IOWA DENTAL BOARD MEETING AGENDA
June 7, 2019
*Updated 5/31/2019*

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

Location: Iowa Dental Board, 400 SW 8th St., Suite D, Des Moines, Iowa


COMMITTEE MEETINGS:

DENTAL HYGIENE COMMITTEE: 8:15 AM
(See separate agenda)

EXECUTIVE COMMITTEE: 9:00 AM

BOARD MEETING:

OPEN SESSION: 10:00 AM

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. April 5, 2019

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  
b. Other Committee Recommendations, if any  

D. CONTINUING EDUCATION COMMITTEE REPORT  
Lori Elmitt  
a. Vote on Recommendations: Course Applications  
b. Vote on Recommendations: Sponsor Applications  
c. Other Committee Recommendations, if any  

E. DENTAL HYGIENE COMMITTEE REPORT  
Mary Kelly  
a. Committee Meeting Overview  
b. Recommendations for Board Discussion  
c. Items for Ratification  
   i. Rule Waiver Request: Sandra Fast R.D.H., Iowa Administrative Code 650 – Chapter 11.6(2)(e)(1), Dental Hygiene Licensure by Credentials  

F. EXAMINATION REPORTS  
a. CRDTS - Dental Steering Committee  
b. CRDTS - Dental Hygiene Examination Review Committee  
c. CRDTS - Dental Examination Review Committee  
d. WREB - Dental Committee  
e. WREB - Dental Hygiene Committee  

G. IOWA PRACTITIONER PROGRAM REPORT  
Steve Garrison  
a. Quarterly Update  

V. ADMINISTRATIVE RULES  
Steve Garrison  
a. Review of 2019-2020 Regulatory Plan  
b. Discussion and Vote on ARC 4359C: Amendments to Iowa Administrative Code 650 – Chapter 27, Regarding Teledentistry  
c. Discussion and Vote on ARC 4358C, Proposed Adoption and Filing: Rescind and Replace Iowa Administrative Code 650 – Chapter 29, Regarding Sedation  
d. Discussion and Vote on Proposed Notice of Intended Action: Amendments to Administrative Code 650 – Chapter 52, Regarding Reciprocity for Military Spouses  
e. Discussion and Vote on Proposed Notice of Intended Action: Rescind Administrative Code 650 – Chapter 34 and Amendments to Iowa Administrative Code 650 – Chapter 30, Regarding Student Loan Default/Noncompliance  

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.
f. **Discussion on Draft Amendments:**
   Iowa Administrative Code 650 – Chapter 27.11(2),
   Regarding Retention for Study Models and Casts

g. **Discussion on Pending Expanded Function Rules, ARC 4424C**

VI. **RULE WAIVERS**
   
a. Rule Waiver Request: Palacios Sergio D.D.S.,
   Iowa Administrative Code 650 – Chapter 11.4(1),
   Regarding Graduates of Foreign Dental Schools

VII. **LEGISLATIVE UPDATES**

VIII. **OTHER BUSINESS**
   
a. Vote on Officers
b. Vote on Committee Appointments
c. Review of I-Smile 2018 Report
d. Update on IDB Strategic Plan

**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; pursuant to
Iowa Code section 21.5(1)(d), to discuss whether to initiate licensee disciplinary investigations or proceedings;
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, April 5, 2019 (21.5(1)(a))
b. Compliance with Board Orders (21.5(1)(d))
c. Complaints and Investigative Reports (21.5(1)(d))
d. Combined Statement of Charges, Settlement Agreement and Final Order (21.5(1)(d) &
   21.5(1)(f))
e. Notice of Hearing and Statement of Charges (21.5(1)(d))
f. Malpractice Reports (21.5(1)(d))

**OPEN SESSION**

II. **ACTION, IF ANY, ON CLOSED SESSION AGENDA ITEMS**
   
a. Closed Session Minutes: April 5, 2019
b. Compliance with Board Orders
c. Complaints and Investigative Reports
d. Combined Statement of Charges, Settlement Agreement and Final Order
e. Notice of Hearing and Statement of Charges
f. Malpractice Reports

III. **ADJOURN**

**NEXT REGULARLY-SCHEDULED MEETING: AUGUST 1-2, 2019**
IOWA DENTAL BOARD

MINUTES
April 5, 2019
Conference Room
400 S.W. 8th St., Suite D
Des Moines, Iowa

Board Members
Steven Bradley, D.D.S., Present
Michael Davidson, D.D.S. Absent
Monica Foley, D.D.S. Present
William McBride, D.D.S. Present
Mary Kelly, R.D.H. Present
Nancy Slach, R.D.H. Present
Bruce Thorsen, Public Member Present
Lori Elmitt, Public Member Present

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

Attorney General’s Office
Laura Steffensmeier, Assistant Attorney General

Other Attendees
Sarah Reisetter, J.D., Iowa Department of Public Health
Tom Cope, Iowa Dental Hygienists' Association
Bob Russell, D.D.S., Iowa Department of Public Health
Jane Slach, Iowa Dental Assistants Association, Dental Assistants Educator Council
Laurie Traetow, Iowa Dental Association
Matt McKinney, Iowa Dental Association
Ryan Stuntz, D.D.S., Iowa Dental Association
Francisco Olalde, University of Iowa Carver College of Medicine
Lisa Holst, D.D.S.
Lynh Patterson, Delta Dental of Iowa
Shawn Kerby, D.D.S.
Lisa Kerby
Cody Kerby
Michael Kerby
Jeff Purk, D.D.S., Legacy Dental
I. CALL TO ORDER FOR APRIL 5, 2019

Dr. Bradley called the meeting of the Iowa Dental Board to order at 10:01 a.m., on Friday, April 5, 2019.

Roll Call:

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<th>Davidson</th>
<th>Elmitt</th>
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A quorum was established with seven members present.

II. IOWA DEPARTMENT OF PUBLIC HEALTH

Ms. Stuecker reported that Board members received information in their folders regarding HSB 253, which is the health and human services appropriations bill. There is language in this bill that would change the body to whom the directors of the licensing boards (dental, medical, pharmacy and nursing) would report. Ms. Stuecker provided an overview of the legislative proposal. If signed into law, the directors would report to the Director of the Iowa Department of Public Health (IDPH), who would have ongoing supervisory authority and the ability to hire and terminate the directors of the boards. Ms. Stuecker turned the time over to the Board members and Ms. Reisetter to discuss this matter further.

Ms. Reisetter shared with the Board that this bill was being driven not by IDPH, but by the legislature. Ms. Reisetter stated that should the bill be signed into law the department would need feedback from board members about the performance of the directors. Ms. Reisetter stated that the department’s oversight would be limited to the administrative functions related to the director’s performance and other human-resources-related matters.

Mr. Thorsen thought that there was potential for future conflicts to arise as personnel changes occur within the IDPH if this were to be implemented. Mr. Thorsen stated that he was opposed to the legislation, and expressed his concerns. Ms. Reisetter understood the concerns. She noted that the licensing boards they oversee deal with similar regulatory issues and the department does not impede their legal authority. Ms. Reisetter stated that the department would welcome the participation of and collaboration with the Dental Board if the provision were signed into law.

Mr. Thorsen asked if the department would develop written protocols to address these functions and processes. Ms. Reisetter said she could visit with Director Gerd Clabaugh about that suggestion, with the caveat it could be subject to change when a new director was appointed.

III. 1st OPPORTUNITY FOR PUBLIC COMMENT
Dr. Bradley asked everyone to introduce themselves, and allowed the opportunity for public comment.

Dr. Stuntz, Iowa Dental Association (IDA), commented on some of the agenda items. On the issue of teledentistry, Dr. Stuntz appreciated the intent to establish a framework. Dr. Stuntz expressed some concerns, similar to those expressed by the American Association of Orthodontists (AAO). The IDA members have asked that licensees who provide teledentistry services be required to be located within a certain physical proximity to the patient, and that the doctor be identified prior to the start of treatment. The IDA recommendations were based on the intention to balance access to care with safety and allow for the Board to take action when the minimum standard of care has not been met, even in cases where the licensee is located outside of Iowa.

Dr. Stuntz also commented on the proposed expanded functions rules. Dr. Stuntz asked the Board to clarify whether current Level 1 expanded functions providers would be grandfathered-in. In regards to the proposed requirement for examination, Dr. Stuntz asked whether this requirement would be limited to new licensees and registrants who train in Level 1 expanded functions, or if this would apply to all licensees and registrants who may currently provide those services.

Dr. Stuntz stated that they also received comments from oral surgeons regarding the proposed sedation rules. Overall, the IDA members indicated that they are in favor of the proposals; however, they recommended against listing specific drugs intended for deeper levels of sedation. The IDA members recommended that the focus be placed on the intended level of sedation as opposed to the specific drugs used.

Dr. Stuntz thanked Dr. Bradley for his service to the Board over the past nine years.

Mr. Cope, Iowa Dental Hygienists' Association (IDHA), also thanked Dr. Bradley for his service on the Board.

Dr. Russell, IDPH, thanked Dr. Bradley for his service.

Dr. Purk commented on the proposed sedation requirements related to the training of dental assistants to observe patients under sedation. Dr. Purk inquired what the timeframe and recommended frequency for training would be. Ms. Stuecker clarified that the rules were not on this meeting agenda and that she did not have the draft before her; however, the rules will be back before the Board at the June meeting. The rules were open for public comment and they should be directed to Steve Garrison for consideration by the Board at the June meeting.

IV. APPROVAL OF OPEN SESSION MINUTES

- January 25, 2019 – Quarterly Meeting

- MOVED by ELMITT, SECONDED by KELLY, to APPROVE the meeting minutes as submitted. Motion APPROVED unanimously.

V. REPORTS
EXECUTIVE DIRECTOR’S REPORT

Ms. Stuecker thanked Dr. Bradley for his service to the Board.

Ms. Stuecker reported that the Board published its third annual report. Copies were made available to the public. The report will be published to the website in the near future and a press release will be issued providing a link to the report.

BUDGET REPORT

Ms. Stuecker reported that expenditures were on target for this fiscal year. Approximately 60% of the budget has been spent for the current fiscal year, which had three months remaining. Ms. Stuecker reported that staff will start planning for next fiscal year’s budget soon.

Ms. Stuecker provided an update on a new conference room space in the building that had been procured due to space constraints in the building. Those expenses would be shared with the Iowa Board of Medicine, Iowa Board of Pharmacy and Iowa Board of Nursing.

ANESTHESIA CREDENTIALS COMMITTEE REPORT

- Actions Taken by the Committee on General Anesthesia & Moderate Sedation Permit Applications
- Other Committee Recommendations, if any

Ms. Braness provided an overview of the committee’s recent meeting and recommendations.

CONTINUING EDUCATION COMMITTEE REPORT

- Vote on Recommendations: Continuing Education Course Applications
- Vote on Recommendations: Continuing Education Sponsor Applications
- Other Committee Recommendations, if any

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

- MOVED by MCBRIDE, SECONDED by THORSEN, to APPROVE the recommendations as submitted. Motion APPROVED unanimously.

DENTAL HYGIENE COMMITTEE REPORT

- Committee Meeting Overview
- Recommendations for Board Discussion and Vote

Ms. Kelly stated that the committee met earlier that morning. Ms. Kelly reported that a committee would be established to review Iowa Administrative Code 650 - Chapter 10 and to discuss issues related to the scope of practice for dental hygienists. Since Ms. Kelly preferred to have more than
one Dental Hygiene Committee member serve on the new committee the meetings will be subject to open meetings laws. Ms. Kelly has recommended that representatives from the IDA, IDHA, and IDPH be included on this committee. An email will be sent out after the committee members and meeting dates are established.

EXAMINATION REPORTS

- **CRDTS – Dental Steering Committee**
  
  Dr. Bradley reported that the committee had not recently met.

- **CRDTS – Dental Hygiene Examination Review Committee**
  
  Ms. Slach reported that the committee had not recently met.

- **CRDTS – Dental Examination Review Committee**
  
  Dr. McBride reported that the committee had not recently met. The next meeting was scheduled on the same date as a Board meeting.

- **WREB – Dental Examination Review Committee**
  
  Dr. Foley reported that the next meeting was scheduled for November 2019.

- **WREB – Dental Hygiene Examination Review Committee**
  
  Ms. Kelly reported that that the next meeting was scheduled for November 2019. The meeting was the same date as the Board meeting, and she will not be able to attend.

IOWA PRACTITIONER PROGRAM REPORT

- **Quarterly Update**
  
  Ms. Stuecker provided an update on the committee. There were currently ten active participants.

VI. ADMINISTRATIVE RULES

  
  Mr. Stuecker provided an overview of the updated regulatory plan.

  - **Vote on ARC 4305C, Proposed Adoption and Filing: Amendments to Iowa Administrative Code 650 - Chapter 16, “Prescribing, Administering and Dispensing Drugs”, Iowa Administrative Code 650 - Chapter 25 “Continuing Education”, and Iowa Administrative Code 650 - Chapter 30, “Discipline”**
Mr. Stuecker provided an update on the draft of the rules, which were before the Board for adoption. There were not any public comments received; however, the Administrative Rules Review Committee (ARRC) recommended two changes, which have been incorporated into the draft before the Board. The changes clarified the types of criminal matters that would need to be reported to the Board.

Ms. Stuecker reported that Board staff received a number of questions related to the requirement to query the PMP within 48 hours prior to a dentist prescribing or dispensing an opioid to a patient. Dr. McBride recommended that the language be updated to say that the query should be conducted no more than 48 hours prior to the prescription or dispensing of the opioid. The Board members were in agreement. The Board members discussed the best way to update the wording to reflect the intent of the rule. The Board recommended amending the language as follows:

“The query shall be performed within 48 hours prior to a prescription being issued or dispensed....”

- MOVED by KELLY, SECONDED by MCBRIDE, to ADOPT the amendments noticed in ARC 4305C with the changes as noted. Motion APPROVED unanimously.


Mr. Stuecker provided an update on the rules, which had been delayed. Fees for continuing education courses and remediation administered by Board staff were removed and these rules are now back to the Board for a vote. The Notice of Intended Action was before the Board for a vote and included the changes as requested.

- MOVED by FOLEY, SECONDED by FOLEY, to APPROVE the Notice of Intended Action with the revisions as noted. Motion APPROVED unanimously.

- Discussion on Dental Assistants and Radiography

Ms. Stuecker reported that staff has identified administrative issues that may need to be discussed. Ms. Stuecker reported that 94% of registered dental assistants obtain a QDA (qualified dental assistant), which means the assistant is authorized to take dental radiographs. The remaining 6% of registered dental assistants have an RDA (registered dental assistant) which means they are not authorized to take dental radiographs. This is a source of confusion to applicants and licensees, and the Board has disciplined people over this issue.

Ms. Stuecker asked the Board to weigh in on a suggestion to require all future dental assistants to obtain a QDA to minimize these issues and concerns. The Board members agreed with the proposal to discuss and consider rule amendments that would require dental assistants to obtain a radiography qualification at the time of registration.
Discussion and Review of Retention for Study Models and Casts

Dr. McBride reported on some of the feedback that he’s received about this rule. In particular, there are a number of questions that have been raised as practices transition to digital images and move away from the use of physical models and casts.

Dr. McBride stated that technology may warrant a review and update to this rule. Additionally, the Board may want to consider defining study model and casts in the rule for clarity. In particular, the Board may want to stipulate which models and casts, at a minimum, should be retained as part of the patient record.

Following some discussion, the Board members agreed that this rule should be reviewed.

VII. LEGISLATIVE UPDATES

Ms. Stuecker reported that the Board’s bill did advance this legislative session. The Board members can re-assess their priorities for next year’s legislative session.

Ms. Stuecker inquired about the status of the bill related to dental screenings that was raised this session. Mr. Thorsen provided a summary of the legislation. To date, the changes to dental screenings have not advanced as originally proposed.

VIII. OTHER BUSINESS

- Review of Public Health Supervision Reports

Ms. Stuecker reported that the IDPH has provided the annual reports related to public health supervision. The reports have been made available for review.

In a handful of instances, some of the licensees or registrants had not filed their annual reports with the IDPH. Board staff sent letters to these individuals asking them to submit their reports or update the current status of their public health supervision agreement. All of those individuals responded by indicating that they were no longer practicing under public health supervision agreements.

- Vote on Shawn Kerby, D.D.S., Trainee Application

Ms. Stuecker provided an overview of the request. Dr. Kerby surrounded his dental license last year due to a felony conviction and was before the Board asking to be permitted to work as a trainee in a dental office. Dr. Kerby was provided an opportunity to address the Board and answer questions from the Board members. Dr. Bradley and various Board members posed questions to Dr. Kerby related to this request and his current status following his release from prison and a summary of his current job duties.

Ms. Steffensmeier provided legal clarification regarding this particular request in light of the prior orders of the Board in the Matter of Shawn Kerby, D.D.S. Dr. Kerby would not be eligible for
reinstatement of his dental license until September 2019. Ms. Steffensmeier indicated that the prior orders may limit the ability of the Board to allow Dr. Kerby to practice as a dental assistant trainee. Additionally, dental assistant trainee status is intended to train individuals to become dental assistants, which does not apply in this case.

Dr. Kerby stated that his employment options have been limited given his educational training and felony conviction.

The Board members discussed the matter. Some of the Board members recommended that Dr. Kerby focus on maintaining his sobriety and accomplishing the things needed to reinstate his dental license since that was Dr. Kerby’s ultimate goal.

