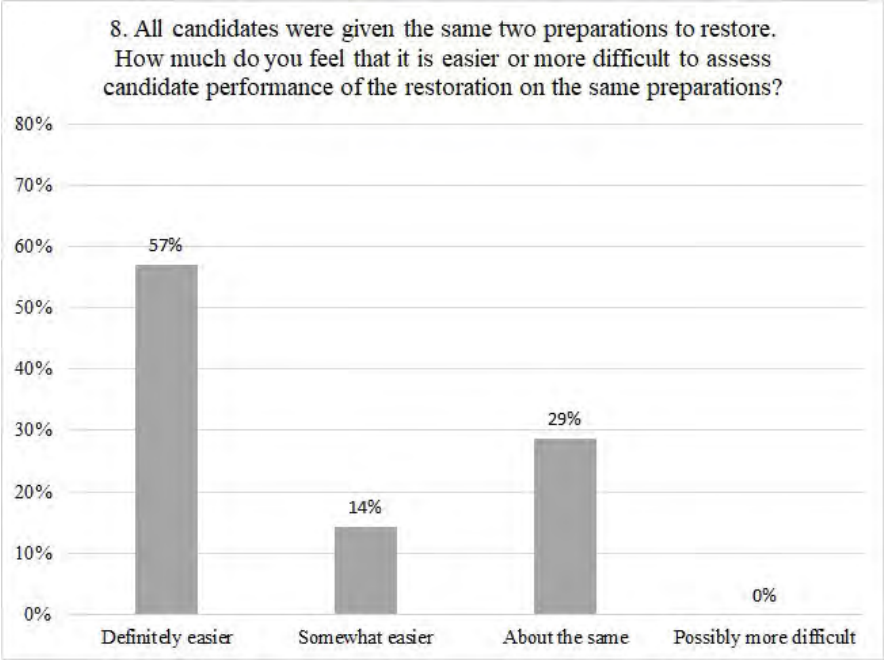


Figure 11. Proportion of different responses to Examiner Survey Question 8.

The section at the end inviting other comments or suggestions elicited one generic positive comment and two substantive comments suggesting that the Operative Examination Committee should consider including a means of failing or deducting points for examiner-validated gross open contact, e.g., "Grading for open contact is somehow still passing the candidate which I think it needs to be one of the automatic failure situations." Changes to criteria descriptors that will impact scoring and address the suggestions made in the comments have been prepared and recommended to the committee for implementation.

Field Test Results: Candidate Performance and Test Quality

Table 7 provides basic descriptive statistics for the raw and weighted means of medians computed from the three sets of examiner grades for each criterion. Direct comparisons to the standard Operative Section, particularly regarding criterion scores, are limited due to three factors. One is that only 5.5% of procedures performed for the standard Operative Section in 2019 were Class III procedures. All field-test attempts on the Operative Simulation Section included a Class III procedure. Since 2018, most states are accepting the results of performance on one Class II procedure if competence is demonstrated, so many candidates are completing Class II procedures. Years of Operative Section data have shown that the Class III is slightly, but significantly, less challenging than any Class II procedure and therefore, if completed, must be in combination with a Class II procedure. The second limiting factor is that many arches completed in the first, smaller field test, were modified to create additional exemplars of grading criteria performance levels during the development calibration materials and some performance levels may not be distributed within the sample in a comparable manner. The third factor is that the field-test host schools, which were chosen for location and convenience, given the conditions posed by COVID-19 and their students may not be a representative sample of all potential candidates.

Despite field-test limitations to direct comparison, three criteria and final scores (which include point deductions from penalties and loss of all points due to critical errors) were highly comparable. The slightly higher final score mean reflects a more negatively skewed distribution in the field test data; the passing percentage is actually somewhat lower for the field test than the standard Operative section in 2019. The significantly higher means of raw scores and some criteria for the field-tests may be related to the difference in procedure type in the comparison, particularly for Anatomical Form and Margins, which have traditionally scored significantly higher for the Class III procedure. Recent additions, since the field-test, to the criterion definitions for Internal Form related to grading examiner feedback are also expected to result in higher comparability.

Table 7. *Grading Criteria and Section Scores for Standard Operative Section and Operative Simulation Field Test: Means and Standard Deviations of Raw Unweighted Class II Median Criterion Scores, Raw and Final Scores, with t-Tests. Included are t values, probability values (p), effect size values (Cohen's d) degrees of freedom (df), and alpha level (α), i.e., significance below 0.05. Number of procedures noted as N_p, number of attempts noted as N.*

	Standard Operative Section 2019 N_p = 2,553[a]		Operative Simulation Field Test 2020 N_p = 164[a]		*t*-tests *df* = 2,715; α = 0.05		
	Mean	*SD*	Mean	*SD*	*t* value	*p* value	Cohen's *d* [b]
Outline and Extension	3.63	0.75	3.65	0.85	-0.27	0.79	0.02
Internal Form	3.62	0.74	3.85	0.65	-3.90	<0.01	0.33
Operative Environment	4.27	0.67	4.19	0.76	1.42	0.16	0.11
Anatomical Form	3.60	0.70	3.99	0.81	-6.86	<0.01	0.52
Margins	3.65	0.66	3.99	0.72	-6.32	<0.01	0.49
Finish, Function, & Damage	3.94	0.59	3.88	0.85	1.23	0.22	0.08
	N = 2,166		*N* = 82		*df* = 2,246		
Overall Raw Score	3.74	0.46	3.88	0.44	-2.76	0.01	0.31
Overall Final Score (with Penalties)	3.71	0.53	3.75	0.75	-0.69	0.49	0.06

[a] Only 5.5% of procedures performed in 2019 were Class III; 50% of Field test Procedures were Class III

[b] Generally accepted interpretations of Cohen's *d* effect size values are small, *d* = 0.2, medium, *d* = 0.5 and large, *d* = 0.8 (Cohen, 1988)

Table 8 provides field-test summary results from the many-faceted Rasch model (MFRM) analysis for graded criteria in logit, i.e., log-odds, values, with results from the 2019 standard Operative Section for reference. The MFRM analysis reported in Table 8 reflects the first day of grading, with complete sets of three grades per examination attempt. Mean-square fit statistics and discrimination parameter estimates are within suggested ranges. Since the criteria have multi-point

rating scales they were also assessed for category functioning, as well, in accordance with Linacre's (2002) rating scale guidelines to assess, e.g., that average parameter estimates of candidate ability increase with each category scale point.

Table 8. *Standard Operative Section and Operative Simulation Field Test: Many-Faceted Rasch Model Criterion Analysis Indicators in Logits.*

	Standard Operative Section 2019 *N* = 2,166	Operative Simulation Field Test 2020 *N* = 82
Criterion Measure Logit (Range)	-0.78 – 0.39	-0.37 – 0.43
Standard Error (Range)	0.02 – 0.02	0.08 – 0.10
Criterion Measure Logit Mean[a]	0.0	0.0
Criterion Measure Logit *SD*	0.50	0.25
Many-Facet Point-Biserial *r*[b] (Range)	0.25 – 0.32	0.23 – 0.37
2pl Discrimination Estimate[c] (Range)	0.92 – 1.08	0.76 – 1.10
Infit Mean-Square (Range)	0.93 – 1.07	0.85 – 1.19
Outfit Mean-Square (Range)	0.92 – 1.08	0.85 – 1.21

[a] Mean of criterion parameters constrained at 0

[b] Correlation between observations and corresponding average observations, excluding current observation

[c] Estimate of discrimination parameter, as calculated for two-parameter logistic IRT model; Rasch (c.f., one-parameter IRT) model fit requires values close to 1.00 (i.e., between 0.5 to 1.5 logits)

Table 9 provides summary statistics for overall test functioning, with 2019 standard Operative Section results for reference. The MFRM analysis reported in Table 9 also reflects the first day complete sets of three grades per examination attempt. Results are highly comparable, even with the large difference in sample size and limitations regarding comparisons noted earlier. The reliability estimate for the Operative Simulation Field Test is quite high for a performance-based assessment, at 0.91, which likely reflects the uniformity of the simulated teeth, in addition to high levels of examiner agreement. An additional MFRM analysis was conducted including all

examiner grades from both days of grading, yielding similar results and an even higher reliability estimate of 0.93, providing additional evidence of calibration effectiveness. (The Rasch person separation reliability estimate is the same or lower than Cronbach's alpha coefficient estimates of internal consistency reliability [Cronbach, 1951]. Minimum and maximum scores are excluded, if applicable; note that in the Many-faceted Rasch Model analysis, minimum and maximum refers to all raw grades, not median grades). Final score statistics include zero scores, which result from validated critical errors.