- MOVED by BRADLEY, SECONDED by KELLY, to DENY the request to be issued dental assistant trainee status. Motion APPROVED unanimously.

- The Board took a brief recess at 11:13 a.m.
- The Board reconvened at 11:20 a.m.

  - Vote on Iowa Dental Association SDF Course

Ms. Braness provided an overview of the request. Following a recommendation from the Board members on the Continuing Education Advisory Committee, the course was updated to include information about the Board-approved silver diamine fluoride protocols developed by the IDPH and the University of Iowa College of Dentistry.

- MOVED by KELLY, SECONDED by THORSEN, to APPROVE the training as submitted. Motion APPROVED unanimously.

  - Vote on College of Diplomates ABPD Opioid Course

Ms. Braness provided an overview of the request. The course, if approved, would meet the continuing education requirement in the area of opioids.

- MOVED by MCBRIDE, SECONDED by ELMTT, to APPROVE the course as submitted. Motion APPROVED unanimously.

  - Vote on Dr. Karen Baker Opioid Course

Ms. Braness provided an overview of the request. The course, if approved, would meet the continuing education requirement in the area of opioids.

- MOVED by SLACH, SECONDED by KELLY, to APPROVE the course as submitted. Motion APPROVED unanimously.

  - Vote on Continuing Education for the 2019 Iowa Governor’s Conference on Public Health
Ms. Braness provided an overview of the request. The request was brought directly to the Board as it was received too late to be reviewed by the Continuing Education Advisory Committee and the conference was scheduled for later this month.

- MOVED by KELLY, SECONDED by SLACH, to APPROVE the courses as recommended by staff.

Following discussion by the Board, the motion was AMENDED to APPROVE ALL of the courses as submitted.

- Vote taken. Motion, as amended, was APPROVED unanimously.
  - Review of Committees in Preparation of June Appointments

Ms. Stuecker stated that this information was provided in preparation for committee appointments at the next Board meeting.

Ms. Slach recommended that the Executive Committee be structured in the same way as the Board and that the License Registration Committee be comprised of licensees.

- Iowa Practitioner Review Committee Appointments

Ms. Stuecker reported that two committee members of the IPRC were eligible for reappointment: Fred Marsh, M.D. and Gordon Anderson.

- MOVED by SLACH, SECONDED by KELLY, to REAPPOINT the IPRC members as recommended. Motion APPROVED unanimously.

IX. 2nd OPPORTUNITY FOR PUBLIC COMMENT

Dr. Bradley allowed the opportunity for public comment.

Dr. Purk commented on the dental assistant designations. Dr. Purk was concerned about the discussion proposing a requirement that all registered dental assistants obtain a radiography qualification. Dr. Purk requested that the Board consider continuing to allow an RDA, separate from the QDA, or allow exceptions to the requirement.

Dr. Thies asked for further clarification between the RDA and QDA designations. Ms. Stuecker clarified that an RDA is a registered dental assistant without a radiography qualification and a QDA is a registered dental assistant with the qualification in dental radiography.

Dr. Bradley noted that the Board has imposed formal disciplinary action in cases where dentists and dental assistants failed to comply with the rules regarding radiography qualifications for dental assistants. The Board hopes to eliminate these situations by proposing this requirement.
X. COMPLAINTS AND INVESTIGATIVE INFORMATION FOR UNLICENSED PRACTICE

Ms. Stuecker reported that the Board was provided a memo of the history of these matters.

Ms. Steffensmeier reported that the cases should be reviewed in order. Ms. Steffensmeier stated that these are subject to open session discussion since these individuals are not licensed.

- Case #17-0032, #17-0034, #17-0035, #19-0024: Smile Labs Iowa - Des Moines, Carroll, Ames, Ankeny, Iowa City

Ms. Stuecker clarified that these locations were owned by a single individual; therefore, these will be handled as single complaint.

Ms. Slach stated that the video in this case may be misleading. Dr. McBride agreed, and believed the video was intended to be instructional. The Board members discussed some of the other information provided.

Ms. Steffensmeier indicated that a letter could be sent with information about the law. Mr. Garrison confirmed that a letter had been sent previously. Ms. Steffensmeier stated that since the Board has investigated this case, the Board could decide about how to proceed.

The complaint file can be copied and provided to the county attorney as part of a referral. Mr. Thorsen asked about referral to the Attorney General’s Office as a consumer complaint. Ms. Steffensmeier stated that the Attorney General’s Office would be unlikely to take up this matter without complaints from consumers.

- MOVED by SLACH, SECONDED by THORSEN, to REFER the matter to the local county attorneys and close the complaint with the Board. Motion APPROVED unanimously.
  - Case #17-0031: Smile Labs of Ankeny

Mr. Garrison reported that the location closed since the complaint was filed.

- MOVED by KELLY, SECONDED by MCBRIDE, to CLOSE the complaint without further action. Motion APPROVED unanimously.
  - Case #17-0033: Smiles Labs of Fort Dodge

Mr. Garrison reported that the location closed since the complaint was filed.

- MOVED by KELLY, SECONDED by MCBRIDE, to CLOSE the complaint without further action. Motion APPROVED unanimously.
  - Case #17-009: Sparkle Iowa Teeth Whitening - Windsor Heights
Mr. Garrison reported that the business was only selling a tooth whitening product and was not providing a service.

- **MOVED** by ELMITT, **SECONDED** by KELLY, to CLOSE without further action. Motion **APPROVED** unanimously.
  - **Case #17-0030: Midwest Smile Labs & Simply Bright**

Mr. Garrison reported that the location closed since the complaint was filed.

- **MOVED** by ELMITT, **SECONDED** by KELLY, to CLOSE the complaint without further action. Motion **APPROVED** unanimously.
  - **Case #17-0152: Fierce Salon & Spa**

Mr. Garrison reported that the salon was only selling a tooth whitening product and was not providing a service.

- **MOVED** by KELLY, **SECONDED** by THORSEN, to CLOSE the complaint without further action. Motion **APPROVED** unanimously.
  - **Case #18-0015: Picture Perfect Salon & Tan**

Ms. Stuecker reported that the salon was only selling a tooth whitening product and was not providing a service.

- **MOVED** by ELMITT, **SECONDED** by THORSEN, to CLOSE the complaint without further action. Motion **APPROVED** unanimously.
  - **Case #18-0015: Picture Perfect Salon & Tan**

- The Board took a brief recess at 11:50 a.m.
- The Board reconvened at 11:56 a.m.

**XI. EXECUTIVE DIRECTOR ANNUAL PERFORMANCE EVALUATION**

Ms. Stuecker requested that her evaluation be conducted in closed session.

- **MOVED** by BRADLEY, **SECONDED** by ELMITT, to go into CLOSED session pursuant to Iowa Code Section 21.5(1)(i) to evaluate the professional competency of an individual whose performance is being considered when necessary to prevent needless and irreparable injury to that individuals reputation and that individual requests a closed session.
  - The Board convened in closed session at 11:57 a.m.
  - **MOVED** by ELMITT, **SECONDED** by THORSEN, to RETURN to OPEN session. Motion **APPROVED** unanimously.
The Board reconvened in open session at approximately 12:55 p.m.

CLOSED SESSION:

❖ MOVED by BRADLEY, 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; 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; and pursuant to Iowa Code section 21.5(1)(h), to avoid disclosure of specific law enforcement matters, such as allowable tolerances or criteria for the selection, prosecution, or settlement of cases, which if disclosed would facilitate disregard of requirements imposed by law.

ITEMS FOR REVIEW AND DISCUSSION

a. Enforcement Criteria (21.5(1)(h))
b. Closed Session Minutes, January 25, 2019 (21.5(1)(a))
c. Compliance with Board Orders (21.5(1)(d))
d. Complaints and Investigative Reports (21.5(1)(d))
e. Settlement Agreement and Final Order (21.5(1)(f))
g. Notice of Hearing and Statement of Charges (21.5(1)(d))

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The motion was APPROVED by roll call.

❖ The Board reconvened in closed session at approximately 1:00 p.m.

❖ MOVED by MCBRIDE, SECONDED by SLACH, to RETURN to OPEN session. Motion APPROVED unanimously.

❖ The Board reconvened in open session at 3:30 p.m.

OPEN SESSION

ACTION, IF ANY, ON CLOSED SESSION AGENDA ITEMS

1. Closed Session Minutes
MOVED by SLACH, SECONDED by THORSEN, to APPROVE the closed session minutes for the January 25, 2019 quarterly meeting. Motion APPROVED unanimously.

2. Compliance


MOVED by SLACH, SECONDED by THORSEN, to DENY the request for prior approval of the continuing education course in the area of periodontics he submitted and KEEP OPEN in the Matter of Thomas R. Cooney, D.D.S., file number 15-0174. Motion APPROVED unanimously.


3. Disciplinary Orders

MOVED by SLACH, SECONDED by THORSEN, to APPROVE the Notice of Hearing and Statement of Charges as proposed in the Matter of Gregory L. Garro, Jr., D.D.S., file numbers 17-0015, 18-0114. Motion APPROVED unanimously.

MOVED by MCBRIDE, SECONDED by FOLEY, to APPROVE the Stipulated Agreement to Discontinue Practice as proposed in the Matter of George C. Weber, D.D.S., file number 18-0087. Motion APPROVED unanimously.


MOVED by MCBRIDE, SECONDED by FOLEY, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Megan E. Brummer, D.D.S., file number 19-0001. Motion APPROVED unanimously.

MOVED by MCBRIDE, SECONDED by FOLEY, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Mark R. McConaughy, D.D.S., file number 19-0002. Motion APPROVED unanimously.


MOVED by MCBRIDE, SECONDED by FOLEY, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Jack Osterhaus, D.D.S., file number 18-0124. Motion APPROVED unanimously.

MOVED by MCBRIDE, SECONDED by FOLEY, to APPROVE the Settlement Agreement and Final Order as proposed in the Matter of Phelan R. Thomas, D.D.S., file numbers 18-0076, 18-0116. Motion APPROVED unanimously.

MOVED by MCBRIDE, SECONDED by FOLEY, to APPROVE the Stipulated Agreement to Discontinue Practice as proposed in the Matter of Jay R. Buckley, file number 15-0127. Motion APPROVED unanimously.


MOVED by THORSON, SECONDED by MCBRIDE, to APPROVE the Combined Statement of Charges, Settlement Agreement and Final Order as proposed in the Matter of Judd Larson, D.D.S., file number 16-0046. Motion APPROVED unanimously.


4. Action on Cases

MOVED by SLACH, SECONDED by KELLY, to CLOSE file numbers 18-0164, 19-0016. Motion APPROVED unanimously.

MOVED by FOLEY, SECONDED by KELLY, to KEEP OPEN file number 19-0008. Motion APPROVED unanimously.


MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0112. Motion APPROVED unanimously. Dr. McBride recused himself.
❖ MOVED by ELMITT, SECONDED by THORSEN, to KEEP OPEN file number 18-0187. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0188. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0191. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0196. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0197. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0199. Motion APPROVED unanimously. Dr. Bradley recused himself.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0201. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to KEEP OPEN file number 18-0203. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0205. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0206. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0207. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0208. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0209. Motion APPROVED unanimously.

❖ MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0005. Motion APPROVED unanimously.
MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0006. Motion APPROVED unanimously. Dr. Foley recused herself.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0007. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0009. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0019. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0020. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0021. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0022. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0023. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0026. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0036. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0093. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 18-0160. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0030. Motion APPROVED unanimously.

MOVED by ELMITT, SECONDED by THORSEN, to CLOSE file number 19-0018. Motion APPROVED unanimously.

MOVED by THORSEN, SECONDED by MCBRIDE, to CLOSE file number 18-0159. Motion APPROVED unanimously.
MOVED by THORSEN, SECONDED by MCBRIDE, to CLOSE file number 18-0165. Motion APPROVED unanimously. Dr. Bradley recused himself.

MOVED by THORSEN, SECONDED by MCBRIDE, to CLOSE file numbers 18-0166, 18-0167. Motion APPROVED unanimously. Ms. Kelly recused herself.

MOVED by THORSEN, SECONDED by MCBRIDE, to KEEP OPEN file number 18-0200. Motion APPROVED unanimously.

MOVED by KELLY, SECONDED by SLACH, to KEEP OPEN file number 15-001. Motion APPROVED unanimously.

MOVED by THORSEN, SECONDED by MCBRIDE, to KEEP OPEN file number 16-0063. Motion APPROVED unanimously.

MOVED by THORSEN, SECONDED by MCBRIDE, to KEEP OPEN file number 17-0144. Motion APPROVED unanimously.

MOVED by THORSEN, SECONDED by MCBRIDE, to CLOSE file number 18-0097. Motion APPROVED unanimously.

ADJOURN

MOVED by KELLY, SECONDED by BRADLEY, to ADJOURN the meeting. Motion APPROVED unanimously.

The Board adjourned its meeting at 3:39 p.m. on April 5, 2019.

NEXT MEETING OF THE BOARD

The next quarterly meeting of the Board is scheduled for June 7, 2019, in Des Moines, Iowa.

These minutes are respectfully submitted by Christel Braness, Program Planner 2, Iowa Dental Board.
DATE OF MEETING: June 7, 2019
RE: Actions Taken by the Committee
SUBMITTED BY: Anesthesia Credentials Committee

COMMITTEE ACTIONS TAKEN ON APPLICATIONS
The committee voted to take action on the applications as indicated below:

APPLICATION(S) FOR GENERAL ANESTHESIA PERMIT:

Recommended Approval as Noted:
- Ashley Sunstrum, D.D.S. (following completion of residency program)
- William Morio, D.D.S. (following completion of residency program)
- Jordan Tortorich, D.D.S. (following completion of residency program)

APPLICATION(S) FOR MODERATE SEDATION PERMITS:

- No applications received.

OTHER BUSINESS:

- ARC 4358C Notice of Intended Action, Iowa Administrative Code 650 – Chapter 29, “Sedation and Nitrous Oxide”

At the start of the meeting, Dr. Frank asked the public members participating in the meeting to summarize any additional comments they wished to share. The committee discussed the comments received. Much of the discussion focused on the comments submitted by the Iowa Society of Anesthesiologists (ISA).

The first part of the discussion focused on whether a separate anesthesia provider should be required, for pediatric patients in particular, as suggested by the ISA. Dr. Figueora, an oral surgeon participating in the call, noted that the recommendation referenced by the ISA was not included in the final language of the California legislation, which was signed into law.

A second focus of discussion was whether or not to require two patient monitors when moderate sedation is administered as recommended by the ISA. The committee members discussed the pros and cons of the suggestion. The committee members indicated that they would comply whatever the Board decided on this matter; though, it was unclear to the committee members that this would fundamentally make moderate sedation safer. The moderate sedation permit holders on the
committee expressed a preference, however, that the option for in-office training remain since ACLS, PALS or DAANCE certifications could hinder the ability of some offices, particularly in more rural areas, to comply with those training requirements.

Although two committee members requested that the Board delay the rulemaking pending further discussion, the committee did not offer any formal recommendations for consideration by the Board.
REPORT TO THE IOWA DENTAL BOARD

DATE OF MEETING: June 7, 2019
RE: Recommendations: Course, Sponsor & Requests
SUBMITTED BY: Continuing Education Advisory Committee
ACTION REQUESTED: Board Action on Committee Recommendation

CONTINUING EDUCATION COURSE REVIEW*

RECOMMENDED APPROVAL AS FOLLOWS:

1. Iowa Dental Hygienists’ Association: “Kirkwood Community College Student Research Presentations” – Requested 2 hour.
2. Rene Dutkowski, D.D.S.: The Chesapeake Health Education Program through the Esthetic Skin Institute:
   a. “Botulinum Toxin A (Botox and Dysport) – Requested 8.5 hours.
   b. “Dermal Fillers” – Requested 8.5 hours.
3. University District Dental Society: Spring 2019 Meeting: Requested 4.5 hours total
   a. “Clinical Cluster: SRBD, SB, and TMD – Requested 1.5 hours.
   b. “Modern Dental Photography Systems” – Requested 1.5 (clock hours are 1.25 hours.)
   c. “Restoring the Edentulous Arch with CONUS Prothesis – Requested 1.5 hours.
4. Des Moines District Dental Society:
   b. “Hot Topics in Implant Dentistry” – Requested 6 hours.
7. Southeast Iowa District Dental Society: “Highlights of Dental Specialists” – Requested 4 hours.

**Staff recommended APPROVAL pursuant to IAC 650—25.5(2). “Acceptable subject matter includes courses in patient treatment record keeping, risk management, sexual boundaries, communication, and OSHA regulations, and courses related to clinical practice. A course on Iowa jurisprudence that has been prior-approved by the board is also acceptable subject matter.”

CONTINUING EDUCATION SPONSOR APPLICATIONS FOR REVIEW

- No applications received.
BEFORE THE IOWA DENTAL BOARD

Petition by Sandra Fast  

for the waiver of 650 IAC 11.6 (153)  

relating to Dental Hygiene License by Credentials  

PETITION FOR WAIVER

1. Petitioner’s name, address, and telephone number. All communications concerning the petition can be directed to the address, phone, and e-mail address listed below.

   Name: Sandra S. Fast

   Address: 625 SE Tallgrass Lane  
   Waukee, IA 50263

   Work Telephone: N/A

   Home Phone: N/A

   Cell phone, if desired: 352-213-0634

   Email: bsfast05@gmail.com

2. I am requesting a waiver of 650 Iowa Administrative Code subrule 11.6 (153).

3. I am requesting a waiver of 650 Iowa Administrative Code subrule 11.6 (153), which requires a licensed RDH to have 3 consecutive years of practice immediately prior to the filing of the application and evidence of attaining a grade of at least 75% on a regional clinical examination within the previous five-year period.

   In lieu of these requirements I completed training and practiced as a dental assistant and then later completed training, successfully passed (score higher than 75%) the Florida dental hygiene written and clinical examinations in 2008 (although not within the past 5 years). After receiving my dental hygiene license in 2008 I practiced in Florida until the spring of 2010 (less than 3 consecutive years). Although I do not meet the requirements of the three consecutive years of
practice and my written and clinical exams were completed more than 5 years ago, I am a licensed dental hygienist with experience in a practice, my written and clinical exam scores were higher than 75%, plus the training and work experience that I received as a dental assistant. I would like the board to accept the following: Certified Dental Assistant with Expanded Functions and Dental Hygiene at Santa Fe College
(List specific training at accredited schools or other relevant information).
(Below, list any additional relevant information)
In addition, I worked as a Hygienist for an entire year after finishing Hygiene school and I also attended 3 years of schooling for Dental Assisting/Dental Hygiene. That includes a year of training as a Dental Assistant at Santa Fe College. I also worked as a Dental Assistant for approximately 2 years.

4. Explain the relevant facts and reasons that the petitioner believes justify a waiver. Include in your answer all of the following:

   a. Undue Hardship. My husband and I were married in the spring of 2010, at which time he was a college student. After completing his degree in the summer of 2010, he accepted a job with an employer in Indiana and we moved to Indianapolis. As a result of this move, I was unable to continue working as a hygienist in Florida. Shortly after we moved to Indiana I became pregnant and did not seek employment in the dental field there in order to spend time raising our youngest child after he was born and to home school one of our other children.

   My husband was transferred to Iowa by his employer in 2018. After moving to Iowa we discovered that the cost of living was substantially higher compared with that of Indiana. Our current circumstances (i.e., all of our children are now attending public school) allow me to go back to work to help support our family. All of my previous education, training, and work experience are in the field of dentistry; therefore, the dental field is the only profession in which I
could currently be employed without receiving further education and/or training in a different field.

(Insert any other information to justify undue hardship)

b. Why Waiving the Rule Would Not Prejudice the Substantial Legal Rights of Any Person.
The waiver of this rule would not prejudice the substantial legal rights of any person because the waiver is based on the fact that I have been trained as a Dental Hygienist, completed and passed written and clinical exams, and spent time practicing after receiving my Dental Hygiene license. The credentials that I have as a Dental Hygienist in Florida would ensure and protect public health, safety, and welfare as I practice dental hygiene in Florida.

c. The Provisions of the Rule Subject to the Waiver are NOT Specifically Mandated by Statute or Another Provision of Law. Iowa Code Chapter 153 does not mandate the requirements of rule 650-11.6 (153).

d. Substantially Equal Protection of the Public Health, Safety, and Welfare has been Afforded by: I would be under the supervision of a licensed dentist. If my knowledge and/or skills were not adequate to allow me to safely provide patients with the proper level of care the dentist would be obligated to report this to the dental board.

The subrule that I am requesting a waiver from helps to ensure that: This rule helps ensure that hygienists moving to the state of Iowa to practice have received the proper instruction and training and have successfully completed a written and clinical examination. Although it was not in the state of Iowa, I did receive dental hygiene training from and accredited institution, successfully completed written and clinical exams, and practiced dental hygiene in Florida. These credentials therefore ensure that I am qualified to practice dental hygiene in the state of Iowa.
5. A history of prior contacts between the board and petitioner related to the regulated activity is as follows: None

6. Information related to the board’s action in similar cases: Unknown

7. There is no other public agency or political subdivision that regulates dentistry in Iowa. Are there any public agencies or political subdivisions that would be affected by your request? If yes, please provide the name, address and other contact information below. □ Yes   ☒ No

8. I am not aware of any person or entity that would be adversely affected by the granting of a waiver in this case: Correct as stated.

9. Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver, if any.

Tina Treloar
Santa Fe College
3000 NW 83rd St.
Gainesville, FL 32606
tina.treloar@sfcollege.edu

Dr. Cynthia Brush
Tioga Dental
13005 SW 1Rd Ste 233
Gainesville, Fl 32669
352-436-4215

Dr. Brian Decker
D and P Dentistry
7575 W University Ave Ste P
Gainesville, FL 32607
352-331-4626

10. I hereby authorize the Board to obtain any information relating to this waiver request from the individuals named herein. I will provide signed releases of information if necessary.

I hereby attest to the accuracy and truthfulness of the above information.

[Signature]
(Petitioner’s signature)

5/19/19
(Date)
<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Rule/Subrule</th>
<th>Topic</th>
<th>Decision</th>
<th>Date of Ruling</th>
<th>Background Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanos</td>
<td>Dana</td>
<td>11.6(2)</td>
<td>License by Credentials</td>
<td>APPROVED</td>
<td>12/20/2001</td>
<td>Requested approval for licensure by credentials. At the time, California did not extend licensure by credentials to similarly licensed Iowa licensees, which was a requirement for licensure by credentials. The Board determined that Ms. Spanos was eligible for a waiver as retaking a clinical examination would pose an undue hardship since a clinical examination would require her to return to California to screen patients for participation in the examinations, along with the other costs and expenses related to the examination. It also determined that waiver would not prejudice the legal rights of others; and recommended that the statute be changed to eliminate the requirement for reciprocal state relations. Lastly, the Board determined that the waiver would provide substantially equal protection to the public given that she has met all other licensing requirements, and had sufficient experience and education.</td>
</tr>
<tr>
<td>Spanos</td>
<td>Dana</td>
<td>11.5(2)&quot;d&quot;</td>
<td>Licensure by examination</td>
<td>DENIED</td>
<td>12/20/2001</td>
<td>Requested approval for licensure by examination. Ms. Spanos requested that the Board accept the WREB examination completed in 1999. In its ruling the Board determined that completing a new clinical examination would impose an undue hardship and burden; however, granting the waiver would prejudice the substantial legal rights of others since other similarly-situated applicants would be denied licensure; and it would not provide equally substantial protection to the public.</td>
</tr>
<tr>
<td>Confidential</td>
<td>2004-2(SB)</td>
<td>11.2(2)&quot;e&quot;</td>
<td>Licensure by Examination</td>
<td>DENIED</td>
<td>8/27/2004</td>
<td>Graduated from the Univ. of Iowa College of Dentistry with a DDS. Successfully completed the national board examinations. Received a cumulative score of 73.8 on the CRDTS examination; the minimum passing score is 75. Stated that the CRDTS manual states that &quot;75 may represent an acceptable demonstration of competence.&quot; S.B. Argued that it was up to the state board to determine an acceptable passing score. S.B. believed that the scoring of the CRDTS examination is subjective. In its ruling the Board determined that S.B. did not meet the requirements for waiver since accepting a lower than passing score would prejudice the rights of others, and would not provide substantially equivalent protection to the public.</td>
</tr>
<tr>
<td>Perry</td>
<td>Blake</td>
<td>11.2(2)&quot;e&quot;</td>
<td>Licensure by Examination - Exam Date</td>
<td>Approved</td>
<td>9/4/2007</td>
<td>Asked that the Board allow him to apply on the basis of examination. Dr. Perry had taken the WREB examination 5 years and two months prior to the date of application. The requirement at that time was to apply within 5 years of the date of having completed the accepted clinical examination. Dr. Perry had been practicing in Wisconsin for two years and four months prior to the date of application. Dr. Perry requested that the rule be waived since he had successfully completed the required examinations, and had practiced for period of time long enough to demonstrate safe, competent practice. Prior to practicing in Wisconsin, Dr. Perry had served in the Air Force and the Wisconsin Air National Guard. The nature of his service prevented him from practicing in one location for a minimum of three years as required of a license by credentials.</td>
</tr>
<tr>
<td>Jensen</td>
<td>Ryan</td>
<td>12.1</td>
<td>Licensure by Examination</td>
<td>DENIED</td>
<td>5/9/2013</td>
<td>Requested that the WREB examination be accepted for the purposes of license by examination. In 2013, the only clinical examination accepted for the purposes of license by examination was CRDTS. CRDTS was not offered at his dental school, and he requested that the Board accept the WREB examination in lieu of CRDTS. The Board determined that meeting the clinical examination requirement was not an undue hardship and would prejudice the substantial legal rights of others.</td>
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<tr>
<td>IAC 650 Ch.</td>
<td>Chapter Title</td>
<td>Description of Proposed Action, Reason</td>
<td>Legal Basis for Proposed Action</td>
<td>Start Discussion</td>
<td>Schedule for Action</td>
<td>Date of NoIA</td>
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<tr>
<td>29</td>
<td>“Sedation and Nitrous Oxide Inhalation Analgesia”</td>
<td>Review requirements for allowing sedation in dental offices by CRNAs or MDs, and related requirements.</td>
<td>147.76, 153.33</td>
<td>In Process</td>
<td>January 25, 2019</td>
<td>1/25/2019</td>
</tr>
<tr>
<td>20</td>
<td>“Dental Assistants”</td>
<td>Review, update remediation</td>
<td>153.38, 153.39</td>
<td>April 5, 2019</td>
<td>August 2, 2019</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>“Dental Assistant Radiography Qualification”</td>
<td>Review and update requirements for obtaining and reinstating a qualification in dental radiography. **DA Educators proposed changing min RAD CE to 1 hour 153.38, 153.39, 147.10, 147.11, 272C.2</td>
<td>April 5, 2019</td>
<td>August 2, 2019</td>
<td></td>
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<tr>
<td>13</td>
<td>“Special Licenses”</td>
<td>Review/Update resident/faculty application requirements</td>
<td>153.22, 153.37</td>
<td>June 7, 2019</td>
<td>September 27, 2019</td>
<td></td>
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<td>35</td>
<td>“Iowa Practitioner Review Committee”</td>
<td>Review program eligibility</td>
<td>153, 272C</td>
<td>August 2, 2019</td>
<td>November 15, 2019</td>
<td></td>
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<tr>
<td>27</td>
<td>“Discontinuation of Practice”</td>
<td>General updates</td>
<td>153.33(8), 153.34, 147.76</td>
<td>August 2, 2019</td>
<td>January 24, 2020</td>
<td></td>
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<tr>
<td>10</td>
<td>“General Requirements”</td>
<td>General updates, Update cross references in 10.3(1)b to chapter 29 (29.6(4),(5))</td>
<td>153.15, 153.33A, 147.76</td>
<td>April 5, 2019</td>
<td>April 2, 2020</td>
<td></td>
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Iowa Dental Board Annual Regulatory Plan 2019-2020
DENTAL BOARD[650]
Amended Notice of Intended Action
Proposing rule making related to teledentistry
and providing an opportunity for public comment

The Dental Board hereby proposes to amend Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Legal Authority for Rule Making
This rule making is proposed under the authority provided in Iowa Code section 147.76, 153.33, and 272C.3.

State or Federal Law Implemented
This rule making implements, in whole or in part, Iowa Code sections 147.10, 147.11, 153.15A, 153.33(8), 153.39 and 272C.2.

Purpose and Summary
The primary purpose of these amendments is to define standards of practice for teledentistry. Technological advances have made it possible for dental services to be provided without an on-site dentist. These rules expand access to dental services utilizing available technology. These rules also establish criteria to safely provide dental services while maintaining patient confidentiality.

Reason for Amendment of Notice of Intended Action
Following the publication of ARC 4359C, public comments were received through May 15, 2019. A public hearing was not scheduled as part of the original Notice of Intended Action. In response to ARC 4359C, the Iowa Dental Board received a request to hold a public hearing. Therefore, the Notice of Intended Action has been amended to establish a public hearing date.

Fiscal Impact
This rule making has no fiscal impact to the State of Iowa.

Jobs Impact
After analysis and review of this rule making, no impact on jobs has been found.

Waivers
The rules in this chapter establish the minimum requirements to meet the standard of care in the practice of dentistry. Waiver of these rules would pose a risk to members of the public since it would mitigate the minimum acceptable standard of the practice of dentistry.

Public Comment
Any interested person may submit additional written or oral comments concerning this proposed rule making. Written or oral comments in response to this rule making must be received by the Board no later than 4:30 p.m. on July 24, 2019. Comments should be directed to:

Steve Garrison
Public Hearing

In response to a formal request, a public hearing has been scheduled for July 24, 2019 at 2:00 p.m. The public hearing will be held at the offices of the Iowa Dental Board.

Following publication of ARC 4359C, public comments were received, which were reviewed by the Board at its June 7, 2019 meeting. The comments are summarized below.

The Iowa Dental Board has received 34 written comments in response to ARC 4359C, the Notice of Intended Action related to Iowa Administrative Code 650 – Chapter 27. The amendments would provide rules for teledentistry.

The majority of comments are from a form letter that references contacting Trey Lawrence, Associate General Counsel with the American Association of Orthodontists (AAO). Mr. Lawrence has provided written and verbal comments at previous board meetings. Mr. Lawrence provided written comments on 11/12/2018 suggesting the following in summary:

- The definition of “Teledentistry Provider” be added to the language to include oversight of corporate entities.
- All providers of dental services should be covered under these rules.
- Only a dentist should be allowed to own any teledentistry platform.
- The dentist providing services must reside in Iowa within a 50 or 75 mile radius of the patient.
- Diagnosis and treatment planning should be replaced with “services” to include all dental services.
- Physical location/office location, address, telephone number, educational background of dentist should be part of informed consent.
- An in-person exam by a dentist must be done before teledentistry treatment can occur.
- Clarify that direct supervision provided through teledentistry must comply with Iowa laws otherwise requiring direct supervision for in-person treatment.

19 of the 34 comments received are from orthodontists using an identical template which provide Mr. Lawrence’s contact information. Some of the suggestions are identical to Mr. Lawrence’s 11/12/2018 letter. The comments suggests in summary:

- The term “Dental Care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services.”
- Any doctor providing services via teledentistry should be licensed not only in Iowa, but also in the state in which the doctor is physically located.
- The dentist should be located with 120 miles (or approximately a two hour drive) of the patient.
- The dentist should be required to provide full contact information publically via a website or the like and to the patient at the beginning of treatment. The contact information should include the information described above.
- An in-person exam should occur before a doctor uses teledentistry. The board should consider requirements recently passed by Arkansas for reference.
• Direct supervision should be clarified.
• Any teledentistry platform or service should be owned by a dentist.
• A public hearing is requested.

Sean Murphy, Vice President of Advocacy and General Counsel for the AAO, provided additional comments and a packet of information. The comments suggest in summary (Duplicative comments already stated in the letter from Mr. Lawrence have not been repeated):

• The rules appear to accommodate SmileDirect’s business model.
• The Iowa Dental Board should have investigative and enforcement authority over non-licensees involved in administering or performing teledentistry services.
• New Mexico and Tennessee rules should be considered.

Three of the 34 comments are from orthodontists who are not in favor of the rules. In summary they wrote:

• Smile Direct Club, or a reasonable facsimile, offers minimal direct patient contact. Any prudent orthodontist realizes that treatment involves accurate collection of adequate diagnostic materials leading to an individualized treatment plan.
• Effective orthodontic treatment often entails the need to motivate patient compliance.
• A scan for any orthodontics is a final impression and should be done under direct supervision.
• Bone loss and periodontal disease may be missed unless x-rays and an exam are required.
• There’s no mention of how calibration training should occur nor who has oversight. It would be impractical to re-calibrate with each new advance in technology.

Two of the 34 comments are from dentists in support of the rules. In summary they wrote:

• Teledentistry would expand access to care for patients receiving care at a Federally Qualified Health Center. It would ease time commitment and eliminate transportation issues.
• Dentists would be able to accommodate more patients.
• With proper training, the ability to diagnose dental disease is possible using teledentistry.
• Teledentistry is the next step in providing good care to underserved patients.
• If hygienists are able to provide care off site using teledentistry, we can prevent access to care issues.
• In health centers, if teledentistry services are provided offsite, we free up operatory space and can see more patients.

Two of the 34 comments are from hygienists in support of the rules. In summary, they wrote:

• Access to care would be expanded for children with behavioral issues who may not be able to be transported to appointments.
• Teledentistry would expand access to care for children with behavioral issues.
• We are excited to move forward with calibration training. There is a great need for underserved children.
• Teledentistry would expand access to care in rural locations.

A comment was received from the American Teledentistry Association. In summary:

• A dentist should be allowed to use a static internet questionnaire to accept a patient of record.
• Informed consent requirements should be identical to informed consent requirements in a brick and mortar facility.
• The information in the preamble regarding job impact is untrue. Dozens of dentists in Iowa and their staff are practicing teledentistry and these rules would create barriers and cause a loss of jobs in Iowa.

A comment was received from the Iowa Dental Association. In summary:

• An initial in-person examination should be required.
• A dentist utilizing teledentistry should be located sufficiently close to the patient to be familiar with available emergency services or have an agreement with a qualified local dentist.
• A dentist utilizing teledentistry should be required to disclose information about the dentist to the patient. Practice location should be disclosed and on the dentist’s website.