Table 9. *Standard Operative Section and Operative Simulation Field Test: Overall Test Summary Statistics*

Indicator	Standard Operative Section 2019	Operative Simulation Field Test 2020
N Attempts	2,166	82
Final Score Mean	3.71	3.75
Final Score *SD*	0.53	0.75
Minimum; Maximum	0.00; 5.00	0.00; 4.68
Standard Error of Measurement *(SEM)*	0.21	0.23
Conditional *SEM* at Passing Score	0.08	0.09
Indicators below are reported in logits.		
Candidate Ability Estimate Mean	1.54	1.08
Candidate Ability Estimate *SD*	0.87	0.80
Candidate Ability Estimate Min.; Max.	-2.02; 5.04 (-5.59[a]; 5.04)	-0.71; 2.89
Person Separation Reliability Estimate[b]	0.85	0.91

[a] If minimum score(s) included: Facets software flags minimums and maximums and estimates test statistics with and without extremes

[b] Equivalent to alpha coefficient internal consistency reliability estimate (Cronbach, 1951), or lower than alpha, since minimum (zero) and maximum (perfect) scores are excluded

The percentage of candidates that scored at or above the passing cut score on the Operative Simulation field tests was 92.7% (76 out of 82). The passing percentage for the second, larger field test was lower than that of the first, due to penalties, including two attempts with validated critical errors (e.g., treated the wrong tooth) that lost all points. Table 10 provides passing percentages for the two Operative Simulation field tests, with the 2019 standard Operative Section passing percentage for reference.

Table 10. *Standard Operative Section and Operative Simulation Field Test: Passing Percentages*

	N Attempts	Passing Count	Failing Count	Passing Percentage
Standard Operative Section 2019 Season	2,166	2,079	87	96.0%
Operative Simulation Field Test 2020 - Total	82	76	6	92.7%
Field Test First Site March 30, 2020 (U. of OK)	20	19	1	95.0%
Field Test Second Site April 1-2, 2020 (U. of UT)	62	57	5	91.9%

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Sharon E. Osborn Popp, Ph.D.

WREB Testing Specialist/ Psychometrician

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WREB - A National Dental and Dental Hygiene Testing Agency

23460 N. 19th Avenue, Suite 210 - Phoenix, Arizona 85027

666 Grand Avenue Suite 901
Des Moines, IA 50309
(515) 331-2298 or (800) 828-2181
www.iowadentalfoundation.org

Jill Stuecker, Executive Director
Iowa Dental Board
400 S.W. Eighth Street, Suite D
Des Moines, Iowa 50309

January 13, 2020

Re: Continuing Education Credit for Participation in Volunteer Dental Clinics

Dear Jill:

For the past 25 years, the Iowa Dental Foundation (the "Foundation") has served as the primary facilitator of dental health programs for Iowans who may not otherwise have access to quality dental care. While the Foundation engages in activities throughout the year to improve the oral health of Iowans, the Foundation's signature event is the Iowa Mission of Mercy ("IMOM"), which is held each fall in a different part of the state. Since the first IMOM in 2008, over 15,000 patients from across the state have received free dental care totaling over $10 million.

The benefits of the IMOM are not limited to the patients being served. The dental professionals who volunteer their time and their talents at the IMOM—dentists, dental hygienists, and dental assistants—all gain professionally through participation in the IMOM. As discussed more fully below, the knowledge, skills, and competence gained by volunteering at the IMOM often exceed the knowledge, skills, and competence that can be gained by participating in a typical continuing education program. This letter serves as a request to the Iowa Dental Board to allow a limited amount of continuing education credit for dental professionals who volunteer at free dental clinics, such as the IMOM.

Collaborative Learning Environment. The IMOM facilitates a learning environment for dental professionals unlike any other—an environment that cannot be replicated in a classroom or in a typical dental office. During the two-day clinic, dental professionals provide dental care from over 100 mobile dental operatories set up in one room. The dental professionals routinely collaborate with each other to ensure that patients receive the highest quality care. The collaborative environment of the IMOM provides a rare opportunity for dental professionals to work alongside and to learn from other dental professionals. In many cases, this may be the only opportunity during the year for general dentists to work alongside specialists and for specialists to work alongside general dentists and other specialists.

Actively Engaged Learning Environment. Unlike a typical conference or lecture where the participants may only be partially engaged in the topics being discussed, IMOM volunteers are actively engaged in the process of learning from each other during the course of caring for patients. IMOM dental volunteers routinely discuss challenging cases with their peers to determine the best course of treatment. Not only do they share professional techniques with their peers, but then put those techniques into practice in the care of patients. In many cases, more experienced practitioners share their knowledge and skills with younger practitioners and students.

Challenging Patient Population. Due to the nature of the IMOM as a free dental clinic, the patients served frequently have different and often far more challenging dental conditions than patients treated in a typical dental office. In many cases, IMOM patients have gone years, or even decades, without receiving dental care. These cases force dental professionals to hone their critical thinking skills and to maintain

proficiency at techniques they do not need to employ on a daily basis when treating patients with fewer oral health needs. In addition, the challenging dental conditions are often compounded by language and cultural barriers, which allows dental professionals the opportunity to sharpen their patient communication skills while educating patients about their oral health care.

Request for Continuing Education Credit. Due to the educational benefits resulting from participation in the IMOM, the Foundation requests that the Board consider allowing a limited amount of continuing education credit for dental professionals who volunteer at free dental clinics. As you know, section 25.6(1) of the Board's current rules prohibits continuing education credit for "events where volunteer services are provided." This rule fails to recognize the significant educational benefits of practicing in a collaborative environment with numerous other dental professionals. As discussed above, volunteering at IMOM is directly applicable to the "dental skills, knowledge, and competence" of dental professionals, as required by that rule. In addition, the IMOM provides significant oversight by experienced dental professionals to ensure patient safety and maximize the learning potential for dental professionals. Therefore, the Foundation requests that the Board modify its restriction to allow one hour of continuing education credit for every four consecutive hours of verified volunteer dental services, subject to a maximum of six hours per biennium.

It is important to note that allowing dental professionals to obtain continuing education credit for volunteering in a free dental clinic is not unprecedented. Currently, at least thirteen states allow continuing education credit for participation in volunteer dental clinics. The majority of these states calculate continuing education credits at the rate of one hour of continuing education credit per one to two hours of volunteering.

I would appreciate if you could share this request with the Iowa Dental Board at its next meeting. I would certainly be happy to answer any questions you or the members of the Board may have about this request.

Sincerely,

Laurie Traetow, Executive Director

DENTAL BOARD[650]

Notice of Intended Action

The Dental Board hereby proposes to amend Chapter 25, "Continuing Education" Iowa Administrative Code 650.

Legal Authority for Rule Making

This rule making is proposed under the authority provided in Iowa Code section 147.76.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 147.10, 153.15A, 153.39 and 272C.

Purpose and Summary

The amendments would allow continuing education credit for the purposes of renewal for the delivery of volunteer dental services without compensation at free clinics. Current rules prohibit the designation of continuing education hours for the purposes of renewal to individuals who volunteer their services.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, there is no impact on jobs as this amendments apply to requirements for continuing education and would provide additional opportunities for meeting those requirements.

Waivers

Any person who believes that application of the discretionary provisions of this rule making would result in hardship or injustice to that person may petition the Board for a waiver of the discretionary provisions, if any, pursuant to 650—7.4.

Public Comment

Any interested person may submit written comments concerning this proposed rulemaking. Written comments in response to this rule making must be received by the Board no later than 4:30 p.m. on October 9, 2019. Comments should be directed to:

Iowa Dental Board
400 S.W. Eighth Street, Suite D
Des Moines, Iowa 50309
Phone: 515.281.3248
Fax: 515.281.7969
Email: steven.garrison@iowa.gov

Public Hearing

DRAFT

No public hearing is scheduled at this time. As provided in Iowa Code section 17A.4(1)"b," an oral presentation regarding this rule may be demanded by 25 interested persons, a governmental subdivision, the Administrative Rules Review Committee, an agency, or an association having 25 or more members.

Review by Administrative Rules Review Committee

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rule making by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rule making at its regular monthly meeting or at a special meeting. The Committee's meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

The following rule-making actions are proposed:

DRAFT

TITLE V
PROFESSIONAL STANDARDS

CHAPTER 25
CONTINUING EDUCATION

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—25.5(153) Acceptable programs and activities.

25.5(1) A continuing education activity shall be acceptable and not require board approval if it meets the following criteria:

a. It constitutes an organized program of learning (including a workshop or symposium) which contributes directly to the professional competency of the licensee or registrant and is of value to dentistry and applicable to oral health care; and

b. It pertains to common subjects or other subject matters which relate to the practice of dentistry, dental hygiene, or dental assisting which are intended to refresh and review, or update knowledge of new or existing concepts and techniques, and enhance the dental health of the public; and

c. It is conducted by individuals who have sufficient special education, training and experience to be considered experts concerning the subject matter of the program. The program must include a written outline or manual that substantively pertains to the subject matter of the program.