Hygienists with the Iowa Department of Public Health, Bureau of Oral and Health Delivery Systems provided written questions which were answered. They also commented in part:

• 27.12(7) should be revised to state, "Once an examination has been conducted, a dentist may delegate the services to be provided under general supervision"

Delta Dental provided a letter in support of the rules. In summary:

• Iowa is in need of innovative solutions to reduce oral health disparities in underserved populations.
• We are pleased to see in the proposed 650-27.12(8) a requirement that a dentist who uses teledentistry shall have appropriate knowledge of local dental resources to ensure appropriate follow-up and emergency care.
• Iowa is facing a dental workforce shortage as more Iowa dentists retire and more dentists preferring more flexible work hours or part-time hours.
• We recommend the Board review Iowa law and regulations that would conflict or create barriers to implementing teledentistry in Iowa. In particular, the Board may want to pursue amending Iowa Code section 153.15 that limits dental hygienists to practicing in a dental office, a public or private school, public health agencies, hospitals, and the armed forces.

The Iowa Primary Care Association provided a letter in support of the rules. In summary:

• Teledentistry would expand access to care in rural and underserved areas in Iowa.
• We are in support of the calibration training language.
• This rule would allow Iowans to reduce the amounts of time off work for dental visits in larger communities and support local dental businesses.

The Iowa Dental Hygienists Association provided a letter in support of the rules. In summary:

• The rules were drafted by a Board appointed committee that provided a diverse set of perspectives to the development process.
• The rules are similar to the Iowa Board of Medicine’s rules.
• New technology exists and these rules will expand access to care.

Following further discussion by the Board, the Board voted to adopt the rules as drafted without further changes.

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 adopted and filed:

ITEM 1. Renumber rule 650—27.12(17A,147,153,272C) as 650—27.13(17A,147,153,272C).

ITEM 2. Adopt the following new rule 650—27.12(153):

650—27.12(153) Teledentistry. This rule establishes the standards of practice for teledentistry.

27.12(1) Definitions. As used in this rule:

“Asyncronous technology” means store-and-forward technology that allows a dentist, dental hygienist, or dental assistant to transmit a patient’s health information to a dentist for viewing at a later time.

“Board” means the Iowa dental board.

“Synchronous technology” means two-way audiovisual technology that allows a dentist to see and communicate in real time with a patient who is located in a different physical location.

“Teledentistry” means the practice of dentistry when a patient receives dental care in a location where the dentist is not physically at that location but is delivering or overseeing the delivery of those services through the use of teledentistry technology.

“Teledentistry technology” means synchronous or asynchronous technology.

27.12(2) Teledentistry authorized. In accordance with this rule, a dentist may utilize teledentistry to provide dental care to patients located in Iowa. A dentist shall not provide dental care to a patient located in Iowa based solely on an Internet questionnaire consisting of a static set of questions that have been answered by the patient.

27.12(3) License required. A dentist who uses teledentistry in the examination, diagnosis, or treatment of a patient located in Iowa shall hold an active Iowa license to practice dentistry.

27.12(4) General requirements. The standard of dental care is the same whether a patient is seen in person or through a teledentistry encounter. The use of teledentistry is not an expansion of the scope of practice for dental hygienists or dental assistants. A dentist who uses teledentistry shall utilize evidence-based teledentistry standards of practice and practice guidelines, to the degree they are available, to ensure patient safety, quality of care, and positive outcomes.

27.12(5) Calibration training. The dentist, dental hygienist, and dental assistant shall undergo calibration training for any teledentistry technology utilized. Calibration training shall include communication and data sharing to ensure that the use of teledentistry technologies allows the dentist to provide diagnoses and treatment planning with comparable efficacy to diagnoses and treatment planning provided at an in-person examination. Calibration training includes processes and protocols for screening, data collection, definitive examination, and diagnosis. The purpose of calibration training is to diminish practice inconsistencies and ensure coordinated efforts.

27.12(6) Informed consent. When teledentistry will be utilized, a dentist shall ensure informed consent covers the following additional information:

a. A description of the types of dental care services provided via teledentistry, including limitations on services;

b. The identity, contact information, licensure, credentials, and qualifications of all dentists, dental hygienists, and dental assistants involved in the patient’s dental care; and

c. Precautions for technological failures or emergency situations.

27.12(7) Examination. A dentist may use teledentistry to conduct an examination for a new patient or for a new diagnosis if the examination is conducted in accordance with evidence-based standards of practice to sufficiently establish an informed diagnosis. A dentist shall not conduct a dental examination using teledentistry if the standard of care necessitates an in-person dental examination. Once an examination has been conducted, a dentist may delegate the services to be provided.
27.12(8) Follow-up and emergency care. A dentist who uses teledentistry shall have adequate knowledge of the nature and availability of local dental resources to provide appropriate follow-up care to a patient following a teledentistry encounter. A dentist shall refer a patient to an acute care facility or an emergency department when referral is necessary for the safety of the patient or in the case of emergency.

27.12(9) Supervision. With the exception of administering local anesthesia or nitrous oxide inhalation analgesia, or performing expanded functions, a dentist may delegate and supervise services to be performed to a dental hygienist or dental assistant.

a. When direct supervision of a dental hygienist or dental assistant is required, a dentist may provide direct supervision using synchronous technology. A dentist is not required to directly supervise the entire delivery of dental care but must appear using synchronous technology upon request with a response time similar to what would be expected if the dentist were present in the treatment facility.

b. When general supervision of a dental hygienist or dental assistant is required, a dentist may utilize teledentistry technology.

c. When public health supervision is utilized, a supervising dentist may authorize use of teledentistry technology.

27.12(10) Patient records. A teledentistry encounter shall be clearly characterized as such in a patient record.

27.12(11) Privacy and security. All dentists, dental hygienists, and dental assistants shall ensure that the use of teledentistry complies with the privacy and security requirements of the Health Insurance Portability and Accountability Act.

ITEM 3. Amend 650—Chapter 27, implementation sentence, as follows:

These rules are intended to implement Iowa Code sections 153.34(7), 153.34(9), 272C.3, 272C.4(14) and 272C.4(6).
DENTAL BOARD[650]
Amended Notice of Intended Action

Proposing rule making related to teledentistry
and providing an opportunity for public comment

The Dental Board hereby proposes to amend Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Legal Authority for Rule Making

This rule making is proposed under the authority provided in Iowa Code section 147.76, 153.33, and 272C.3.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 147.10, 147.11, 153.15A, 153.33(8), 153.39 and 272C.2.

Purpose and Summary

The primary purpose of these amendments is to define standards of practice for teledentistry. Technological advances have made it possible for dental services to be provided without an on-site dentist. These rules expand access to dental services utilizing available technology. These rules also establish criteria to safely provide dental services while maintaining patient confidentiality.

Reason for Amendment of Notice of Intended Action

Following the publication of ARC 4359C, public comments were received through May 15, 2019. A public hearing was not scheduled as part of the original Notice of Intended Action. In response to ARC 4359C, the Iowa Dental Board received a request to hold a public hearing. Therefore, the Notice of Intended Action has been amended to establish a public hearing date.

Additionally, the Board has approved revisions to the language published in ARC 4359C. The changes are noted in the following draft.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.

Waivers

The rules in this chapter establish the minimum requirements to meet the standard of care in the practice of dentistry. Waiver of these rules would pose a risk to members of the public since it would mitigate the minimum acceptable standard of the practice of dentistry.

Public Comment

Any interested person may submit additional written or oral comments concerning this proposed rule making. Written or oral comments in response to this rule making must be received by the Board no later than 4:30 p.m. on July 24, 2019. Comments should be directed to:
Public Hearing

In response to a formal request, a public hearing has been scheduled for July 24, 2019 at 2:00 p.m. The public hearing will be held at the offices of the Iowa Dental Board.

Following publication of ARC 4359C, public comments were received, which were reviewed by the Board at its June 7, 2019 meeting. The comments are summarized below.

The Iowa Dental Board has received 34 written comments in response to ARC 4359C, the Notice of Intended Action related to Iowa Administrative Code 650 – Chapter 27. The amendments would provide rules for teledentistry.

The majority of comments are from a form letter that references contacting Trey Lawrence, Associate General Counsel with the American Association of Orthodontists (AAO). Mr. Lawrence has provided written and verbal comments at previous board meetings. Mr. Lawrence provided written comments on 11/12/2018 suggesting the following in summary:

- The definition of “Teledentistry Provider” be added to the language to include oversight of corporate entities.
- All providers of dental services should be covered under these rules.
- Only a dentist should be allowed to own any teledentistry platform.
- The dentist providing services must reside in Iowa within a 50 or 75 mile radius of the patient.
- Diagnosis and treatment planning should be replaced with “services” to include all dental services.
- Physical location/office location, address, telephone number, educational background of dentist should be part of informed consent.
- An in-person exam by a dentist must be done before teledentistry treatment can occur.
- Clarify that direct supervision provided through teledentistry must comply with Iowa laws otherwise requiring direct supervision for in-person treatment.

19 of the 34 comments received are from orthodontists using an identical template which provide Mr. Lawrence’s contact information. Some of the suggestions are identical to Mr. Lawrence’s 11/12/2018 letter. The comments suggest in summary:

- The term “Dental Care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services.”
- Any doctor providing services via teledentistry should be licensed not only in Iowa, but also in the state in which the doctor is physically located.
- The dentist should be located with 120 miles (or approximately a two hour drive) of the patient.
- The dentist should be required to provide full contact information publically via a website or the like and to the patient at the beginning of treatment. The contact information should include the information described above.
• An in-person exam should occur before a doctor uses teledentistry. The board should consider requirements recently passed by Arkansas for reference.
• Direct supervision should be clarified.
• Any teledentistry platform or service should be owned by a dentist.
• A public hearing is requested.

Sean Murphy, Vice President of Advocacy and General Counsel for the AAO, provided additional comments and a packet of information. The comments suggest in summary (Duplicate comments already stated in the letter from Mr. Lawrence have not been repeated):

• The rules appear to accommodate SmileDirect’s business model.
• The Iowa Dental Board should have investigative and enforcement authority over non-licensees involved in administering or performing teledentistry services.
• New Mexico and Tennessee rules should be considered.

Three of the 34 comments are from orthodontists who are not in favor of the rules. In summary they wrote:

• Smile Direct Club, or a reasonable facsimile, offers minimal direct patient contact. Any prudent orthodontist realizes that treatment involves accurate collection of adequate diagnostic materials leading to an individualized treatment plan.
• Effective orthodontic treatment often entails the need to motivate patient compliance.
• A scan for any orthodontics is a final impression and should be done under direct supervision.
• Bone loss and periodontal disease may be missed unless x-rays and an exam are required.
• There’s no mention of how calibration training should occur nor who has oversight. It would be impractical to re-calibrate with each new advance in technology.

Two of the 34 comments are from dentists in support of the rules. In summary they wrote:

• Teledentistry would expand access to care for patients receiving care at a Federally Qualified Health Center. It would ease time commitment and eliminate transportation issues.
• Dentists would be able to accommodate more patients.
• With proper training, the ability to diagnose dental disease is possible using teledentistry.
• Teledentistry is the next step in providing good care to underserved patients.
• If hygienists are able to provide care off site using teledentistry, we can prevent access to care issues.
• In health centers, if teledentistry services are provided offsite, we free up operatory space and can see more patients.

Two of the 34 comments are from hygienists in support of the rules. In summary, they wrote:

• Access to care would be expanded for children with behavioral issues who may not be able to be transported to appointments.
• Teledentistry would expand access to care for children with behavioral issues.
• We are excited to move forward with calibration training. There is a great need for underserved children.
• Teledentistry would expand access to care in rural locations.

A comment was received from the American Teledentistry Association. In summary:
• A dentist should be allowed to use a static internet questionnaire to accept a patient of record.
• Informed consent requirements should be identical to informed consent requirements in a brick and mortar facility.
• The information in the preamble regarding job impact is untrue. Dozens of dentists in Iowa and their staff are practicing teledentistry and these rules would create barriers and cause a loss of jobs in Iowa.

A comment was received from the Iowa Dental Association. In summary:

• An initial in-person examination should be required.
• A dentist utilizing teledentistry should be located sufficiently close to the patient to be familiar with available emergency services or have an agreement with a qualified local dentist.
• A dentist utilizing teledentistry should be required to disclosure information about the dentist to the patient. Practice location should be disclosed and on the dentist’s website.

Hygienists with the Iowa Department of Public Health, Bureau of Oral and Health Delivery Systems provided written questions which were answered. They also commented in part:

• 27.12(7) should be revised to state, "Once an examination has been conducted, a dentist may delegate the services to be provided under general supervision"

Delta Dental provided a letter in support of the rules. In summary:

• Iowa is in need of innovative solutions to reduce oral health disparities in underserved populations.
• We are pleased to see in the proposed 650-27.12(8) a requirement that a dentist who uses teledentistry shall have appropriate knowledge of local dental resources to ensure appropriate follow-up and emergency care.
• Iowa is facing a dental workforce shortage as more Iowa dentists retire and more dentists preferring more flexible work hours or part-time hours.
• We recommend the Board review Iowa law and regulations that would conflict or create barriers to implementing teledentistry in Iowa. In particular, the Board may want to pursue amending Iowa Code section 153.15 that limits dental hygienists to practicing in a dental office, a public or private school, public health agencies, hospitals, and the armed forces.

The Iowa Primary Care Association provided a letter in support of the rules. In summary:

• Teledentistry would expand access to care in rural and underserved areas in Iowa.
• We are in support of the calibration training language.
• This rule would allow Iowans to reduce the amounts of time off work for dental visits in larger communities and support local dental businesses.

The Iowa Dental Hygienists Association provided a letter in support of the rules. In summary:

• The rules were drafted by a Board appointed committee that provided a diverse set of perspectives to the development process.
• The rules are similar to the Iowa Board of Medicine’s rules.
• New technology exists and these rules will expand access to care.

Following further discussion by the Board, the Board voted to adopt a simplified version of the rules, which were noticed in ARC 4359C.

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 adopted and filed:

ITEM 1. Renumber rule 650—27.12(17A,147,153,272C) as 650—27.13(17A,147,153,272C).

ITEM 2. Adopt the following new rule 650—27.12(153):

650—27.12(153) Teledentistry. This rule establishes the standards of practice for teledentistry.

27.12(1) Definitions. As used in this rule:

“Asynchronous technology” means store-and-forward technology that allows a dentist, dental hygienist, or dental assistant to transmit a patient’s health information to a dentist for viewing at a later time.

“Board” means the Iowa dental board.

“Synchronous technology” means two-way audiovisual technology that allows a dentist to see and communicate in real time with a patient who is located in a different physical location.

“Teledentistry” means the use of technology for the distance delivery of dental care services, the practice of dentistry when a patient receives dental care in a location where the dentist is not physically at that location but is delivering or overseeing the delivery of those services through the use of teledentistry technology.

“Teledentistry technology” means synchronous or asynchronous technology.

27.12(2) Teledentistry authorized. In accordance with this rule, a dentist may utilize teledentistry to provide dental care to patients located in Iowa provided the licensee holds an active Iowa license. A licensee who uses teledentistry will be held to the same standards of care and professional ethics as a licensee using traditional in-person encounters with patients. The use of teledentistry is not an expansion of the scope of practice for dental hygienists or dental assistants. A dentist shall not provide dental care to a patient located in Iowa based solely on an Internet questionnaire consisting of a static set of questions that have been answered by the patient.

27.12(3) License required. A dentist who uses teledentistry in the examination, diagnosis, or treatment of a patient located in Iowa shall hold an active Iowa license to practice dentistry.

27.12(4) General requirements. The standard of dental care is the same whether a patient is seen in person or through a teledentistry encounter. The use of teledentistry is not an expansion of the scope of practice for dental hygienists or dental assistants. A dentist who uses teledentistry shall utilize evidence-based teledentistry standards of practice and practice guidelines, to the degree they are available, to ensure patient safety, quality of care, and positive outcomes.

27.12(5) Calibration training. The dentist, dental hygienist, and dental assistant shall undergo calibration training for any teledentistry technology utilized. Calibration training shall include communication and data sharing to ensure that the use of teledentistry technologies allows the dentist to provide diagnoses and treatment planning with comparable efficacy to diagnoses and treatment planning provided at an in-person examination. Calibration training includes processes and protocols for screening, data collection, definitive examination, and diagnosis. The purpose of calibration training is to diminish practice inconsistencies and ensure coordinated efforts.

27.12(6) Informed consent. When teledentistry will be utilized, a dentist shall ensure informed consent covers the following additional information:

a. A description of the types of dental care services provided via teledentistry, including limitations on services;

b. The identity, contact information, licensure, credentials, and qualifications of all dentists, dental
hygienists, and dental assistants involved in the patient’s dental care; and
— c. Precautions for technological failures or emergency situations.

27.12(7) Examination. A dentist may use teledentistry to conduct an examination for a new patient or for a new diagnosis if the examination is conducted in accordance with evidence-based standards of practice to sufficiently establish an informed diagnosis. A dentist shall not conduct a dental examination using teledentistry if the standard of care necessitates an in-person dental examination. Once an examination has been conducted, a dentist may delegate the services to be provided.

27.12(8) Follow-up and emergency care. A dentist who uses teledentistry shall have adequate knowledge of the nature and availability of local dental resources to provide appropriate follow-up care to a patient following a teledentistry encounter. A dentist shall refer a patient to an acute care facility or an emergency department when referral is necessary for the safety of the patient or in the case of emergency.