25.5(2) Types of activities acceptable for continuing dental education credit may include:

a. A dental science course that includes topics which address the clinical practice of dentistry, dental hygiene, dental assisting and dental public health.

b. Courses in record keeping, medical conditions which may have an effect on oral health, ergonomics related to clinical practice, HIPAA, risk management, sexual boundaries, communication with patients, OSHA regulations, and the discontinuation of practice related to the transition of patient care and patient records.

c. Sessions attended at a multiday convention-type meeting. A multiday convention-type meeting is held at a national, state, or regional level and involves a variety of concurrent educational experiences directly related to the practice of dentistry.

d. Postgraduate study relating to health sciences.

e. Successful completion of a recognized specialty examination or the Dental Assisting National Board (DANB) examination.

f. Self-study activities.

g. Original presentation of continuing dental education courses.

h. Publication of scientific articles in professional journals related to dentistry, dental hygiene, or dental assisting.

i. Delivery of volunteer dental services, without compensation, through a free clinic, the purpose of which is the delivery of healthcare services to low-income or underserved individuals.

25.5(3) Credit may be given for other continuing education activities upon request and approval by the board.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

650—25.6(153) Unacceptable programs and activities.

25.6(1) Unacceptable subject matter and activity types include, but are not limited to, personal development, business aspects of practice, business strategy, financial management, marketing, sales, practice growth, personnel management, insurance, and collective bargaining~~, and events where volunteer services are provided~~. While desirable, those subjects and activities are not applicable to dental skills, knowledge, and competence. Therefore, such courses will receive no credit toward renewal. The board may deny credit for any course.

25.6(2) Inquiries relating to acceptability of continuing dental education activities, approval of sponsors, or exemptions should be directed to Advisory Committee on Continuing Dental Education, Iowa Dental Board, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

650—25.9(153) Designation of continuing education hours. Continuing education hours shall be determined by the length of a continuing education course in clock hours. For the purpose of calculating continuing education hours for renewal of a license or registration, the following rules shall apply:

25.9(1) Attendance at a multiday convention.

a. Attendees at a multiday convention may receive a maximum of 1.5 hours of credit per day with the maximum of six hours of credit allowed per biennium.

b. Sponsors of multiday conventions shall submit to the board for review and prior approval guidelines for awarding credit for convention attendance.

25.9(2) Presenters or attendees of table clinics at a meeting.

a. Four hours of credit shall be allowed for presentation of an original table clinic at a meeting as verified by the sponsor when the subject matter conforms with rule 650—25.5(153).

b. Attendees at the table clinic session of a dental, dental hygiene, or dental assisting meeting shall receive two hours of credit as verified by the sponsor when the subject matter conforms with rule 650—25.5(153).

25.9(3) Postgraduate study relating to health sciences shall receive 15 credits per semester.

25.9(4) Successful completion of a specialty examination or the Dental Assisting National Board (DANB) shall result in 15 hours of credit.

25.9(5) Self-study activities shall result in a maximum of 12 hours of continuing education credit per biennium.

25.9(6) An original presentation of continuing dental education shall result in credit double that which the participants receive. Additional credit will not be granted for the repeating of presentations within the biennium. Credit is not given for teaching that represents part of the licensee's or registrant's normal academic duties as a full-time or part-time faculty member or consultant.

25.9(7) Publication of scientific articles in professional journals related to dentistry, dental hygiene, or dental assisting shall result in 5 hours of credit per article with the maximum of 20 hours allowed per biennium.

25.9(8) Delivery of volunteer dental services in accordance with 650— subrule 25.5(2)i shall result in one hour of continuing education credit for every three hours worked. Dentists and dental hygienists can report a maximum of six hours of credit per biennium of volunteer dental services. Dental assistants can report a maximum of four hours of credit per biennium of volunteer dental services. The volunteer hours must be verified by the free clinic or the organization sponsoring an event where volunteer services are provided.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

States that Permit Volunteer Service at a Fee Clinic to Count towards Continuing Education Requirements

DENTISTS (Not a complete list)

Alabama
Total hours required: 20 hours every year
Allowed for volunteering: 4 hours every year (Ratio 4:1)
Percentage: 20%

Idaho
Total hours required: 30 every 2 years
Allowed for volunteering: 10 hours every 2 years (Ratio 2:1)
Percentage: 33%

Louisiana
Total hours required: 30 hours every 2 years
Allowed for volunteering: 6 hours every 2 years
Percentage: 20%

Minnesota
Total hours required: 50 hours every 2 years
Allowed for volunteering: 20 hours every 2 years
Percentage: 40%

New Jersey
Total hours required: 40 hours every 2 years
Allowed for volunteering***: Proposed***: 20 hours every 2 years (Ratio 2:1)
Percentage: 50%

North Carolina
Total hours required: 15 hours every year
Allowed for volunteering: 2 hours every year (Ratio 5:1)
Percentage: 13%

Oklahoma
Total hours required: 40 hours every 2 years
Allowed for volunteering: 7 hours every 2 years
Percentage: 17.5%

Oregon
Total hours required: 40 hours every 2 years
Allowed for volunteering: 6 hours every 2 years
Percentage: 15 %

Rhode Island
Total hours required: 40 hours every 2 years
Allowed for volunteering: 6 hours every 2 years
Percentage: 15%

Virginia
Total hours required: 15 hours every year
Allowed for volunteering: 2 hours every year
Percentage: 13%

Washington
Total hours required: 63 hours every 3 years
Allowed for volunteering: 21 hours every 3 years
Percentage: 33%

West Virginia
Total hours required: 32 hours every 2 years
Allowed for volunteering: 8 hours for providing care to indigent patients. (Ratio 2:1)
Percentage: 25%

DENTAL HYGIENISTS (Not a complete list)

Oregon
Total hours required: 24 hours every 3 years
Allowed for volunteering: 6 hours every 3 years
Percentage: 25%

North Carolina
Total hours required: 6 hours every year
Allowed for volunteering: 1 hour every year. 5:1 ratio
Percentage: 16

Minnesota
Total hours required: 25 hours every 2 years
Allowed for volunteering: 10 hours every 2 years
Percentage: 40%

Rhode Island:
Total hours required: 20 hours every 2 years
Allowed for volunteering: 6 hours every 2 years
Percentage: 30%

West Virginia
Total hours required: 20 hours every 2 years
Allowed for volunteering: 5 hours every 2 years (Ratio 2:1)
Percentage: 25%

Iowa Dental Board
400 S.W. 8th St. Ste. D
Des Moines, IA 50309-4688
515-281-5157
dentalboard.iowa.gov

Petition for Waiver Form

Please review the Board's rules governing waivers and variances in 650 IAC chapter 7.4 prior to filing a petition for waiver. Complete this form and submit it, including supporting documentation, to the Board by mail or email to IDB@iowa.gov Deadline for inclusion on the Board's agenda is two weeks prior to a Board meeting.

Licensee/Registrant Name: Hannah Quade

License/Registration No.: _____

Street Address: 786 Cleveland Ave.

City: Dubuque State: IA Zip Code: 52003

Contact Person for Petition for Waiver: Hannah Quade

Phone Number: 563-564-0925 Email: hannahquade1@gmail.com

List each rule you are requesting to be waived: IAC 650-20.6(2)a, b(2)

20.6(2) Registered dental assistant.

a. To meet this qualification, a person must:

(1) Work in a dental office for six months as a dental assistant trainee; or

(2) If licensed out of state, have had at least six months of prior dental assisting experience under a licensed dentist within the past two years; or

(3) Be a graduate of an accredited dental assisting program approved by the board; and

(4) Be a high school graduate or equivalent; and

(5) Be 17 years of age or older.

b. Applications for registration as a registered dental assistant must be filed on official board forms and include the following:

(1) The fee as specified in 650—Chapter 15.

(2) Evidence of meeting the requirements specified in 20.6(2)*"a."*

Describe specifically which requirements you are requesting to be waived:

I am writing this form to request that rules 1 and 3 be waved. I am currently working at an office that needs an RDA as soon as possible. I have passed all of my board exams and my dental classes through the dental assisting program at NICC (Northeast Iowa Community College). Unfortunately I do have to retake two of my gen. ed. classes, which include workplace communications and psych of human relations. I have already registered for both of the classes listed above and will be taking them from 8/25/2020 until 12/16/2020. I am hoping to have you wave the rules until I finish those classes and get my diploma so I am able to continue working at my office in the meantime.

List the time period for which you are seeking a waiver. The start date must be a future date. An end date must be requested.

I am requesting the waiver to cover me from 8/10/2020 through 1/1/2021.

Have you previously requested a waiver of any of the rules listed above? If so, what was the outcome? If a prior petition for waiver was granted, attach a copy of Board's prior written ruling or correspondence.

I have not previously requested a waiver.

For each rule you are requesting to be waived, provide the following explanations:

1. Explain why following the rule would pose an undue hardship:
2. Explain how waiving the rule may impact other people:
3. Explain how the rule is intended to protect the public health, safety, or welfare:
4. Explain how the public health, safety, or welfare can still be protected if the rule is waived:

Have you spoken to a Board staff member about your request? If so, who? Attach copies of any relevant email correspondence.

Yes, my team has been in contact with Phil McCollum and Christel Braness.

Do you plan to attend the Board meeting when this Petition will be considered?

I wasn't currently planning on attending the meeting, but if it would be beneficial to me in any way then I will absolutely be present!

Attach any relevant documentation to support your answers.

I hereby attest to the accuracy and truthfulness of the information contained herein.

Signature: HQuade Date: 07/15/2020

Printed Name: Hannah Quade Title: DA/trainee

TITLE IV
AUXILIARY PERSONNEL

CHAPTER 20
DENTAL ASSISTANTS

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—20.6(153) Registration requirements. Effective July 2, 2001, dental assistants must meet the following requirements for registration:

20.6(1) Dental assistant trainee.

a. On or after May 1, 2013, a dentist supervising a person performing dental assistant duties must ensure that the person has been issued a trainee status certificate from the board office prior to the person's first date of employment as a dental assistant. A dentist who has been granted a temporary permit to provide volunteer services for a qualifying event of limited duration pursuant to 650—subrule 13.3(3), or an Iowa-licensed dentist who is volunteering at such qualifying event, is exempt from this requirement for a dental assistant who is working under the dentist's supervision at the qualifying event.

b. Applications for registration as a dental assistant trainee must be filed on official board forms and include the following:

(1) The fee as specified in 650—Chapter 15.

(2) Evidence of high school graduation or equivalent.

(3) Evidence the applicant is 17 years of age or older.

(4) Any additional information required by the board relating to the character and experience of the applicant as may be necessary to evaluate the applicant's qualifications.

(5) If the applicant does not meet the requirements of (2) and (3) above, evidence that the applicant is enrolled in a cooperative education or work-study program through an Iowa high school.

c. Prior to the trainee status expiration date, the dental assistant trainee is required to successfully complete a board-approved course of study and examination in the areas of infection control, hazardous materials, and jurisprudence. The course of study may be taken at a board-approved postsecondary school or on the job using curriculum approved by the board for such purpose. Evidence of meeting this requirement prior to the trainee status expiration date shall be submitted by the employer dentist.

d. Prior to the trainee status expiration date, the dental assistant trainee's supervising dentist must ensure that the trainee has received a certificate of registration or has been issued start-over trainee status in accordance with rule 650—20.5(153) before performing any further dental assisting duties.

20.6(2) Registered dental assistant.

a. To meet this qualification, a person must:

(1) Work in a dental office for six months as a dental assistant trainee; or

(2) If licensed out of state, have had at least six months of prior dental assisting experience under a licensed dentist within the past two years; or

(3) Be a graduate of an accredited dental assisting program approved by the board; and

(4) Be a high school graduate or equivalent; and

(5) Be 17 years of age or older.

b. Applications for registration as a registered dental assistant must be filed on official board forms and include the following:

(1) The fee as specified in 650—Chapter 15.

(2) Evidence of meeting the requirements specified in 20.6(2)"*a.*"

(3) Evidence of successful completion of a course of study approved by the board and sponsored by a board-approved, accredited dental assisting program in the areas of infection control, hazardous materials, and jurisprudence. The course of study may be taken at a board-approved, accredited dental

assisting program or on the job using curriculum approved by the board for such purpose.

(4) Evidence of successful completion of a board-approved examination in the areas of infection control, hazardous materials, and jurisprudence.

(5) Evidence of high school graduation or the equivalent.

(6) Evidence the applicant is 17 years of age or older.

(7) Evidence of meeting the qualifications of 650—Chapter 22 if engaging in dental radiography.

(8) A statement:

1. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

2. Providing the expiration date of the CPR certificate; and

3. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

(9) Any additional information required by the board relating to the character, education and experience of the applicant as may be necessary to evaluate the applicant's qualifications.

20.6(3) All applications must be signed and verified by the applicant as to the truth of the documents and statements contained therein.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 0465C**, IAB 11/28/12, effective 1/2/13; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4187C**, IAB 12/19/18, effective 1/23/19; **ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—20.7(153) Review of applications. The board shall follow the procedures specified in rule 650—11.8(147,153) in reviewing applications for registration and qualification.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—20.8(153) Registration denial. The board may deny an application for registration as a dental assistant for any of the following reasons:

1. Failure to meet the requirements for registration as specified in these rules.

2. Pursuant to Iowa Code section 147.4, upon any of the grounds for which registration may be revoked or suspended as specified in 650—Chapter 30.

[**ARC 2028C**, IAB 6/10/15, effective 7/15/15]

650—20.9(147,153) Denial of registration—appeal procedure. The board shall follow the procedures specified in 650—11.10(147) if the board proposes to deny registration to a dental assistant applicant.

This rule is intended to implement Iowa Code sections 147.3, 147.4 and 147.29.

[**ARC 7789B**, IAB 5/20/09, effective 6/24/09; **ARC 2028C**, IAB 6/10/15, effective 7/15/15]

650—20.10(153) Examination requirements. Beginning July 2, 2001, applicants for registration must successfully pass an examination approved by the board on infection control, hazardous waste, and jurisprudence.

20.10(1) Examinations approved by the board are those administered by the board or board's approved testing centers or the Dental Assisting National Board Infection Control Examination, if taken after June 1, 1991, in conjunction with the board-approved jurisprudence examination. In lieu of the board's infection control examination, the board may approve an infection control examination given by another state licensing board if the board determines that the examination is substantially equivalent to the examination administered by the board.

20.10(2) Information on taking the examination may be obtained by contacting the board office at 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

20.10(3) An examinee must meet such other requirements as may be imposed by the board's approved dental assistant testing centers.

20.10(4) A dental assistant trainee must successfully pass the examination within 12 months of the first date of employment. A dental assistant trainee who does not successfully pass the examination within 12 months shall be prohibited from working as a dental assistant until the dental assistant

trainee passes the examination in accordance with these rules.

20.10(5) A score of 75 or better on the board infection control/hazardous material exam and a score of 75 or better on the board jurisprudence exam shall be considered successful completion of the examination. The board accepts the passing standard established by the Dental Assisting National Board for applicants who take the Dental Assisting National Board Infection Control Examination.

20.10(6) The written examination may be waived by the board, in accordance with the board's waiver rules at 650—Chapter 7, in practice situations where the written examination is deemed to be unnecessary or detrimental to the dentist's practice.

[**ARC 2028C**, IAB 6/10/15, effective 7/15/15]

RECEIVED
JUL 13 2020
IOWA DENTAL BOARD

Iowa Dental Board
400 S.W. 8th St. Ste. D
Des Moines, IA 50309-4688
515-281-5157
dentalboard.iowa.gov

Petition for Waiver Form

Please review the Board's rules governing waivers and variances in 650 IAC chapter 7.4 prior to filing a petition for waiver. Complete this form and submit it, including supporting documentation, to the Board by mail or email to IDB@iowa.gov Deadline for inclusion on the Board's agenda is two weeks prior to a Board meeting.

Licensee/Registrant Name: Samantha Paige Johnson

License/Registration No.: NA

Street Address: 758 5th ST -unit 308

City: CORALVILLE State: IA Zip Code: 52241

Contact Person for Petition for Waiver: Samantha P. Johnson

Phone Number: (605)480-0870 Email: sampaige1@hotmail.com

List each rule you are requesting to be waived:

Exams for: Infection control IAC 650-20.10(153)

Radiology IAC 650-22.4(136C,153)

Describe specifically which requirements you are requesting to be waived:

Exams for license in Iowa

List the time period for which you are seeking a waiver. The start date must be a future date. An end date must be requested.

START: 7/6/2020

END: 8/7/2020

Have you previously requested a waiver of any of the rules listed above? If so, what was the outcome? If a prior petition for waiver was granted, attach a copy of Board's prior written ruling or correspondence.

NO.

For each rule you are requesting to be waived, provide the following explanations: SEE ATTACHED.

1. Explain why following the rule would pose an undue hardship:
2. Explain how waiving the rule may impact other people:
3. Explain how the rule is intended to protect the public health, safety, or welfare:
4. Explain how the public health, safety, or welfare can still be protected if the rule is waived:

Have you spoken to a Board staff member about your request? If so, who? Attach copies of any relevant email correspondence. YES, Christel Braness & Stephanie Bowers. Emails attached.

Do you plan to attend the Board meeting when this Petition will be considered?

YES - IF ABLE. COVID-19 may restrict me.

Attach any relevant documentation to support your answers.

see attached documents.

MULTIPLE YEARS OF CE FOR infection control & radiography can be obtained from South Dakota's Dental Board. 5 year cycle of over 60 hours.

I hereby attest to the accuracy and truthfulness of the information contained herein.