27.12(9) Supervision. With the exception of administering local anesthesia or nitrous oxide inhalation analgesia, or performing expanded functions, a dentist may delegate and supervise services to be performed to a dental hygienist or dental assistant.
— a. When direct supervision of a dental hygienist or dental assistant is required, a dentist may provide direct supervision using synchronous technology. A dentist is not required to directly supervise the entire delivery of dental care but must appear using synchronous technology upon request with a response time similar to what would be expected if the dentist were present in the treatment facility.
— b. When general supervision of a dental hygienist or dental assistant is required, a dentist may utilize teledentistry technology.
— c. When public health supervision is utilized, a supervising dentist may authorize use of teledentistry technology.

27.12(10) Patient records. A teledentistry encounter shall be clearly characterized as such in a patient record.

27.12(11) Privacy and security. All dentists, dental hygienists, and dental assistants shall ensure that the use of teledentistry complies with the privacy and security requirements of the Health Insurance Portability and Accountability Act.

ITEM 3. Amend 650—Chapter 27, implementation sentence, as follows:
These rules are intended to implement Iowa Code sections 153.34(7), 153.34(9), 272C.3, 272C.4(14) and 272C.4(6).
May 15, 2019

Steve Garrison, Program Officer  
Iowa Dental Board  
400 S.W. Eighth St., Suite D  
Des Moines, IA 50309  
via e-mail at steven.garrison@iowa.gov

Dear Mr. Garrison:

I write on behalf of the American Association of Orthodontists (AAO). The AAO is the world’s oldest and largest dental specialty organization, created in 1900. It represents more than 19,000 orthodontists throughout the United States, Canada, and abroad. AAO member orthodontists have successfully completed an accredited orthodontic residency program, after previously graduating from dental school. As a professional organization, the AAO is dedicated to, among other goals: (a) ethically advancing the art and science of orthodontics and dentofacial orthopedics worldwide; (b) improving the health of the public by promoting quality orthodontic care, the importance of overall oral healthcare, and advocating for the public interest; and (c) educating the public about the benefits of orthodontic treatment and the educational qualifications of orthodontic specialists.

We are submitting this letter to offer comments on the draft of proposed Rule 650-27.12(153) Teledentistry. Please note, as an association having more than 25 members in Iowa, pursuant to Iowa Code § 17A.4(1)(b) the AAO requests a hearing on the proposed Rule.

Before discussing the AAO’s position regarding Rule 650-27.12(153) Teledentistry, I’d like to recount the AAO’s previous involvement with the Iowa Dental Board regarding another issue – specialty advertising. As you may recall, the AAO was involved with revisions to Iowa’s specialty advertising regulations dating back to 2017, which included the AAO making numerous written and public comments in an effort to best protect patient health and safety. When the AAO arrived on the scene, it was told that the specialty advertising issue had already been discussed for months prior, thus making it more difficult to incorporate the AAO’s changes. Outside of Iowa, the AAO’s position – that only those dentists completing CODA accredited
post-graduate specialty programs should be able to advertise as “specialists” – has not only been accepted by numerous dental boards across the country, but in addition, Ohio’s Common Sense Initiative office recently determined that Ohio’s “proposed [specialty recognition and advertising] rules from the Dental Board are supported by and consistent with a clearly articulated state policy and are not a pretext for anticompetitive conduct.” See Ex. 1, April 25, 2019 CSI Memorandum.

Unfortunately, the Iowa Dental Board is not currently in a position to benefit from the CSI’s determination because it already revised its specialty advertising regulations apparently due to the threat of a lawsuit (despite a lawsuit never being filed and the AAO’s request that the Dental Board wait on its revisions).

Now, the Iowa Dental Board is once again moving quickly with Rule 650-27.12(153) Teledentistry’s language, which will definitely have a major impact on the practice of dentistry and dental patients in Iowa. It is easy to see how patients’ orthodontic appliances, bite guards, teeth whitening trays, dentures, and even crowns could be impacted by teledentistry. As far as the history regarding Rule 650-27.12(153), I am attaching a July 12, 2017 message to the Board:

SmileDirect: The information submitted to us included roughly 50 patient complaints. The letter I sent to them is an attempt to get more information regarding any licensees who are engaged in this work. It’s simply a letter of inquiry that took me 5 minutes to write. It’s similar to letters my colleagues from other state dental boards are sending as well. It’s not in any way, shape or form an investigation. If you decide you want to look into it further, we need the name of licensed dentists doing the work. We are fielding an increased number of questions regarding teledentistry and what can and cannot be done remotely. We are going to have write rules around this and in my mind, the SmileDirect issue is directly related to that. It’s a very separate and distinct issue from tooth whitening because we are talking about dentists. See Ex. 2, July 12, 2017 email (Emphasis added).

Against this backdrop, one can question why Rule 650-27.12(153) in certain instances appears to accommodate SmileDirectClub’s practice model, which does not involve a SmileDirectClub dentist ever seeing physically, in-person a patient who is often undergoing months of orthodontic treatment. See, e.g., Rule 650-27.12(2); 650-27.12(7); 650-27.12(8); 650-27.12(9). As this Board should know, the AAO has been working with the Iowa Dental Board since the teledentistry issue was first introduced – submitting comments, traveling to Des Moines for a meeting, and explaining how to revise the Rule to best protect patient health and safety. As indicated below, the AAO’s position on teledentistry and

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1 The AAO finds the Board’s July 12 statement “we are talking about dentists” surprising because on October 11, 2017, the Board commented that “we are not investigating [SDC]. The Iowa Dental Board only has jurisdiction over licensed dentists, hygienists and assistants.” See Ex. 3, October 11, 2017 email. This response seems to conflict with the earlier statement that “we are talking about dentists,” not to mention a cursory review of SmileDirectClub’s website where SmileDirectClub claims it is using state (i.e. Iowa) licensed dentist(s) – “Each SmileDirectClub customer is assigned a dentist or orthodontist who is licensed where they live.” See https://blog.smiledirectclub.com/doctors-behind-your-smile/. Yet, this Board has apparently decided not even to investigate SmileDirectClub, despite the Better Business Bureau now reporting over 840 “Customer Complaints” for SmileDirectClub on its website. See https://www.bbb.org/us/nv/nashville/profile/cosmetic-dentistry/smiledirectclub-0573-37111672. Also, despite SmileDirectClub now having a Des Moines location and two Iowa pop-up locations where no Iowa licensed dentists are physically present. See Ex. 4, https://smiledirectclub.com/smilesops/. Surely this Board is opposed to dental practices taking place in locations where dentists are not present and would investigate those locations. In other states, dental boards have taken action, and just last week, a Georgia federal court ruled that “SmileDirectClub’s acts of taking digital scans of a patient’s mouth . . . falls squarely within the definition of the practice of dentistry [under Georgia law].” See Ex. 5, Order, p. 6. Just like the Georgia Board of Dentistry, it is this Board’s responsibility to regulate the practice of dentistry in Iowa on behalf of Iowa’s citizens and patients.
many of its proposed revisions are backed by laws and findings in other states. Yet, despite the AAO’s longstanding involvement and the litany of backup for its teledentistry revisions, to date not one of the AAO’s substantive revisions have been incorporated into the proposed Rule 650-27.12(153). The AAO has no doubt that the Iowa Dental Board requests public comments from stakeholders to better understand the issue and how best to construct proposed laws for Iowa patients, so the AAO is hopeful that the Iowa Dental Board will finally recognize and incorporate the AAO’s revisions, which the AAO believes best protect patient health and safety.

To reiterate, the AAO supports the following parameters generally with respect to teledentistry laws and regulations:

**IN-PERSON EXAMINATION/EVALUATION** – there are certain diagnoses and evaluations that can only be performed in-person or are best performed in-person (x-rays, etc.). There are a number of categories of problems/conditions that a dentist usually looks for as part of a physical examination at the outset of traditional in-person treatment. These include conditions or problems that can be quite serious, such as oral cancer, periodontal problems, advanced decay, gum disease, etc. With that in mind, although it may make sense to perform an initial consult via teledentistry, the AAO believes teledentistry TREATMENT should not occur before a physical, in-person examination/evaluation of the patient has occurred by a state licensed dentist.

**GEOGRAPHIC PROXIMITY** – to the extent a teledentistry patient would need to see the doctor providing teledentistry services for any reason (follow-up care, emergency, etc.), the AAO believes it makes sense for doctors performing teledentistry services to have a physical office location within a certain geographic proximity of the patient. Idaho currently has a law that requires dentists who provide any telehealth services to physically practice within seventy-five (75) miles of the patient’s location. See Ex. 6, IDAPA 19.01.01.066.01, p. 27. With that in mind, the AAO believes a law would make sense that requires dentists who provide teledentistry services to at most practice within 120 miles (or roughly a two-hour drive) of the patient’s location.

**DOCTOR INFORMATION** – regardless of modality, the AAO believes patients should always be aware of their treating doctors’ (or potential doctors’) information. In particular, it seems that a patient should be able to know where the dentist treating him or her is located, or otherwise be able to reach his/her doctor if needed. This is perhaps all the more important in a teledentistry setting. With that in mind, the AAO believes teledentistry laws should require those doctors who are performing teledentistry services to disclose (via public website, etc.) their name, license number, telephone number, practice address, and education to patients and the public who may be using or interested in their teledentistry services.

**DOCTOR OWNED/CONTROLLED** – to make sure teledentistry services keep the patient in mind, the AAO believes it makes sense for teledentistry platforms or services to have doctor control or ownership. This is analogous to the rules that exist in numerous states requiring that a dental practice be owned or controlled by a licensed doctor.

**OTHER LAWS/STANDARDS** – the AAO believes it makes sense that all other dental and supervision laws and standards are followed to the extent they are not directly and expressly addressed by any new teledentistry laws.

**LICENSURE** – as with any dental act or service, those performing teledentistry services need to have the appropriate dental licensure. With that in mind, the AAO believes those performing
teledentistry services should not only be a **licensed dentist in the state where the patient is receiving services**, but also licensed in the state where the dentist is located while performing the teledentistry services.

**DENTAL BOARD AUTHORITY** – to the extent teledentistry services might involve companies and non-licensees, the AAO believes it makes sense to give the state dental board **investigative and enforcement authority over non-licensees involved in administering or performing teledentistry services.**

Given these parameters, the AAO offers the following comments concerning Iowa’s draft teledentistry rule.

**650-27.12(1) Definitions**—The definition of “Teledentistry” is too broad as it covers “dental care.” The Board should limit the definition of “Teledentistry” to only cover “limited diagnostic and treatment planning services,” as referenced in 650-27.12(5) and as New Mexico has done. See Ex. 7, § 61-5A-4. The Board should also include among the defined terms a definition of “teledentistry provider” that would include all possible doctors, professionals, agents, or companies operating under this section, and give the Board authority over them. Such a definition could, for instance, define “teledentistry provider” as “any individual or corporate entity that provides teledentistry services to patients within the state of Iowa, over which the Board has rulemaking and investigatory authority.”

**650-27.12(2)**—The Board should limit what dental care can be provided to “limited diagnostic and treatment planning services,” as referenced in 650-27.12(5) and as New Mexico has done. See Ex. 7, § 61-5A-4. The Board should clarify that a dentist may utilize teledentistry for patients located in Iowa in accordance with this rule and in accordance with the other laws for the state of Iowa.

**650-27.12(3)**—This section requires that a dentist practicing teledentistry with respect to an Iowa patient must be licensed in Iowa; the Board should include the additional requirement that the dentist be physically located (or have a practice physically located) within a specified number of miles from the patient (for instance, 120 miles, or approximately 2 hours’ driving time). Idaho, for instance, included a similar requirement (75 miles) in its teledentistry regulations. See Ex. 6. The draft rule at 27.12(8) indicates a concern for patients being seen in-person in case of an emergency or other urgent situation; requiring that a dentist practicing teledentistry be physically located within a certain number of miles from the patient would further address this concern. Also, the Board should clarify that a dentist providing teledentistry services to an Iowa resident must be licensed both in Iowa and in the state where the dentist is providing services (i.e., the state where the dentist is physically located while providing teledentistry services).

**650-27.12(5)**—The current draft of the rule states that calibration training “shall include communication and data sharing to ensure the use of teledentistry technologies allows the dentist to provide diagnoses and treatment planning with comparable efficacy to diagnosis and treatment planning provided at an in-person examination.” (emphasis added). The Board should remove the references to “diagnoses and treatment planning” and replace it with the term “services,” or a similarly broad term, to ensure that training in all potential respects is accomplished.

**650-27.12(6)**—In subpart (b), the Board should specifically require the inclusion of the doctor’s name, physical location/office location, license, telephone number, credentials, educational background, and qualifications, among the information included in the informed consent agreed to by the patient and to the public who may be using or interested in the teledentistry services.
See Ex. 8, proposed TN Rule 0460-01-.19 (2)(f). Currently the draft rule requires that the doctor provide “contact information,” of phrase that itself could be considered ambiguous. In particular, it seems that a prospective or current patient should be able to know where the dentist treating him or her is located, or otherwise be able to reach his/her doctor by telephone if needed. This is all the more important in a teledentistry setting. For instance, the only number available to the patient should not be a “1-800” customer service-type number for the company providing teledentistry services.

650-27.12(7)—This section pertains to examinations for new patients. As the Board is aware, there are a number of categories of problems/conditions that a dentist usually looks for as part of a physical examination at the outset of traditional in-person treatment. These include conditions or problems that can be quite serious, such as oral cancer, periodontal problems, advanced decay, gum disease, etc. If an in-person examination by the dentist is not required at the outset of the doctor-patient relationship, then there may never be an opportunity for the dentist to detect such problems. Therefore, the Board should change this rule to clarify that consultation may take place by teledentistry, but an in-person examination/evaluation must be done before teledentistry treatment can occur. For example, the State of Arkansas included in its teledentistry regulations a requirement that an in-person examination of the patient by the doctor must occur before a doctor-patient relationship is formed and before the doctor may offer services via teledentistry. See Ex. 9, Ark. Admin. Code 038.00.1-XXI.

650-27.12(9)—By stating that a dentist is not required to directly supervise the entire delivery of dental care (where direct supervision is required), this teledentistry rule could have the effect of reducing the amount of direct supervision that would otherwise be required for in-person treatment. The Board should clarify in this rule that the dentist’s direct supervision provided through teledentistry technology must otherwise comply with Iowa’s laws for direct supervision (i.e., direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment). In connection with this consideration, the Board should delete the entire last sentence of 27.12(9)(a), and replace it with a statement along the lines of: “The dentist’s direct supervision provided through teledentistry must comply with all of the elements of Iowa’s direct supervision laws.”

650-27.12(11)—The Board should apply this rule to not only dentists, dental hygienists, and dental assistants, but any other providers of dental services or treatment for dental patients, in order to ensure that the privacy concerns embodied by this rule apply to the fullest extent possible under the teledentistry model.

The Board should also require that any teledentistry platform, teledentistry services, or teledentistry companies be owned or controlled by a licensed Iowa doctor. This is analogous to the rules that exist in numerous states requiring that a dental practice be owned or controlled by a licensed doctor.

Thank you for your work on this issue and consideration of these comments. Please do not hesitate to let me know if you have any questions regarding the aforementioned issues, or otherwise have any
questions. We also look forward to attending a hearing on the proposed rule pursuant to Iowa Code § 17A.4(1)(b), so please let us know when that will occur.

Sincerely,

Sean Murphy, J.D.

Vice President, Advocacy and General Counsel
MEMORANDUM

TO: Ohio State Dental Board

FROM: Common Sense Initiative Office

DATE: April 25, 2019

RE: R.C. §107.56 Referral—Dental Specialties Recognition and Advertising Rules

On October 31, 2018, the Ohio State Dental Board self-referred for review under Ohio Revised Code (R.C.) §107.56 proposed amendments to its administrative rules entitled “Dental Specialties Recognition and Advertising Rules.” This memo represents the Common Sense Initiative office’s (“CSI’s”) determination under that statute.

ANALYSIS

I. The action is consistent with a clearly articulated state policy.

The Dental Board’s proposed changes to the specialty recognition and advertising rules is consistent with clearly articulated state policy. The Ohio General Assembly’s stated purpose for the Dental Board as it relates to dentists is twofold: to regulate the practice of dentistry and to ensure that the practice of dentistry is safe. In order to accomplish those purposes, the legislature says that the Dental Board “shall make such reasonable rules as it determines necessary...to establish standards for the safe practice of dentistry...by qualified practitioners, and shall, through its policies and activities, promote such practice.”

Building on that foundation of ensuring and promoting the safe practice of dentistry by qualified practitioners, the legislature gives the Dental Board clear and specific authority to designate dental specialties and to prevent false and misleading advertising. Of the nine members of the Dental Board who practice of dentistry, the legislature mandated that “two shall be persons recognized as

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1 R.C. §4715.03(A).
specialists pursuant to rules adopted by the board.”2 It also gives clear authority for the Dental Board to promulgate advertising rules by allowing the Dental Board to take disciplinary action against licensees for “[a]dvertising services in a false or misleading manner or violating the board’s rules governing time, place, and manner of advertising.”3

The Dental Board’s proposed rules limit official specialty recognition to dentists who have completed post-doctoral education or hospital residency in dental public health, endodontology, oral and maxillofacial pathology and oral and maxillofacial radiology, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics, prosthodontics, dental anesthesiology, oral medicine, implant dentistry, and orofacial pain.4 A licensed dentist who meets any of those requirements may claim a specialty designation when advertising. Nonetheless, a licensed general dentist who does not meet the requirements for official specialty designation is not prohibited from advertising specialty services, as long as the advertisement includes a disclaimer statement, clarifying that the licensee’s advertised specialty does not meet the specialty recognition requirements of the Ohio State Dental Board.5 Both the educational requirements and the required advertising disclaimer guarantee the safe and qualified practice of dentistry by ensuring that dentists holding themselves out as specialists have appropriate and sufficient training and that dental service advertisements are not false or misleading for consumers.

II. The state policy is not merely a pretext for anticompetitive conduct that could be subject to state or federal antitrust law.

The policy effectuated by the Dental Board’s proposed administrative rule changes is not a pretext for anticompetitive conduct because it stops short of preventing any licensed dentist from practicing a specialty. Under continuing provisions of OAC 4715-5-04, a licensed dentist who does not meet the requirements for specialty designation is a general dentist, and all licensed general dentists, regardless of education level, are permitted to render specialty services in Ohio. They do not require additional specialized education or credentials in order to do so.6 Additionally, a licensed general dentist who does not meet the requirements for specialty designation is not even prohibited from advertising specialty services so long as the advertisement includes a prescribed disclaimer statement.

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2 R.C. §4715.02.
3 R.C. §4715.30(A)(3).
4 See proposed amendments to O.A.C. §4715-5-04(B).
5 O.A.C. §4715-13-05(C): “a dentist who is not recognized as a specialist under paragraph (B) of rule 4715-5-04 of the Administrative Code may advertise truthful certification, diplomate status or other similar credentials from a bona fide national organization which grants credentials based upon the dentist’s postgraduate education, training, and experience, and an examination based upon psychometric principles, if the following disclaimer appears in a reasonably clear and visible manner compared to the announcement of the credential: “[insert name of the organization] does not meet the specialty recognition requirements of the Ohio State Dental Board.”
6 O.A.C. §4715-5-04(A).
**Determination**

Accordingly, CSI determines that the proposed rules from the Dental Board are supported by and consistent with a clearly articulated state policy and are not a pretext for anticompetitive conduct.
a few things

From  Stuecker, Jill
To  Bruce Thorsen; Dr. Bradley; Dr. Foley; Dr. Jeneary; Dr. McBride;
     Dr. Tom Jeneary DDS; Lori Emmitt; Mary Kelly; Michael Davidson;
     Nancy Slach

Cc

Date  Wednesday, July 12, 2017 12:27 PM

20170712103958901.pdf (38 Kb html)

I have heard from several of you who have gotten phone calls from Larry. Funny that he hasn't called me.  
Regardless - a couple things:

1. Attached is the complaint that was submitted against Lily White Smiles. It's not a patient complaint. It's a hygienist reporting the venue for tooth whitening. It should have been included in board materials. It was accidentally omitted and is in your folders for tomorrow. Any assertion that board staff are attempting to hide information is offensive. The complaint is a public record for goodness sakes.

2. SmileDirect: The information submitted to us included roughly 50 patient complaints. The letter I sent to them is an attempt to get more information regarding any licensees who are engaged in this work. It's simply a letter of inquiry that took me 5 minutes to write. It's similar to letters my colleagues from other state dental boards are sending as well. It's not in any way, shape or form an investigation. If you decide you want to look into it further, we need the name of licensed dentists doing the work. We are fielding an increased number of questions regarding teledentistry and what can and cannot be done remotely. We are going to have to write rules around this and in my mind, the SmileDirect issue is directly related to that. It's a very separate and distinct issue from tooth whitening because we are talking about dentists. 

The way licensing boards are set up is that board staff make determinations all the time as to what we think we should look into further. Attempting to get more information is very different from making actual decisions. Only you, the Board, can make decisions. Some investigations we start the
minute a complaint comes in, as we attempt to anticipate what you will need to make that decision. Other things we wait on, to get more direction from you.

As always, if you need me to do something different please let me know.

See you tomorrow.

Jill Stuecker, MPA, MA | Executive Director
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

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Fwd: BuzzFeed News query: Complaint to state dental board

From: Stuecker, Jill
To: nidhi.s@buzzfeed.com

Nidhi,

Yes - a complaint was received from the American Association of Orthodontists regarding SmileDirect Club.

No - we are not investigating the company. The Iowa Dental Board only has jurisdiction over Iowa licensed dentists, hygienists and assistants.

That is all the information that I can provide to you.

Jill Stuecker, MPA, MA | Executive Director
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

Ensuring that Iowans receive professional, competent, and safe dental care of the highest quality.

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Hello, I'm a reporter at BuzzFeed News.

This is a query regarding the company SmileDirect Club.

The American Association of Orthodontists submitted a complaint to the Iowa Board of Dental Examiners in April this year, regarding SmileDirect Club's operations in the state.

- Can you confirm if this complaint was received?

- Is the Board investigating the company?

- Has the Board taken any action in relation to this complaint?

Please let me know if the Board has any other comment related to this company or complaint.

My deadline is the end of the day Wednesday.

Thanks, Nidhi (202 602 1715)

--

Nidhi Subbaraman BuzzFeed News Science reporter

C: (202) 602 1715 | M: (780) 712 7313 | Twitter: @NidhiSubs

1630 Connecticut Ave NW, 7th Floor Washington, DC 20009
What's a SmileShop?

It's your first step to getting a smile you'll love. During your visit, a SmileGuide will take a 3D scan of your current smile. And the best part is you only have to go once, and it's only 30 minutes. Bye, waiting rooms!

LET'S DO THIS.

Get started with a FREE 30-minute visit.

You'll get a free 3D scan so you can see what your new smile will look like, and a free bright on™ light and whitening pen to get you started on a smile you'll love.
SmileShop Locations

We're opening SmileShops all over this fair land. So keep an eye out for new locations.

United States

Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida

Georgia

Hawaii

Idaho

Illinois

Indiana

Iowa

Des Moines - Waukee (../smileshops/des-moines-waukee/)
9500 University Ave
West Des Moines IA 50266
Book a scan (../smileshops/des-moines-waukee/)

Iowa City - Coral Ridge Mall Pop-Up - May 13th - 15th ONLY! (../smileshops/coral-ridge-mall-pop-up/)
1451 Coral Ridge Avenue
Coralville IA 52241
Book a scan (../smileshops/coral-ridge-mall-pop-up/)

Sioux City - Southern Hills Mall Pop-Up - May 20th - 22nd ONLY! (../smileshops/sioux-city-southern-hills-mall-pop-up/)
4400 Sergeant Road
Sioux City IA 51106
Book a scan (../smileshops/sioux-city-southern-hills-mall-pop-up/)

Kansas

Kentucky

Louisiana
IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

SMILEDIRECTCLUB, LLC,

Plaintiff,

v.

GEORGIA BOARD OF DENTISTRY,

et al.,

Defendants.

CIVIL ACTION FILE
NO: 1:18-cv-02328-WMR

ORDER ON DEFENDANTS’ MOTION TO DISMISS

This matter is before the Court on Defendants’ Motion to Dismiss [Doc. 29] pursuant to Fed. R. Civ. P. 12(b)(1) and 12(b)(6), and the American Association of Orthodontists’ (“AAO”) motion for leave to file an Amicus Curiae Response Brief [Doc. 46]. AAO’s motion for leave to file an Amicus Curiae Response Brief [Doc. 46] is DENIED. After consideration of the arguments presented by the parties, the applicable law, and all appropriate matters of record, Defendants’ Motion to Dismiss [Doc. 29] is GRANTED IN PART and DENIED IN PART.

I. BACKGROUND

The averments of the Complaint show that Plaintiff SmileDirectClub, LLC (“SmileDirect”) is a dental service organization that provides services to contractually affiliated dentists in Georgia who wish to offer at-home clear teeth aligner treatment for cases of mild to moderate malocclusion, i.e. – improper
positioning of the teeth when the jaws are closed. (See Doc. 1, Complaint at ¶ 3).

In order to provide its services, SmileDirect operates various locations called SmileShops. A patient who wishes to receive at-home teeth alignment treatment would visit a SmileShop, where trained technicians would take digital scans and photos of the patient’s teeth and gums. The digital scans and photos are sent to the SmileDirect lab, where they are used to create a 3D model of the patient’s mouth, which, along with the digital scans and pictures, are provided to a Georgia-licensed dentist or orthodontist at another location for review and evaluation. The dentist or orthodontist then identifies any periodontal disease, cavities, or any other oral conditions that requires further investigation or which would prevent the patient from being a candidate for SmileDirect’s clear aligners. (See Doc. 1, Complaint at ¶¶ 24-28). If the dentist or orthodontist determines that the patient may be appropriately treated with SmileDirect’s clear aligners, then such professional will approve a patient-specific treatment plan for the patient. The treatment plan is shared with the patient online through SmileDirect’s website portal. If the patient is satisfied with the treatment plan and elects to move forward with treatment, the dentist or orthodontist will write a prescription for the clear aligners. Throughout the treatment process, the licensed dentist or orthodontist maintains sole responsibility for all clinical decisions and all aspects of the patient’s care. (See Doc. 1, Complaint at ¶¶ 29-30).
The Complaint further avers that, through the use of SmileShops and its web-based platform, SmileDirect has been able to reduce drastically the cost of expensive aligner treatment and increase access to aligner treatment for many unreached segments of the population, all while ensuring that patients receive alignment treatment that is approved of and closely monitored by Georgia-licensed dentists and orthodontists. (See Doc. 1, Complaint at ¶ 32).

Against this backdrop of consumers having less expensive treatment options for straightening their teeth, the Georgia Board of Dentistry voted to amend Georgia Board of Dentistry Rule 150-9-.02 to add, *inter alia*, a subparagraph (3)(aa) which expands the duties of “dental assistants” to require that digital scans taken for the purpose of fabricating orthodontic appliances and models to be made under the direct supervision of a licensed dentist. SmileDirect contends that the amendment would preclude its technicians from taking the same type of digital scans at its SmileShop locations, where a dentist is not physically present, and later providing those scans and resulting 3D models to a Georgia-licensed dentist or orthodontist located offsite for evaluation and review. (See Doc. 1, Complaint at ¶¶ 34-38, and ¶58). SmileDirect alleges that the adoption of subparagraph (3)(aa) makes it virtually impossible for SmileDirect, and its affiliated Georgia-licensed dentists and orthodontists, lawfully to conduct business in Georgia without making costly and
prohibitive changes to SmileDirect’s current business model. (See Doc. 1, Complaint at ¶ 43, and ¶ 58).

Accordingly, SmileDirect filed the instant lawsuit against the Georgia Board of Dentistry seeking a declaratory judgment that SmileDirect’s practice of providing digital scan services to its affiliated dentists or orthodontists pursuant to the protocol described above does not constitute the practice of dentistry or dental hygiene within the meaning of O.C.G.A. §§ 43-11-1(6), 43-11-17(a), and 43-11-74, and is, therefore, outside the regulatory jurisdiction of the Georgia Board of Dentistry. (See Doc. 1, Complaint at ¶¶ 82-88). SmileDirect further asserts claims against the Georgia Board of Dentistry and its members (collectively, the “Defendants”) seeking injunctive relief and damages for violations of 15 U.S.C §1, the Fourteenth Amendment, and 42 U.S.C. § 1983. (See Doc. 1, Complaint at ¶¶ 90-113). The Defendants have moved to dismiss the Complaint pursuant to Fed. R. Civ. P. 12(b)(1) and 12(b)(6). II. LEGAL STANDARD

“To survive a motion to dismiss [under Rule 12 (b)(6)], a complaint need only present sufficient facts, accepted as true, to ‘state a claim to relief that is plausible on its face.’” Renfroe v. Nationstar Mortg., LLC, 822 F.3d 1241, 1243-1244 (11th Cir. 2016) (quoting Bell Atl. Corp. v. Twombly, 550 U.S. 544, 556 (2007)). “The complaint must ‘raise a right to relief above the speculative level,’ but it need not contain ‘detailed factual allegations.’” Renfroe, 822 F3d at 1244 (quoting Twombly,
550 U.S. at 555). If the court determines that well-pleaded facts, accepted as true, do not state a claim that is plausible, the claims must be dismissed. Twombly, 550 U.S. at 570. “When a defendant properly challenges subject matter jurisdiction under Rule 12(b)(1), however, the district court is free to independently weigh facts[.]” Turcios v. Delicias Hispanas Corp., 275 Fed. Appx. 879, 880 (11th Cir. 2008).

III. ANALYSIS

A. Claim for declaratory relief (Count I).

SmileDirect seeks a declaratory judgment that SmileDirect’s acts of providing digital scan services to its affiliated dentists or orthodontists does not constitute the practice of dentistry or dental hygiene within the meaning of O.C.G.A. §§ 43-11-1(6), 43-11-17(a), and 43-11-74, and is, therefore, outside the regulatory jurisdiction of the Georgia Board of Dentistry. SmileDirect’s claim is incorrect.

Georgia’s General Assembly, in enacting the Dental Practice Act, has given the Georgia Board of Dentistry significant authority to regulate the practice of dentistry. See O.C.G.A. § 43-11-7. Furthermore, O.C.G.A. § 43-11-1(6) defines “dentistry” as “the evaluation, diagnosis, prevention, or treatment . . . , whether using surgical or non-surgical procedures, of diseases, disorders, or conditions . . . of the oral cavity, maxillofacial area, or the adjacent and associated structures . . .
including, but not limited to, the acts specified in Code Section 43-11-17.” O.C.G.A. § 43-11-17, in turn, sets out a non-exclusive list of acts that constitute prima-facie evidence of the practice of dentistry. Among those acts are the examination of “any human oral cavity, teeth, gingiva . . . or associated structures or [taking] an impression for the purpose of diagnosing, treating, or operating upon the same[,]” O.C.G.A. § 43-11-17(a)(5), and any “attempts to correct a malposition” of the teeth (such as through the use of orthodontic appliances), O.C.G.A. § 43-11-17(a)(2).

Here, SmileDirect’s acts of taking digital scans of a patient’s mouth for the purpose of having a dentist or orthodontist approve of a treatment plan for correcting a malposition of the patient’s teeth falls squarely within the definition of the practice of dentistry as set forth in O.C.G.A. § 43-11-1(6) and O.C.G.A. § 43-11-17(a)(2) and (a)(5). Accordingly, SmileDirect has failed to state a plausible claim for declaratory relief, and the Defendant’s Motion to Dismiss [Doc. 29] is GRANTED as to Count I of the Complaint.

B. Claims for violations of 15 U.S.C §1, the Fourteenth Amendment and 42 U.S.C. § 1983 (Counts II-IV).

1. Sovereign Immunity

As a threshold matter, the Georgia Board of Dentistry argues that it is entitled to sovereign immunity under the Eleventh Circuit’s decision in Versiglio v. Bd. of Dental Examiners of Alabama, 686 F.3d 1290 (11th Cir. 2012). This Court agrees.
The Georgia Board of Dentistry is protected by sovereign immunity because it was acting as an arm of the State when it engaged in the function at issue here—rulemaking. In Manders v. Lee, 338 F.3d 1304 (11th Cir. 2003), the Eleventh Circuit set out four factors to determine whether an entity is an arm of the State: “(1) how state law defines the entity; (2) what degree of control the state maintains . . . ; (3) where the entity derives its funds; and (4) who is responsible for judgments against the entity.” Id. at 1309. Each factor weighs in favor of sovereign immunity here:


- The State maintains some control over the Board. The Governor appoints (and may remove) the Board Members. O.C.G.A. §§ 43-11-2, 43-1-14, 43-1-17. Georgia’s Senate confirms all appointments. O.C.G.A § 43-1-16. And the Board’s rules are approved by the Governor. O.C.G.A § 43-1C-3.

- The Board is funded through state appropriations. See, e.g., Ga. House of Representatives, Budget & Research Office, General Appropriations Act, https://tinyurl.com/yb7u5snj. Further, licensing fees collected by the Board are remitted to the state treasury. O.C.G.A. § 43-1-3(a)(6).

- Georgia’s Law Department is defending Defendants in this case.

In addition, Georgia’s Court of Appeals has held that the Board is entitled to sovereign immunity. See Georgia State Bd. of Dental Examiners v. Daniels, 137 Ga.
App. 706, 707 (1976). This Court should give “great deference” to that court’s view. Versiglio, 686 F.3d at 1292.

As the Georgia Board of Dentistry is an arm of the State, SmileDirect’s claims against the Board itself are barred by sovereign immunity and must therefore be DISMISSED.

However, SmileDirect’s federal antitrust and constitutional claims may proceed against the Board members in their official capacities. Although Eleventh Amendment ordinarily bars claims filed against state officials (sued in their official capacity) seeking retrospective or compensatory relief, see Pennhurst State Sch. & Hosp. v. Halderman, 465 U.S. 89, 101 (1984), the United States Supreme Court has recognized an important exception to Eleventh Amendment immunity with regard to state officials. Under the doctrine of Ex parte Young, 209 U.S. 123 (1908), the Eleventh Amendment does not bar suits which seek prospective relief against state officials to prevent them from violating federal law. See Pennhurst at 102; see also Summit Med. Assocs., P.C. v. Pryor, 180 F.3d 1326, 1336-37 (11th Cir. 1999).