Signature: _____ Date: 6/24/2020

Printed Name: Samantha Johnson Title: DA

Last Name	First Name	Rule/Subrule	Topic	Decision	Date of Ruling	Background Information
Confidential	2004-1(L)	22.5	Radiography Examination	DENIED	1/16/2004	TL requested an exception to the RAD examination and training requirements do to the costs related to completing a formal course of study. TL reports that she was taking radiographs prior 2001 when registration as a dental assistant became required and that the dentist did not complete the registration forms documenting the radiography experience as requested. *The Board's written response was not included in the waiver folder. (Found discussion in board minutes.) Radiography qualifications were required prior to registration in 2001. Applicant was instructed to meet the training and examination reuqirements prior to taking x-rays in Iowa.*

TITLE IV
AUXILIARY PERSONNEL

CHAPTER 20
DENTAL ASSISTANTS

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—20.6(153) Registration requirements. Effective July 2, 2001, dental assistants must meet the following requirements for registration:

20.6(1) Dental assistant trainee.

a. On or after May 1, 2013, a dentist supervising a person performing dental assistant duties must ensure that the person has been issued a trainee status certificate from the board office prior to the person's first date of employment as a dental assistant. A dentist who has been granted a temporary permit to provide volunteer services for a qualifying event of limited duration pursuant to 650—subrule 13.3(3), or an Iowa-licensed dentist who is volunteering at such qualifying event, is exempt from this requirement for a dental assistant who is working under the dentist's supervision at the qualifying event.

b. Applications for registration as a dental assistant trainee must be filed on official board forms and include the following:

(1) The fee as specified in 650—Chapter 15.

(2) Evidence of high school graduation or equivalent.

(3) Evidence the applicant is 17 years of age or older.

(4) Any additional information required by the board relating to the character and experience of the applicant as may be necessary to evaluate the applicant's qualifications.

(5) If the applicant does not meet the requirements of (2) and (3) above, evidence that the applicant is enrolled in a cooperative education or work-study program through an Iowa high school.

c. Prior to the trainee status expiration date, the dental assistant trainee is required to successfully complete a board-approved course of study and examination in the areas of infection control, hazardous materials, and jurisprudence. The course of study may be taken at a board-approved postsecondary school or on the job using curriculum approved by the board for such purpose. Evidence of meeting this requirement prior to the trainee status expiration date shall be submitted by the employer dentist.

d. Prior to the trainee status expiration date, the dental assistant trainee's supervising dentist must ensure that the trainee has received a certificate of registration or has been issued start-over trainee status in accordance with rule 650—20.5(153) before performing any further dental assisting duties.

20.6(2) Registered dental assistant.

a. To meet this qualification, a person must:

(1) Work in a dental office for six months as a dental assistant trainee; or

(2) If licensed out of state, have had at least six months of prior dental assisting experience under a licensed dentist within the past two years; or

(3) Be a graduate of an accredited dental assisting program approved by the board; and

(4) Be a high school graduate or equivalent; and

(5) Be 17 years of age or older.

b. Applications for registration as a registered dental assistant must be filed on official board forms and include the following:

(1) The fee as specified in 650—Chapter 15.

(2) Evidence of meeting the requirements specified in 20.6(2)*"a."*

(3) Evidence of successful completion of a course of study approved by the board and sponsored by a board-approved, accredited dental assisting program in the areas of infection control, hazardous materials, and jurisprudence. The course of study may be taken at a board-approved, accredited dental

assisting program or on the job using curriculum approved by the board for such purpose.

(4) Evidence of successful completion of a board-approved examination in the areas of infection control, hazardous materials, and jurisprudence.

(5) Evidence of high school graduation or the equivalent.

(6) Evidence the applicant is 17 years of age or older.

(7) Evidence of meeting the qualifications of 650—Chapter 22 if engaging in dental radiography.

(8) A statement:

1. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

2. Providing the expiration date of the CPR certificate; and

3. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

(9) Any additional information required by the board relating to the character, education and experience of the applicant as may be necessary to evaluate the applicant's qualifications.

20.6(3) All applications must be signed and verified by the applicant as to the truth of the documents and statements contained therein.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 0465C**, IAB 11/28/12, effective 1/2/13; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4187C**, IAB 12/19/18, effective 1/23/19; **ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—20.7(153) Review of applications. The board shall follow the procedures specified in rule 650—11.8(147,153) in reviewing applications for registration and qualification.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—20.8(153) Registration denial. The board may deny an application for registration as a dental assistant for any of the following reasons:

1. Failure to meet the requirements for registration as specified in these rules.

2. Pursuant to Iowa Code section 147.4, upon any of the grounds for which registration may be revoked or suspended as specified in 650—Chapter 30.

[**ARC 2028C**, IAB 6/10/15, effective 7/15/15]

650—20.9(147,153) Denial of registration—appeal procedure. The board shall follow the procedures specified in 650—11.10(147) if the board proposes to deny registration to a dental assistant applicant.

This rule is intended to implement Iowa Code sections 147.3, 147.4 and 147.29.

[**ARC 7789B**, IAB 5/20/09, effective 6/24/09; **ARC 2028C**, IAB 6/10/15, effective 7/15/15]

650—20.10(153) Examination requirements. Beginning July 2, 2001, applicants for registration must successfully pass an examination approved by the board on infection control, hazardous waste, and jurisprudence.

20.10(1) Examinations approved by the board are those administered by the board or board's approved testing centers or the Dental Assisting National Board Infection Control Examination, if taken after June 1, 1991, in conjunction with the board-approved jurisprudence examination. In lieu of the board's infection control examination, the board may approve an infection control examination given by another state licensing board if the board determines that the examination is substantially equivalent to the examination administered by the board.

20.10(2) Information on taking the examination may be obtained by contacting the board office at 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

20.10(3) An examinee must meet such other requirements as may be imposed by the board's approved dental assistant testing centers.

20.10(4) A dental assistant trainee must successfully pass the examination within 12 months of the first date of employment. A dental assistant trainee who does not successfully pass the examination within 12 months shall be prohibited from working as a dental assistant until the dental assistant

trainee passes the examination in accordance with these rules.

20.10(5) A score of 75 or better on the board infection control/hazardous material exam and a score of 75 or better on the board jurisprudence exam shall be considered successful completion of the examination. The board accepts the passing standard established by the Dental Assisting National Board for applicants who take the Dental Assisting National Board Infection Control Examination.

20.10(6) The written examination may be waived by the board, in accordance with the board's waiver rules at 650—Chapter 7, in practice situations where the written examination is deemed to be unnecessary or detrimental to the dentist's practice.

[**ARC 2028C**, IAB 6/10/15, effective 7/15/15]

CHAPTER 22
DENTAL ASSISTANT RADIOGRAPHY QUALIFICATION
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—22.1(136C,153) Qualification required. A person who is not otherwise actively licensed by the board shall not participate in dental radiography unless the person holds a current registration certificate or active nursing license and holds an active radiography qualification issued by the board, and a dentist provides general supervision.
[**ARC 8369B**, IAB 12/16/09, effective 1/20/10]

650—22.2(136C,153) Definitions. As used in this chapter:

"Dental radiography" means the application of X-radiation to human teeth and supporting structures for diagnostic purposes only.

"Radiography qualification" means authorization to engage in dental radiography issued by the board.

650—22.3(136C,153) Exemptions. The following individuals are exempt from the requirements of this chapter.

22.3(1) A student enrolled in an accredited dental, dental hygiene, or dental assisting program, who, as part of the student's course of study, applies ionizing radiation.

22.3(2) A person registered as a dental assistant trainee pursuant to 650—Chapter 20, who is engaging in on-the-job training in dental radiography and who is using curriculum approved by the board for such purpose.

650—22.4(136C,153) Application requirements for dental radiography qualification. Applications for dental radiography qualification must be filed on official board forms and include the following:

22.4(1) Evidence of one of the following requirements:

a. The applicant is a dental assistant trainee or registered dental assistant with an active registration status;

b. The applicant is a graduate of an accredited dental assisting program; or

c. The applicant is a nurse who holds an active Iowa license issued by the board of nursing.

22.4(2) The fee as specified in 650—Chapter 15.

22.4(3) Evidence of successful completion, within the previous two years, of a board-approved course of study in the area of dental radiography. The course of study must include application of radiation to humans pursuant to Iowa Code section 136C.3 and may be taken by the applicant:

a. On the job while under trainee status pursuant to 650—Chapter 20, using board-approved curriculum;

b. At a board-approved postsecondary school; or

c. From another program prior-approved by the board.

22.4(4) Evidence of successful completion of a board-approved examination in the area of dental radiography.

22.4(5) Any additional information required by the board relating to the character, education, and experience of the applicant as may be necessary to evaluate the applicant's qualifications.

650—22.5(136C,153) Examination requirements. An applicant for dental assistant radiography qualification shall successfully pass a board-approved examination in dental radiography.