“In determining whether the doctrine of Ex parte Young avoids an Eleventh Amendment bar to suit, a court need only conduct a straightforward inquiry into whether the complaint alleges an ongoing violation of federal law and seeks relief properly characterized as prospective.” Verizon Maryland, Inc. v. Pub. Serv. Comm’n of Maryland, 535 U.S. 635, 645 (2002) (internal quotation marks omitted).
The bulk of SmileDirect’s Complaint (Doc. 1) satisfies that standard. However, in portions of the Complaint, SmileDirect seeks to recover damages for the injuries it has sustained as a result of the amended Rule. To the extent that Smile Direct seeks to recover damages in Counts II-IV for any injuries it has sustained, those portions of the claims do not satisfy the exception of Ex parte Young and are, thus, barred by sovereign immunity. Accordingly, the motion to dismiss is GRANTED as to the portions of the claims in Counts II-IV that seek compensatory damages from the Board members.

To the extent that the Counts II-IV seek an injunction restraining the Board members from prospective enforcement of the amended Rule in contravention of controlling federal law, specifically, various provisions of the U.S. Constitution and the Sherman Antitrust Act, those portions of the claims in Counts II-IV may proceed against the Board members. It is well settled that a plaintiff may properly assert claims for prospective injunctive relief against state officials alleged to be violating federal law. See Verizon Maryland, 535 U.S. at 645-646. Moreover, prospective relief is equally available whether the law that state officials are allegedly violating is a federal statute (like the Sherman Act) or the Constitution. See id. (permitting suit for prospective relief against state officials alleged to be violating a federal statute and administrative order); Doe 1-13 By & Through Doe, Sr. 1-13 v. Chiles, 136 F.3d 709, 720-21 (11th Cir. 1998) (affirming prospective injunctive relief forbidding state
officials from continuing to violate a federal statute); *Edelman v. Jordan*, 415 U.S. 651, 664 (1974) (explaining that *Ex parte Young* permits suits to enjoin state officials from prospectively violating the Constitution).

Here, SmileDirect seeks injunctive relief to prevent the future enforcement of Rule 150-9-.02(3)(aa), which Smile Direct alleges is in violation of federal statutory and constitutional law. (See Doc. 1, Complaint at ¶¶ 90-113; see also Complaint at p. 36, Prayer for Relief). To the extent that Counts II-IV seeks prospective injunctive relief, the Court holds that SmileDirect’s claims against the Board members fall squarely within the *Ex parte Young* exception to Eleventh Amendment immunity.

2. **Sherman Antitrust Claim (Count II)**


   Here, the Complaint asserts that there is evidence of concerted action on the part of the Board members: “the Defendants have agreed and acted upon a policy of excluding non-dentists from providing digital scans without the direct supervision
of dentists, thereby harming competition in the Relevant Market. This agreement among Defendants is expressly stated in Subparagraph (aa) of Rule 150-9-.02(3).” (See Doc. 1, Complaint at ¶ 91). The Complaint further alleges that Defendants’ concerted action unreasonably restrains trade by “depriv[ing] dentists that utilize a new, more efficient method of competition of a fair opportunity to compete in the Relevant Market . . . [and] reduc[ing] the number of providers of aligner treatment in Georgia and the output of such services.” (See Doc. 1, Complaint at ¶ 98; see also id. at ¶¶ 49-52, 89-99).

These allegations are sufficient to plausibly allege concerted action. See N.C. State Bd. of Dental Exam’rs v. FTC, 717 F.3d 359, 373 (4th Cir. 2013) (direct evidence of concerted action where “the Board discussed teeth whitening services provided by non-dentists and then voted to take action to restrict those services”), aff’d, 135 S. Ct. 1101 (2015). Allegations of express agreement “require[] no inferences to establish the proposition or conclusion being asserted.” In re Ins. Brokerage Antitrust Litig., 618 F.3d 300, 324, n.23 (3d Cir. 2010). While SmileDirect ultimately may not be able to prove concerted action to unreasonably restrained trade, the Complaint is sufficient to survive the motion to dismiss as it relates to the Board members.

The Board member defendants also contend that the antitrust claim should be dismissed because they are entitled to state-action immunity from the Sherman Act
claim under *Parker v. Brown*, 317 U.S. 341 (1943) and its progeny. However, the United States Supreme Court clearly has held that “a state board on which a controlling number of decisionmakers are active market participants in the occupation the board regulates must satisfy certain requirements in order to invoke state-action antitrust immunity.” *N.C. State Bd. of Dental Exam’rs v. FTC*, 135 S. Ct. 1101, 1114 (2015). Because the Complaint alleges that a majority of the Board members are active market participants (dentists), Defendants must show “first that ‘the challenged restraint … be one clearly articulated and affirmatively expressed as state policy,’ and second that ‘the policy . . . be actively supervised by the State.’” *Id.* at 1110 (quoting *California Retail Liquor Dealers Ass’n v. Midcal Aluminum, Inc.*, 445 U.S. 97, 105 (1980)).

Considering the specific facts alleged in the Complaint at the motion to dismiss stage, Defendants have not satisfied the active supervision requirement. Although Defendants have provided a “Certification of Active Supervision” signed by the Governor which approves the amendment to Rule 150-9-.02 (*See Doc. 29-2*), SmileDirect alleges in its Complaint that the Board “fail[ed] to fully advise the Governor of the reasons for its actions and the objections to its actions,” that “the Board’s official minutes fail to provide a full and complete summary of objections to the Board’s action expressed during official Board meetings,” and that the Board failed to inform the Governor of the consumer impact of the amendment or disclosed
the conflicts of interest. (See Doc. 1, Complaint at ¶ 45). Thus, the Complaint reveals a well-pleaded factual dispute that is not resolved by the Certification of Active Supervision. Only discovery will determine whether the Board provided all relevant information to the Governor, whether the proposed amendment was subjected to any meaningful review by the Governor, or whether the Certification of Active Supervision was merely “rubberstamped” as a matter of course. See Patrick v. Burget, 486 U.S. 94, 101 (1988) (“[t]he mere presence of some state involvement or monitoring does not suffice” to meet the active supervision requirement).¹

Accordingly, the Court finds that a definitive ruling on Parker immunity would be premature at this stage, that SmileDirect’s Sherman Act antitrust claim, as pleaded, is sufficient to survive a Rule 12(b)(6) motion to dismiss on Parker immunity grounds, and that further factual development is required to determine whether the Board members are entitled to Parker immunity. The Board members may therefore raise the Parker immunity defense at a later stage in this litigation, such as in a motion for summary judgment, if appropriate.

¹ The Court also rejects Defendants’ contention that the intra-corporate immunity doctrine applies. “The relevant inquiry” is whether Defendants are “separate economic actors pursuing separate economic interests, such that the agreement deprives the marketplace of independent centers of decision making ... and thus of actual or potential competition.” Am. Needle, Inc. v. Nat'l Football League, 560 U.S. 183, 195 (2010) (citations and quotation marks omitted). The Complaint plausibly alleges that the majority of Defendants are actual or potential competitors to SmileDirect (see Doc. 1, Complaint at ¶¶ 4-14), and there is no basis to ignore this factual allegation at the pleading stage. See N.C. State Board, 717 F.3d at 371-72 (practicing dentists on Board were “actual or potential competitors” with “the capacity to conspire”).
3. Constitutional Claims — Equal Protection (Count III) and Substantive Due Process (Count IV)

SmileDirect’s constitutional claims are subject to rational-basis review, which asks “(1) whether the government has the power or authority to regulate the particular area in question, and (2) whether there is a rational relationship between the government’s objective and the means it has chosen to achieve it.” Blue Kendall, LLC v. Miami Dade County, 816 F.3d 1343, 1351 (11th Cir. 2016).

SmileDirect alleges that subparagraph (3)(aa) of the Rule creates an arbitrary distinction between persons or entities who offer digital scans by technicians (such as SmileDirect) and those who offer digital scans by expanded duty dental assistants acting under the direct supervision of a licensed dentist or orthodontist. (See Doc. 1, Complaint at ¶ 102). While Defendants contend that the Rule promotes health and safety, the Complaint alleges that digital scans present no health or safety risk to a customer — pointing out that SmileDirect has performed hundreds of thousands of scans nationwide without a single complaint of an adverse patient outcome and that there is no known evidence that digital scans taken under the “direct supervision” of a licensed dentist or orthodontist are safer or more accurate than SmileDirect’s scans. (See Doc. 1, Complaint at ¶¶ 41, 61, 71). While Defendants may disagree with the Complaint’s factual allegations, this dispute cannot be resolved at the motion-to-dismiss stage. Construing the facts most favorably to
SmileDirect, the Court concludes that the Complaint adequately sets forth a plausible equal protection claim.

SDC also alleges that the Rule deprives it of liberty and property interests by imposing restrictions on its ability to offer digital scans that are not rationally related to any legitimate governmental interest. (See Doc. 1, Complaint at ¶ 110). The Court notes that “protecting a discrete interest group from economic competition is not a legitimate governmental purpose.” Craigmiles v. Giles, 312 F.3d 220, 224 (6th Cir. 2002). Here, SmileDirect alleges that the Rule “is merely designed to protect the business interests of traditional orthodontic practices” and that any purported health benefits are purely pretextual. (See Doc. 1, Complaint at ¶¶ 52, 58, 65-71). These allegations are sufficient to state a viable due process claim.

IV. CONCLUSION

For the reasons stated above, IT IS HEREBY ORDERED as follows:

• AAO’s motion for leave to file an Amicus Curiae Response Brief [Doc. 46] is DENIED;

• Defendants’ Motion to Dismiss [Doc. 29] is GRANTED with respect to SmileDirect’s declaratory judgment claim in Count I of the Complaint;

• Defendants’ Motion to Dismiss [Doc. 29] is GRANTED with respect to the claims against Defendant Georgia Board of Dentistry in Counts II-IV for lack of subject matter jurisdiction, and said claims are DISMISSED
WITHOUT PREJUDICE. The Clerk of Court is DIRECTED to
terminate Defendant Georgia Board of Dentistry in its docket; and

- Defendants’ Motion to Dismiss [Doc. 29] is **DENIED** with respect to the
  claims in Counts II-IV against the Board member defendants.

**IT IS SO ORDERED** this 8th day of May, 2019.

WILLIAM M. RAY, II
United States District Judge
Northern District of Georgia
02. **Patient’s Condition Monitored Until Discharge.** The qualified anesthesia provider who induces anesthesia shall monitor the patient’s condition until the patient is discharged and record the patient’s condition at discharge in the patient’s dental record as required by the rules applicable to the level of anesthesia being induced. The anesthesia record shall be maintained in the patient’s dental record and is the responsibility of the dentist who is performing the dental procedures.

03. **Use of Services of a Qualified Anesthesia Provider.** A dentist who intends to use the services of a qualified anesthesia provider shall notify the Board in writing of his intent. Such notification need only be submitted once every licensing period.

04. **Advertising.** A dentist who intends to use the services of a qualified anesthesia provider may advertise the service provided so long as each such advertisement contains a prominent disclaimer that the service “will be provided by a qualified anesthesia provider.”

063. **INCIDENT REPORTING (RUL 63).**

Dentists shall report to the Board, in writing, within seven (7) days after the death or transport to a hospital or emergency center for medical treatment for a period exceeding twenty-four (24) hours of any patient to whom sedation was administered.

064. **SUSPENSION, REVOCATION OR RESTRICTION OF ANESTHESIA PERMIT (RUL 64).**

The Board may, at any time and for just cause, institute proceedings to revoke, suspend, or otherwise restrict an anesthesia permit issued pursuant to Sections 060 and 061 of these rules. If the Board determines that emergency action is necessary to protect the public, summary suspension may be ordered pending further proceedings. Proceedings to suspend, revoke or restrict a permit shall be subject to applicable statutes and rules governing administrative procedures before the Board.

065. **DETERMINATION OF DEGREE OF SEDATION BY THE BOARD (RUL 65).**

In any matter under review or in any proceeding being conducted in which the Board must determine the degree of central nervous system depression, the Board may base its findings or conclusions on, among other matters, the type, and dosages, and routes of administration of drugs administered to the patient and what result can reasonably be expected from those drugs in those dosages and routes administered in a patient of that physical and psychological status.

066. **TELEHEALTH SERVICES (RUL 66).**

Definitions applicable to these rules are those definitions set forth in the Idaho Telehealth Access Act and in Section 54-5703, Idaho Code.

01. **Licensure and Location.** Any dentist or dental hygienist who provides any telehealth services to patients located in Idaho must hold an active Idaho license issued by the Idaho State Board of Dentistry for their applicable practice. Dentists who provide any telehealth services must physically practice within seventy-five (75) miles of the patient’s location.

02. **Additional Requirements.** In addition to the requirements set forth in Section 54-5705, Idaho Code, during the first contact with the patient, a provider licensed by the Idaho State Board of Dentistry who is providing telehealth services shall:

   a. Verify the location and identity of the patient;

   b. Disclose to the patient the provider’s identity, their current location and telephone number and Idaho license number; and

   c. Obtain appropriate consents from the patient after disclosures regarding the delivery models and treatment methods or limitations, including a special informed consent regarding the use of telehealth technologies.

03. **Standard of Care.** A provider providing telehealth services to patients located in Idaho must
comply with the applicable Idaho community standard of care. The provider shall be personally responsible to familiarize themselves with the applicable Idaho community standard of care. If a patient’s presenting symptoms and conditions require a physical examination in order to make a diagnosis, the provider shall not provide diagnosis or treatment through telehealth services unless or until such information is obtained.  

04. **Informed Consent.** In addition to the requirements of Section 54-5708, Idaho Code, evidence documenting appropriate patient informed consent for the use of telehealth technologies must be obtained and maintained at regular intervals consistent with the community standard of care. Appropriate informed consent should, at a minimum, include the following terms:

a. Verification. Identification of the patient, the provider and the provider’s credentials;  

b. Telehealth Determination. Agreement of the patient that the provider will determine whether or not the condition being diagnosed and/or treated is appropriate for telehealth services;  

c. Security Measures Information. Information on the security measures taken with the use of telehealth technologies, such as encrypting data, password protected screen savers and data files, or utilizing other reliable authentication techniques, as well as potential risks to privacy and notwithstanding such measures;  

d. Potential Information Loss. Disclosure that information may be lost due to technical failures.  

067. -- 999. **(RESERVED)**
61-5A-4. Scope of practice. (Repealed effective July 1, 2024.)

A. As used in the Dental Health Care Act, "practice of dentistry" means:

(1) the diagnosis, treatment, correction, change, relief, prevention, prescription of remedy, surgical operation and adjunctive treatment for any disease, pain, deformity, deficiency, injury, defect, lesion or physical condition involving both the functional and aesthetic aspects of the teeth, gingivae, jaws and adjacent hard and soft tissue of the oral and maxillofacial regions, including the prescription or administration of any drug, medicine, biologic, apparatus, brace, anesthetic or other therapeutic or diagnostic substance or technique by an individual or the individual's agent or employee gratuitously or for any fee, reward, emolument or any other form of compensation whether direct or indirect;

(2) representation of an ability or willingness to do any act mentioned in Paragraph (1) of this subsection;

(3) the review of dental insurance claims for therapeutic appropriateness of treatment, including but not limited to the interpretation of radiographs, photographs, models, periodontal records and narratives;

(4) the offering of advice or authoritative comment regarding the appropriateness of dental therapies, the need for recommended treatment or the efficacy of specific treatment modalities for other than the purpose of consultation to another dentist; or

(5) with specific reference to the teeth, gingivae, jaws or adjacent hard or soft tissues of the oral and maxillofacial region in living persons, to propose, agree or attempt to do or make an examination or give an estimate of cost with intent to, or undertaking to:

(a) perform a physical evaluation of a patient in an office or in a hospital, clinic or other medical or dental facility prior to, incident to and appropriate to the performance of any dental services or oral or maxillofacial surgery;

(b) perform surgery, an extraction or any other operation or to administer an anesthetic in connection therewith;

(c) diagnose or treat a condition, disease, pain, deformity, deficiency, injury, lesion or other physical condition;

(d) correct a malposition;

(e) treat a fracture;

(f) remove calcareous deposits;

(g) replace missing anatomy with an artificial substitute;

(h) construct, make, furnish, supply, reproduce, alter or repair an artificial substitute or restorative or corrective appliance or place an artificial substitute or restorative or corrective appliance in the mouth or attempt to adjust it;

(i) give interpretations or readings of dental radiographs;

(j) provide limited diagnostic and treatment planning via teledentistry; or

(k) do any other remedial, corrective or restorative work.

B. As used in the Dental Health Care Act, "the practice of dental hygiene" means the application of the science of the prevention and treatment of oral disease through the provision of educational, assessment, preventive, clinical and other therapeutic services under the general supervision of a dentist. A dental hygienist in a collaborative practice may perform the procedures listed in this section without general supervision while the hygienist is in a cooperative working relationship with a consulting dentist, pursuant to rules promulgated by the board and the committee. "The practice of dental hygiene" includes:

(1) prophylaxis, which is the removal of plaque, calculus and stains from the tooth structures as a means to control local irritational factors;

(2) removing diseased crevicular tissue and related nonsurgical periodontal procedures;
(3) except in cases where a tooth exhibits cavitation of the enamel surface, assessing without a dentist's evaluation whether the application of pit and fissure sealants is indicated;

(4) except in cases where a tooth exhibits cavitation of the enamel surface, applying pit and fissure sealants without mechanical alteration of the tooth;

(5) applying fluorides and other topical therapeutic and preventive agents;

(6) exposing and assessing oral radiographs for abnormalities;

(7) screening to identify indications of oral abnormalities;

(8) performing dental hygiene-focused assessments;

(9) assessing periodontal conditions; and

(10) such other closely related services as permitted by the rules of the committee and the board.