22.5(1) Examinations must be prior approved by the board and must be administered in a proctored setting. All board-approved examinations must have a minimum of 50 questions. The Dental Assisting National Board Radiation Health and Safety Examination is an approved examination.

22.5(2) A score of 75 percent or better on a board-approved examination shall be considered successful completion of the examination. The board accepts the passing standard established by the Dental Assisting National Board for applicants who take the Dental Assisting National Board Radiation Health and Safety Examination.

To: Iowa Dental Board
Re: Petition for Waiver: Training Requirements for Deep/GA Permit Holders

23 July 2020

You have previously granted my staff and me a waiver so that my long time general anesthesia assistants can satisfy the new training requirements.

To that end, my DA Eve Johnson-Brown (QDA08855) has studied and trained to become DAANCE certified. She has been scheduled, and then canceled at the last moment by the testing facility due to COVID restrictions on two separate occasions, at two separate locations. The last time was with no notification after I closed the office and she drove an hour and a half, only to find a locked testing facility.

She is now scheduled for a third time to take the DAANCE test. If she passes, all is well and she will be certified before your upcoming Board meeting.

However, should she need a retake, she and I will need a waiver to be able to continue the legal administration of the anesthesia services we have been safely providing to Iowa dental patients since 1984.

I cannot provide an accurate time frame for this potentially necessary waiver, as she will be at the mercy of the DAANCE coordinators, but can only state that she will retake the test at the next available offering.

Thank you for your consideration.

Robert Alt DDS

Received Time Jul. 23. 2020 3:57PM No. 4951

FAX

Revised 1-01-2006

CLINTON DENTAL SURGERY CENTER, P.C.
2314 NORTH SECOND ST
CLINTON IA 52732
563-242-1565

ROBERT M. ALT, D.D.S.
ORAL AND MAXILLOFACIAL SURGEON

FAX 563-242-0095

Date: 7/23/2020

ATTENTION: Christel Braness

Company: Iowa Dental Board

Department: Program Planner Fax #: 515 281 7969

Faxed by: RA.

Page 1 of 2 including this cover sheet.

CONFIDENTIALITY STATEMENT

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If the reader of this communication is not the intended recipient, or the employee or agent(s) responsible for delivering the communication, you are hereby notified that any distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us **immediately** at the phone number above or via Postal Service.

COMMENTS: You have on file my original request for waiver and a request dated 7-10-20 from Eve Johnson-Brown

Iowa Dental Board
400 S.W. 8th St. Ste. D
Des Moines, IA 50309-4688
https://dentalboard.iowa.gov Phone: 515-281-5157

Petition for Waiver: Training Requirements for Deep/General Anesthesia Permit Holders

Please review 650 IAC 7.4 for detailed information about waivers, and the criteria the Board will consider when deciding whether to grant or deny a waiver request.

Please complete this form and email to Steven.Garrison@iowa.gov by July 23, 2019. Your request will be reviewed at the August 2, 2019 board meeting.

Licensee Name: Robert M. Alt DDS

License Number: 06659 Licensee Email: raltddsoms1@yahoo.com

This form requests a Petition for Wavier for the required certification described in the below rule:
*29.7(2) A dentist shall have at least two patient monitors observe the patient while the patient is under deep sedation or general anesthesia. The patient monitors who observe patients under deep sedation or general anesthesia shall be capable of administering emergency support and shall have completed **one** of the following:*

- *a. Current ACLS **or** PALS certification; **or***
- *b. Current DAANCE certification*

Please respond to the following:

1. The rules go into effect on **August 21, 2019**. Please explain why it would be a hardship to comply with the training requirement listed in 29.7(2) by this date.

   NONE of my current staff have (a) or (b), despite being specifically trained for oral surgery and anesthesia monitoring. Suddenly, what has worked safely and effectively since 1984 is not good enough.

   On what date can you be in compliance with this requirement? August 21, 2020

2. How many patient monitors do you utilize that do not have the required certification? (5)

3. Please describe the current level of training for your patient monitors:

   4 are certified dental assistants (3 have never worked other than oral surgery.)
   1 is an assistant in training

4. Please describe your plans for attaining the required certification pursuant to 29.7(2):

   staff plans to obtain DAANCE, QUIT, or start to work for a dentist who does not utilize sedation/GA.

I hereby attest to the accuracy and truthfulness of the information contained herein, through this electronic signature.

Signature: [signature] Date: 7/22/19

650—29.7(153) Deep sedation or general anesthesia standards.

29.7(1) The administration of anesthetic sedative agents intended for deep sedation or general anesthesia, including but not limited to Propofol, Ketamine and Dilaudid, shall constitute deep sedation or general anesthesia.

29.7(2) A dentist shall have at least two patient monitors observe the patient while the patient is under deep sedation or general anesthesia. The patient monitors who observe patients under deep sedation or general anesthesia shall be capable of administering emergency support and shall have completed one of the following:

a. Current ACLS or PALS certification; or

b. Current DAANCE certification.

29.7(3) A dentist shall use capnography and a pretracheal/precordial stethoscope.

29.7(4) If the dentist has a recovery area separate from the operatory, the recovery area must have oxygen and suction equipment.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

Kanellis, Michael J via iowa.onmicrosoft.com Sun, Jul 12, 2:37 PM (2 days ago)

to Dentistry, Dentistry, D1, D2, D3, D4, McBride, Jill, Laurie, bob.russell@idph.iowa.gov

College of Dentistry Faculty, Staff, Residents, Students, and Friends:

Following are some important updates and information.

COD Aerosol Study

- This past week we completed an aerosol study at the College of Dentistry in conjunction with the College of Public Health and UI Environmental Health and Safety.
- The purpose of this study was to:
  - Evaluate how far dental aerosols travel during procedures carried out in open operatory settings
  - Evaluate different mitigation devices
- We felt that this information was needed to determine whether it would be safe for students to resume aerosol-generating procedures in our student clinics this fall.
- We believe we can keep providers safe by requiring appropriate PPE including N95 masks, but need to know that our patients are also safe in these open clinic spaces.
- Following is a brief summary of the study and our findings:

Aerosols Tested

- The aerosol-generating procedures we tested were:

o Ultrasonic scaling

o High speed handpiece

o Air water syringe

o Rubber cup prophy

Aerosol Monitors

- The aerosol monitors used in this study measured small aerosol particle size in the range of 0.1-10µm.

- This is the particle size range that would be considered when discussing airborne transmission of COVID-19.

- Aerosol sensors were placed as follows:
    - SidePak Aerosol Monitor (Model AM520) measured aerosol concentrations (mg/m3) in the breathing zone of the dental assistant
    - Thermo Scientific MIC pDR-1500 monitors (4µm cut point, 2.65 LPM flowrate, red cyclone) were placed in 3 operatories sharing walls with the procedural operatory, as well as in the operatory directly across from the procedural operatory

Mitigation

- We looked at several different mitigations including the following:

- Intra-oral high vac suction (this was the only 4-handed mitigation)

- Extra-oral suction (ADS EOS)

- Isovac

- Control (no mitigation)

Study Design

- All procedures were done on a manikin head/dentoform.
- All procedures were tested in both Family Dentistry (64” wall height) and D2 Preventive Clinic (54” wall height).
- Aerosol monitors were placed on the assistant as well as surrounding operatories in the area of the patient head.
- Each day of the study, one aerosol procedure was tested against all four mitigations, at ten minute intervals.
- Three rounds of testing were completed each day, with the order of the mitigations randomized.

Results

- The concentration of aerosols reaching the dental assistant’s breathing zone were extremely low and near the limit of quantification of the instrument (aerosol monitor).

- There was no significant difference between mitigation options in reducing aerosol concentrations.

- Aerosol concentrations reaching adjacent operatories were also extremely low and near the limit of quantification of the instrument (aerosol monitor).

- All mitigation devices significantly reduced aerosols levels reaching adjacent operatories.

- There were no significant differences between mitigation devices relative to the amount of aerosol reaching adjacent operatories.

- The amount of aerosol generated by procedure type, from highest to lowest was:

    - High speed handpiece

    - Air water syringe

    - Ultrasonic scaling

    - Rubber cup prophy

Next Steps

- While we are extremely encouraged by the results of this study, we are committed to additional monitoring and testing of aerosol generation in our students clinics.

- We will continue to work with the study team from College of Public Health and UI Environmental Health and Safety to monitor aerosol generation in the clinics as students return in August. We will continually evaluate the results and adjust patient care as needed.

- To further mitigate any aerosols generated in our student clinics, the College of Dentistry has placed an order for 100 Extra-Oral suction devices that should arrive in time for our D3 and D4 students return to patient care.

    - The product we selected is the "Vector Vortex Extra-Oral Suction Device" – https://www.vectorusa.net/products/vector-vortex/

    - These suction units should be used in open clinic spaces (student clinics) during aerosol-generating procedures, when 4-handed dentistry is not an option.

- These suction units can and should be used in combination with other mitigation if possible, including intraoral high-vac suction, saliva ejector, or Isovac.

- Each extra-oral suction unit includes a HEPA filter and interior UV light.

- In addition, the College of Dentistry is pursuing additional engineering controls to improve ventilation within the building, including:

  - Upgrading our air handling filters from MERV 8 to MERV 13

  - Increasing the amount of fresh air mixed into our recirculating air from 5% to 40%

Thank you, and please let me know if you have questions.

Sincerely,

Michael J. Kanellis, DDS, MS
Associate Dean for Patient Care
College of Dentistry and Dental Clinics

Stuecker, Jill <jill.stuecker@iowa.gov>

2019 Public Health Supervision Reports

1 message

Chickering, Stephanie <stephanie.chickering@idph.iowa.gov> Wed, Mar 25, 2020 at 1:23 PM
To: Jill Stuecker <jill.stuecker@iowa.gov>
Cc: "Russell, Bob" <bob.russell@idph.iowa.gov>

Executive Director Stuecker,

The Iowa Department of Public Health has completed our compilation of services provided by dental hygienists and assistants using public health supervision in 2019. All correspondence requesting the reporting of services was done via email.

The first document is the dental hygiene summary report, which includes total services on the first page and locations of services on the second page.

The second document is a list of hygienists with public health supervision agreements, categorized by:

1. those who provided services and responded to our report,
2. those who provided services and wish to inactivate their agreement,
3. those who responded that they did not provide services during the year but wish to keep their agreement active,
4. those who responded that they did not provide services during the year and wish to inactivate their agreement, and
5. those who did not respond to our requests to report.

The third document is the dental assistant summary report, which includes total services provided and locations of those services.

The fourth, and final, document is a list of dental assistants with public health supervision agreements categorized by:

1. those who provided services and responded to our report,
2. those who responded that they did not provide services during the year but wish to keep their agreement active
3. those who responded that they did not provide services during the year and wish to inactivate their agreement, and
4. those who did not respond to our requests to report.

Feel free to let me know if you have any questions.

Stephanie Chickering, BA, RDH

Oral Health Consultant | Bureau of Oral and Health Delivery System | Iowa Department of Public Health | 321 East 12th Street | Des Moines, Iowa 50319 | Phone: 515.240.9819 | Fax: 515.242.6384 | stephanie.chickering@idph.iowa.gov

Protecting and Improving the Health of Iowans

4 attachments

1. CY2019 PH Supervision - Dental Hygiene Summary Report of Services.pdf
119K

2. CY2019 PH Supervision - Dental Hygiene Reporting Status.pdf
71K

3. CY2019 PH Supervision - Dental Assistant Summary Report of Services.pdf
96K

4. CY2019 PH Supervision - Dental Assisting Reporting Status.pdf
65K

Calendar Year 2019 Services Report
Public Health Supervision of Dental Assistants

Total Number of Dental Assistants with Supervision Agreements: **32** (19 *provided services*)
Total Number of Dentists with Supervision Agreements: **23**

Setting	Number of Patients Assisted
Public Health Agency	6
School	11,535
Hospital	0
Armed Forces	0

Services Provided	Number of Assistants per Setting			
	Public Health Agency	School	Hospital	Armed Forces
Extraoral Duties (Documentation)	1	19	0	0
Extraoral Duties (Infection Control)	1	18	0	0
Dental Radiography	0	2	0	0
Intraoral Suctioning	1	18	0	0
Use of Curing Light or Intraoral Camera	1	11	0	0

March 2020

Assistants who submitted 2019 Service Report(s)

Tasha Anderson-Holmes
Katrina Cope
Beth Fricke
Kathryn Gavin
Teri Hudson
Lori Hobscheidt
Kaele Lange
Alannah Larson
Tara Marshall
Morgan Martin
Jake Maxson
Lora Puttmann
Erin Ross
Tracy Sandmeier-Keffer
Crystal Schmitt
Renae Schneider
Emily Shull
Jessica Smith-Haight
Jillian Weaver

Assistants who responded: did not provide services in 2019; keep agreement active

Michelle Alquist
Michelle Doll
Jaleesa Hardin
Gina Larson
Jamie Turrado

Assistants who responded: did not provide services in 2019; inactivate agreement

Nicole Eden
Irene Ehlers
Julie Joyce
Rosa Lopez
Carissa Thomspson
La Shawn Van De Berg

Assistants who did not respond to email requests from IDPH for 2019 Service Reports

Angela Calfee
Courtney Fitzlaff

March 2020

Hygienists who submitted 2019 Service Report(s)

Elizabeth Addison
Elizabeth Albright
Amber Allison
Sonja Bammert
Carla (Carlie) Beem
Samira Bolic
Stephanie Chamberlin
Dana Christensen
Laura Clemen
Amber Cooke
Suzanne Current
Janice DeClercq
Dawn Doore
Emily Drees
Patricia Elmer
Dawn Ericson
Carole Ferch
Tammy Forseen
Juanita Furry
Stephanie Gramlich
Rebecca Hackett
Angela Halfwassen
Megan Hamilton
Wendelin Hauschildt
Carolyn Henry
Tanya Heringer
RaeAnn Herrick
Martha Hernandez-Lopez
Rikki Hetzler
Christine Hobbs
Keri Houdek
Kim Howard
Marie Hrubes
Amy Hunziker
Zuhra Husidic
Jenny Jefson
Melissa Jelken
Christi Johnson
Katy Keating
Patricia Kemp
Mary Jo Ketelsen
Teri Kobussen
Leah Kroeger
Aleshia Lamos
Jennifer Macke
Kirstin Marchese
Shelli Marin
Rachel Marshall
Danielle Mason
Shannon McManus
Marissa Merrill
Gayla Moore
Katherine Moreno
Peggy Mortensen
Darcy Murphy
Karen Nolte
Shelly Olson
Lezah Olson - Hanson
Cindy Partlow
Daisy (Patino) Nguyen
Rachael Patterson-Rahn
Amy Paulsen
Hilma Person
Sarah Petersen
Angela Pettit
Angela Rausch
Melissa Ringnalda
Heather Roller
Erin Ross
Mariah Roth
Deb Schuler
Rachel Sender
Jodi Sigler
Kristina Smit-Burma
Kiane Smith
Michelle Smithburg
Sara Sodawasser
Celeste Strong
Marlena Terrell-Rhoads
Katherine Thorsteinson
Karen Wallace
Tara Weed
Dena White
Keriann Wilder
Rene Williams
Allison Winter
Courtney Wolterman
Melissa Woodhouse
Lisa Woodward
April Yusten
Megan Zerjav

March 2020

Hygienists who submitted 2019 Service Report(s): requested to inactivate agreement

Mary Katharine McNeme

Hygienists who responded: did not provide services in 12019; keep agreement active

Emily Boge
Amanda Davis
Jane Davis
Amanda Godfrey
Amy Goetsch
Dawn Haight
Katelyn Hartman
Mary Kelly
Rhonda Kennedy-Hogan
Molly Mills
Eileen Olderog-Hermiston
Anne Pietscher
Kristine Ristau-Lee
Leann Svejda
Tanya Van Marel
Kim Vipond
Sue Winker
Sharon Wiskirchen

Hygienists who did not provide services in 2019; inactivate agreement

Jane Alquist
Linda Anderson
Marsha Cunningham-Ford
Sharon Davidson
Shannon Driscoll
Angela Friedmann
Peggy Funk
Tisha Gannon
Julie Hunold
Denise Janssen
Laura Jeppeson
Renee Klyn
Linda Meyers
Cinda Swallow
Tamara Thompson
Gina Wells
Mary Jo Zern
Jacquie Zwack

Hygienists who did not respond to email requests from IDPH for 2019 Service Reports

Jami Mason
Eileen Tosh
Cynthia Wilson

Calendar Year 2019 Services Report
Public Health Supervision of Dental Hygienists

Total Number of Dental Hygienists with Supervision Agreements: **131** *(92 provided services)*
Total Number of Dentists with Supervision Agreements: **82**

Service	Total Provided	Total Clients Age 0-20	Total Clients ≥ Age 21
Sealant	37,772	12,870	0
Prophylaxis	1,243	227	1,015
Open Mouth Screening	72,116	68,787	1,653
Fluoride Varnish Application	55,630	52,597	1,244
Silver Diamine Fluoride	19	7	10
Other (Denture Cleaning, X-rays, Chlorhexidine, Oral Cancer Screening)	1,265	152	644

Referrals to Dentist(s)			
Clients Age 0-20		Clients ≥ Age 21	
Regular Care	Urgent Care	Regular Care	Urgent Care
52,383	7,285	1,206	361

March 2020

Service	Total Services Per Public Health Setting										
	Schools	Head Start Programs	Child Care Centers	Federally Qualified Health Centers	Free Clinics	Nursing Facilities	Nonprofit Community Health Centers	Public Health Dental Vans	Federal Public Health Programs	State Public Health Programs	Local Public Health Programs
Sealant	35,989	0	0	119	0	0	0	0	1,497	0	167
Prophylaxis	1	0	0	1,062	2	174	0	0	0	0	4
Open Mouth Screening	42,310	8,500	1,838	1,058	316	225	0	0	17,116	6	747
Fluoride Application	31,487	8,086	1,590	939	223	202	0	0	12,582	5	516
Silver Diamine Fluoride	0	0	0	11	0	8	0	0	0	0	0
Other (Denture Cleaning, X-rays, Chlorhexidine, Oral Cancer Screening)	0	0	0	1,185	32	48	0	0	0	0	0

July 17, 2020

Jill Stuecker, Executive Director
Iowa Dental Board
400 SW 8th Street
Des Moines, IA 50309

Dear Ms. Stuecker:

Iowa Dental Board rules require that a dentist and dental hygienist entering into a public health supervision agreement which includes use of silver diamine fluoride must both complete a board-approved course on silver diamine fluoride.

Our department has programs that provide gap-filling preventive services for Iowa children and adults by dental hygienists with public health supervision from dentists. In order to help the hygienists and dentists who want to add use of silver diamine fluoride to supervision agreements, we have asked Dr. Amy Lesch, University of Iowa College of Dentistry, to provide us with a recorded training about the background and use of silver diamine fluoride. We will then make the training available to dentists and hygienists in order for them to meet the board requirement, assuring sufficient understanding about the use of the product and allowing them to complete and sign public health supervision agreements.

We are seeking approval by the board of Dr. Lesch's training course towards meeting the public health supervision requirement. An outline of the training and Dr. Lesch's faculty professional biography are included on the following pages.

Thank you for your consideration.

Sincerely,

Tracy Rodgers, BS, RDH
Executive Officer, Bureau of Oral and Health Delivery Systems

Presentation Title: Silver Diamine Fluoride (SDF) in a Public Health Setting
Length of presentation: 1 hour
Prepared and Presented by: Amy Lesch, DDS MS
(Faculty Professional Biography – next page)

Presentation Outline

Background

- Use of silver in dentistry
- FDA clearance of SDF
- Research studies about use of SDF

Indications and Contraindications for Use

- Conditions when SDF should and should not be used

Consent and Protocol for Use

- Seeking informed consent
- Temporary staining potential
- Materials needed for application
- Dosage
- Procedural instructions
- Clinical scenarios (with photos)

Evidence of SDF Benefit

- Review of data and research

FACULTY PROFESSIONAL BIOGRAPHY
College of Dentistry
University of Iowa

Date of Preparation: February 3, 2020

I. Personal Data

1. Name
Amy B. Lesch

2. Department
Cden-Pediatric Dentistry

3. Present Rank
Visiting Assistant Professor

II. Higher Education, formal programs

Date Awarded	Degree	Specialty/Major	Institution
December 2019	MS	Dental Public Health	University of Iowa
June 2018	Certificate	Pediatric Dentistry	University of Iowa
May 2015	DDS	Dentistry	University of Michigan
December 2010	BA	Chemistry	Hope College

III. Professional Employment: Appointments

Dates	Rank/Title	Institution
June 2018 - Present	Visiting Assistant Professor	University of Iowa

IV. Certification and Licensure

Date	Dental License (State)
2018 - Present	Iowa

Date	Board Certification / Other Certifications
2019	Diplomate of the American Board of Pediatric Dentistry (ABPD)

V. Honors and Awards

VI. Committees, Service Activities, and Professional Appointments

VII. Dental Service Plan Practice

Year(s)	Time Allocated Per Week (# of Half Days)	Practice Location
2018 - Present	1	Center for Disabilities and Development

VIII. Professional Memberships

Years	Organization
2015 - Present	American Academy of Pediatric Dentistry
2015 - Present	American Association of Public Health Dentistry
2011 - Present	American Dental Association

IX. Areas of Research

Silver Diamine Fluoride: Calibrated examiner for phase III clinical trial with PI Dr. Steven Levy
Early Childhood Caries: Calibrated examiner for NIH study with PIs Drs. Banas and Drake

X. Current Research Topics

XI. Financial Resources (Grants and Contracts)

XII. Bibliography

1. Books and/or Chapters

2. Journal Articles (include initial and final page numbers)

1. Marti K, Sandhu G, Aljadeff L, Greene R, Lesch AB, Le JM, Pinsky HM, Rooney DM. Journal of Dental Education 2019;83(8):973-980. PubMed PMID: 30962311.

2. Lesch A, Pisano J, Kapila YL. The Student Perspective: Internal Exchange Programs. Journal of the Michigan Dental Association 2014;96(6):33-4. PubMed PMID: 25007466.

3. Aljadeff L, Krell RE, Lesch AB, Pinsky HM. The Importance of Leadership Development in Dental Education: A Student Perspective.. Compendium of Continuing Education in Dentistry 2013;34(5):392-4. PubMed PMID: 23991858.

3. Book Reviews

4. Abstracts

1. Butler J, Qian F, Lesch A, O'Malley M, Leary K. Reasons for Failed General Anesthesia and Procedural Sedation of Pediatric Procedures. International Association for Dental Research.

2. Lesch AB, Curtis A, Levy SM, Marshall TA, Weber-Gasparoni K, Fontana M, Warren JJ. Factors Associated with Sugary Beverage Consumption by Toddlers. American Academy of Pediatric Dentistry Annual Session.

XIII. Student Mentoring:

1. Graduate Theses Directed

2. Other Graduate Committee Service

3. Pre-Doctoral Student Research Mentorship

Butler, Jasmine	Degree/Specialty	DDS
	Years	2019 - Present
	Institution	University of Iowa
	Title	Reasons for failed general anesthesia and procedural sedation of pediatric dental procedures
	Role	Co-mentor

4. Post-Graduate Mentorship

5. Pre-Dental/Undergraduate

6. Other

XIV. Teaching Activities

Course Title and No.	Year	Term	Role
Pediatric Dentistry Diagnosis and Treatment PEDO:8240	2019 – Present	Feb	Lecturer
International Perspectives: Xicotepec ABRD:3352	2019 – Present	Jan	Lecturer

XV. Continuing Education

Course Title	Role	Location	Sponsor	Dates	Number of CE Hours
Tot to Teens: Meeting the Challenges of Today's Pediatric Dental Patient	Co-Presenter	University of Iowa College of Dentistry		November 15, 2019 - Present	1

Public Health Supervision Rules, Chapter 10

10.5(3) *Licensee responsibilities.* When working together in a public health supervision relationship, a dentist and dental hygienist shall enter into a written agreement that specifies the following responsibilities.

a. The dentist providing public health supervision must:

(1) Be available to provide communication and consultation with the dental hygienist;

(2) Have age- and procedure-specific standing orders for the performance of dental hygiene services. Those standing orders must include consideration for medically compromised patients and medical conditions for which a dental evaluation must occur prior to the provision of dental hygiene services;

(3) Specify a period of time in which an examination by a dentist must occur prior to providing further hygiene services. However, this examination requirement does not apply to educational services, assessments, screenings, and fluoride if specified in the supervision agreement;

(4) Specify the location or locations where the hygiene services will be provided under public health supervision; and

(5) Complete board-approved training on silver diamine fluoride if the supervision agreement permits the use of silver diamine fluoride. The supervision agreement must specify guidelines for use of silver diamine fluoride and must follow board-approved protocols.

b. A dental hygienist providing services under public health supervision may provide assessments; screenings; data collection; and educational, therapeutic, preventive, and diagnostic services as defined in rule 650—10.3(153), except for the administration of local anesthesia or nitrous oxide inhalation analgesia, and must:

(1) Maintain contact and communication with the dentist providing public health supervision;

(2) Practice according to age- and procedure-specific standing orders as directed by the supervising dentist, unless otherwise directed by the dentist for a specific patient;

(3) Provide to the patient, parent, or guardian a written plan for referral to a dentist and assessment of further dental treatment needs;

(4) Have each patient sign a consent form that notifies the patient that the services that will be received do not take the place of regular dental checkups at a dental office and are meant for people who otherwise would not have access to services;

(5) Specify a procedure for creating and maintaining dental records for the patients that are treated by the dental hygienist, including where these records are to be located; and

(6) Complete board-approved training on silver diamine fluoride if the supervision agreement permits the use of silver diamine fluoride. The supervision agreement must specify guidelines for use of silver diamine fluoride and must follow board-approved protocols.

c. The written agreement for public health supervision must be maintained by the dentist and the dental hygienist and must be made available to the board upon request. The dentist and dental hygienist must review the agreement at least biennially.

d. A copy of the written agreement for public health supervision shall be filed with the Bureau of Oral and Health Delivery Systems, Iowa Department of Public Health, Lucas State Office Building, 321 E. 12th Street, Des Moines, Iowa 50319.