C. In addition to performing dental hygiene as defined in Subsection B of this section, a dental hygienist may apply preventive topical fluorides and remineralization agents without supervision in public and community medical facilities, schools, hospitals, long-term care facilities and such other settings as the committee may determine by rule ratified by the board, so long as the dental hygienist's license is not restricted pursuant to the Impaired Dentists and Dental Hygienists Act [61-5B-1 to 61-5B-11 NMSA 1978].

D. In addition to performing dental hygiene as defined in Subsection B of this section, dental hygienists who have met the criteria as the committee shall establish and the board shall ratify may administer local anesthesia under indirect supervision of a dentist.

E. The board may certify a dental hygienist to administer local anesthetic under the general supervision of a dentist if the dental hygienist, in addition to performing dental hygiene as defined in Subsection B of this section:

(1) has administered local anesthesia under the indirect supervision of a dentist for at least two years, during which time the dental hygienist has competently administered at least twenty cases of local anesthesia and can document this with a signed affirmation by the supervising dentist;

(2) administers local anesthetic under the written prescription or order of a dentist; and

(3) emergency medical services are available in accordance with rules promulgated by the board.

F. A dental hygienist:

(1) may prescribe, administer and dispense a fluoride supplement, topically applied fluoride or topically applied antimicrobial only when the prescribing, administering or dispensing is performed:

(a) under the supervision of a dentist;

(b) pursuant to rules the board and the committee have adopted;

(c) within the parameters of a drug formulary approved by the board in consultation with the board of pharmacy;

(d) within the parameters of guidelines established pursuant to Section 61-5A-10 NMSA 1978; and

(e) in compliance with state laws concerning prescription packaging, labeling and recordkeeping requirements; and

(2) shall not otherwise dispense dangerous drugs or controlled substances.

G. A New Mexico licensed dental hygienist may be certified for collaborative dental hygiene practice in accordance with the educational and experience criteria established collaboratively by the committee and the board.

H. An expanded-function dental auxiliary may perform the following procedures under the direct supervision of a dentist:

(1) placing and shaping direct restorations;

(2) taking final impressions, excluding those for fixed or removable prosthetics involving multiple teeth;
(3) cementing indirect and provisional restorations for temporary use;
(4) applying pit and fissure sealants without mechanical alteration of the tooth;
(5) placing temporary and sedative restorative material in hand-excavated carious lesions and unprepared tooth fractures;
(6) removal of orthodontic bracket cement; and
(7) fitting and shaping of stainless steel crowns to be cemented by a dentist.

I. An expanded-function dental auxiliary may re-cement temporary or permanent crowns with temporary cement under the general supervision of a dentist in a situation that a dentist deems to be an emergency.

J. An expanded-function dental auxiliary may perform other related functions for which the expanded-function dental auxiliary meets the training and educational standards established by the board and that are not expressly prohibited by the board.

K. For the purpose of this section, "collaborative dental hygiene practice" means the application of the science of the prevention and treatment of oral disease through the provision of educational, assessment, preventive, clinical and other therapeutic services as specified in Subsection B of this section in a cooperative working relationship with a consulting dentist, but without general supervision as set forth by the rules established and approved by both the board and the committee.

Chapter 0460-03
Rules Governing the Practice of Dental Hygienists

Amendment

Rule 0460-03-.12 Administration of Local Anesthesia Certification is amended by deleting subparagraph (2)(b) in its entirety.


Chapter 0460-01
General Rules

0460-01-.19 New Rule
Teledentistry

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0460-01-.19 Teledentistry

Rule 0460-01-.19 Teledentistry

0460-02-.19 Teledentistry. No person shall engage in the practice of dentistry, either in person or remotely using information transmitted electronically or through other means, on a patient within the state of Tennessee unless duly licensed by the Board in accordance with the provisions of the current statutes and rules. Teledentistry shall not alter or amend the supervision requirements or procedures that are authorized for licensed dental hygienists or registered dental assistants as stated by T.C.A §63-5-115. This rule is not intended to and does not supersede any pre-existing federal or state statutes or rules and is not meant to alter or amend the applicable standard of care in any particular field of dentistry or to amend any requirement for the establishment of a physical, in-person dentist-patient relationship.

(1) Treatment and the Practice of Teledentistry

(a) A teledentistry encounter entails the rendering of a documented dental opinion concerning evaluation, diagnosis, and/or treatment of a patient whether the dentist is physically present in the same room or in a remote location within the state or across state lines.

(b) Teledentistry as practiced under T.C.A §63-5-108 (b) (16) is not an audio only telephone conversation, email/instant messaging conversation or fax. At a minimum it is to include the application of secure video conferencing or store-and-forward technology to provide or support dental care delivery by replicating the interaction of a traditional encounter between a provider
and a patient.

(c) If the information transmitted through electronic or other means as part of a patient's encounter is not of sufficient quality or does not contain adequate information for the dentist to form an opinion, the dentist must declare they cannot form an opinion to make an adequate diagnosis and must request direct referral for inspection and actual physical examination, request additional data or recommend the patient be evaluated by the patient's primary dentist or other local oral health care provider.

(d) No patient seeking care via teledentistry who is under the age of eighteen (18) years of age can be treated unless there is a parent or guardian present, except as otherwise authorized by law.

(2) Dental Records and Informed Consent when Practicing Teledentistry

(a) For patient encounters conducted by teledentistry, the dentist should have appropriate patient records or be able to obtain the patient's prior treatment information during the teledentistry encounter.

(b) Secure electronic records of the patient are to be kept at all locations where the patient is seen physically and at the location where the dentist is if the dentist is not present at the time of the visit. Dental records established for the purposes of teledentistry must contain the same information as required by Rule 0460-02-.12.

(c) Store-and-forward technology as used in (1)(c) above is the use of asynchronous electronic communications between a patient and dentist at a distant site for the purpose of diagnostic and therapeutic assistance in the care of patients including the transferring of dental data from one site to another through the use of a device that records or stores images that are sent or forwarded via electronic communication to another site for consultation.

(d) The dentist engaging in teledentistry is responsible for ensuring that the dental record contains all pertinent data and information gleaned from the encounter. Any dentist conducting a patient encounter via teledentistry must document by an informed consent form which is to be added in the patient record and must state the technology used.

(e) Informed consent forms are to be signed by the patient or parent/guardian describing the information to be transmitted and/or shared with a dentist who is at a different geographical location.

(f) The dentist that is performing teledentistry services must disclose via public website his or her name, license number, telephone number, address and education to the public who may be using or interested in their teledentistry services.

(3) Supervision

(a) Patient encounter with hygienist — Any licensed dental hygienist who assists the dentist in providing dental health services or care using teledentistry is only authorized to perform those services that the dental hygienist is authorized to perform during an in-person patient encounter under general supervision as defined by T.C.A §53-5-108 (c)(5).

Pursuant to ACT 203 of 2017 the following are requirements for all services provided by Dentist using Tele Dentistry:

1. For the purpose of this regulation, a proper Dentist/patient relationship is deemed to exist in the following situations:

   a. Perform an “in person” dental examination to include a thorough evaluation and recording of the extraoral and intraoral hard and soft tissues. It shall also include the evaluation for oral cancer where indicated and the evaluation and recording of the patient's dental and medical history and a general health assessment. It may include the evaluation and recording of dental caries, missing or unerupted teeth, restoration, existing prostheses, occlusal relationships, periodontal conditions (including periodontal screening and/ or charting), hard and soft tissue anomalies, etc.

   b. When treatment is provided In consultation with, or upon referral by, another Dentist who has an ongoing relationship with the patient, and who has agreed to supervise the patient's treatment, including follow up care and the use of any prescribed medications.

   c. On-call or cross-coverage situations arranged by the patient's treating Dentist

   d. The Dentist personally knows the patient and the patient's general health status through an “ongoing” personal or professional relationship.

2. A Dentist/patient relationship must be established before the delivery of services via Tele Dentistry. A patient completing a medical history online and forwarding it to a Dentist is NOT sufficient to establish the relationship, nor does it qualify as store- and -forward technology.

3. The following requirements apply to all services provided by Dentists using Tele Dentistry:

   a. The practice of Dentistry via Tele Dentistry shall be held to the same standards of care as traditional in-person encounters.
b. The Dentist must obtain a detailed explanation of the patient's complaint from the patient or the patient's treating Dentist.

c. If a decision is made to provide treatment, the Dentist must agree to accept responsibility for the care of the patient.

d. If follow-up care is indicated, the Dentist must agree to provide or arrange for such follow-up care.

e. A Dentist using tele Dentistry may NOT issue a prescription for any controlled substances defined as any scheduled medication under schedules II through V unless the Dentist has seen the patient for an in-person exam or unless a relationship exists through consultation or referral; on-call or cross-coverage situations; or through an ongoing personal or professional relationship.

f. The Dentist must keep a documented Dental patient record, including Dental history.

g. At the patient's request, the Dentist must make available to the patient an electronic or hardcopy version of the patient's Dental record documenting the encounter. Additional, unless the patient declines to consent, the Dentist must forward a copy of the record of the encounter to the patient's regular treating Dentist if that Dentist is not the same one delivering the service via Tele Dentistry.

h. Services must be delivered in a transparent manner, including providing access to information identifying the Dentist in advancement of the encounter, with licensure and board certifications, as well as financial responsibilities.

i. If the patient, at the recommendation of the Dentist, needs to be seen in person for their current Dental issue, the Dentist must arrange to see the patient in person or direct the patient to their regular treating Dentist or other appropriate provider if the patient doesn't have a treating Dentist. Such recommendations shall be documented in the patient's Dental record.

j. Dentist who deliver services through Tele Dentistry must establish protocols for referrals for emergencies services.

k. All Dentist providing care via Tele Dentistry to a patient located within the State of Arkansas shall be licensed to practice Dentistry in the State of Arkansas.

Credits

Current with amendments received through April 30, 2019.

Ark. Admin. Code 038.00.1-XXI, AR ADC 038.00.1-XXI
Issues to consider re: proposed teledentistry rules

Lawrence, Trey <tlawrence@aaortho.org> Mon, Nov 12, 2018 at 2:12 PM
To: "steven.garrison@iowa.gov" <steven.garrison@iowa.gov>
Cc: "Murphy, Sean" <smurphy@aaortho.org>, "Hartwig, Gianna" <ghartwig@aaortho.org>

Mr. Garrison,

As we discussed previously last week by phone, it is my understanding that at the regular meeting of the Iowa Dental Board on November 16, 2018, the Rules Committee will be providing the following draft rules on teledentistry to the Board, with discussion of whether the Board wishes to proceed with notice and comment on the draft rules. Thank you again for providing a copy of the draft rules to review. I am writing to provide some questions and issues that you and the Board may want to consider in connection with the draft rules.

650-27.12(1) Definitions: The Board may want to consider including among the defined terms a definition of “teledentistry provider” that would include all possible doctors, professionals or companies operating under this section, and give the Board authority over them. Such a definition could, for instance, define “teledentistry provider” as “any individual or corporate entity that provides teledentistry services to patients within the state of Iowa, over which the Board has rulemaking and investigatory authority.”

650-27.12(3)—The Board might want to consider clarifying that a dentist may utilize teledentistry to provide dental care to patients located in Iowa in accordance with this rule and in accordance with the other laws of the state of Iowa. Also, the Board may also want to consider clarifying that a dentist providing teledentistry services to an Iowa resident must be licensed both in Iowa and in the state where the dentist is providing services (i.e., the state where the dentist is physically located while providing teledentistry services).

650-27.12(5)—The current draft of the rule states that calibration training “shall include communication and data sharing to ensure the use of teledentistry technologies allows the dentist to provide diagnoses and treatment planning with comparable efficacy to diagnosis and treatment planning provided at an in-person examination.” (emphasis added). The Board may want to consider removing the references to “diagnoses and treatment planning” and replacing with the term “services,” or a similarly broad term, to ensure that the full range of services that may be provided by teledentistry means fall within the scope of this rule.

650-27.12(6)—In subpart (b), the Board may want to consider including physical location/office location, address, and telephone number, and the educational background of the dentist, among the information included in the informed consent agreed to by the patient. In particular, it seems that a patient should be able to know where the...
dentist treating him or her is located, or otherwise be able to reach his/her doctor if needed. This is perhaps all the more important in a teledentistry setting.

650-27.12(7)—This section pertains to examinations for new patients. The Board may want to consider that there are a number of categories of problems/conditions that a dentist usually looks for as part of a physical examination at the outset of traditional in-person treatment. These include conditions or problems that can be quite serious, such as oral cancer, periodontal problems, advanced decay, gum disease, etc. If an in-person examination by the dentist is not required at the outset of the doctor-patient relationship, there will be no examination of the patient by a dentist to detect such problems. Therefore, the Board may want to consider changing this rule to clarify that consultation may take place by teledentistry, but an in-person examination/evaluation must be done before teledentistry treatment can occur.

650-27.12(9)—By stating that a dentist is not required to directly supervise the entire delivery of dental care (where direct supervision is required), this teledentistry rule could have the effect of reducing the amount of direct supervision that would otherwise be required for in-person treatment. The Board may want to consider clarifying in this rule that the dentist’s direct supervision provided through teledentistry technology must otherwise comply with Iowa’s laws for direct supervision. (I.e., direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment). In connection with this consideration, the Board may want to consider deleting the entire last sentence of 27.12(9)(a), and replacing with a statement that the dentist’s direct supervision provided through teledentistry must comply with Iowa laws otherwise requiring direct supervision.

650-27.12(11)—The Board may want to consider applying this rule to not only dentists, dental hygienists, and dental assistants, but any other providers of dental services or treatment for dental patients, in order to ensure that the privacy concerns embodied by this rule reach to the fullest extent possible under the teledentistry model.

The Board may want to consider a requirement that any teledentistry platform, teledentistry services, or teledentistry companies be owned by a licensed doctor. This is analogous to the rules that exist in nearly every state requiring that a dental practice be owned by a licensed doctor.

Thank you for your work on the draft rules and your consideration of these issues. Please do not hesitate to let me know if you have any questions regarding the issues raised in this email, or otherwise have any questions.

Trey Lawrence
Associate General Counsel

American Association of Orthodontists

401 N Lindbergh Blvd
St. Louis, MO  63141
Phone:  314.292.6525
Phone:  800.424.2841 X525
Steve Garrison  
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

SENT VIA EMAIL  
RE: Notice of Intended Action to amend Chapter 27, “Standards of Practice and Principles of Professional Ethics.”

Dear Mr. Garrison:

I am writing to you as a follow up to my June 21st, 2018 letter to you regarding the proposed amendments to Chapter 27 of the Iowa Administrative Code. After reviewing the most recently proposed amendments to Chapter 27, I am concerned about sections 27.12(2) and 27.12(6).

The language in these two sections effectively creates one set of standards for teledentistry and a different set of standards for bricks and mortar dental practice, with the standards for teledentistry being far more draconian. Section 27.2 (Patient acceptance) in the code clearly states that “Dentists, in serving the public, may exercise reasonable discretion in accepting patients in their practices; however, dentists shall not refuse to accept patients into their practice or deny dental service to patients because of the patient’s race, creed, sex or national origin.” Proposed section 27.12(2) contradicts section 27.2. It is accepted practice for a patient to engage a provider over the internet at which time the prospective patient is asked to complete several types of static forms such as a medical/dental history, chief concern form, and demographic/insurance information. Exercising “reasonable discretion”, the practitioner can accept the patient with or without further dialogue about answers given on these “static” internet questionnaires, unless any of the answers require further information or discussion. The provider is allowed and expected to use their best professional judgment prior to initiating treatment. Section 27.11(1)(e) (Informed consent) stipulates that “Dental records shall include, at a minimum, documentation of informed consent that includes discussion of procedure(s), treatment options, potential complications and known risks, and patient’s consent to proceed with treatment.” The additional information required in proposed section 27.12(6) goes well beyond section 27.11(1)(e) by requiring public disclosure of information that is not required in a
traditional setting without any legitimate purpose or justification other than to create an unfair trade advantage in favor of bricks and mortar practitioners.

Lastly, the jobs impact statement in Notice of Intended Action is patently untrue. The ATDA can confirm that there are currently dozens of dentists engaging in teledental practice in Iowa and the proposed changes to the Iowa Administrative Code will place excessive burden on those practitioners, causing them to abandon teledental services. Ancillary personnel for these dentists providing services through teledentistry will lose jobs as well. Providers of digital technology and teledental infrastructure will leave the State, taking valuable jobs with them.

If you have any further questions about the American Teledentistry Association’s concerns, please feel free to contact me via telephone or email.

Sincerely,

Marc Bernard Ackerman, DMD, MBA
Executive Director
Teledentistry
3 messages

Michael <topspn@aol.com> Thu, Apr 11, 2019 at 10:48 AM
To: steven.garrison@iowa.gov
Cc: amcgarvey@aol.com, laurie@iowadental.org, ryan@stuntzonline.com, cownie@brownwinick.com, drlee@willhamortho.com, smurphy@aaortho.org, clayparksiso@gmail.com, conradortho@yahoo.com, martingleason@gmail.com

Dear Board Members,

It's obvious to any rational person that the nature of health care delivery must be modified by advancing technology. In some ways, this is a good thing in so far as it can allow access to a sophisticated level care to those in need who might otherwise not have such access to that care. However, I ask you to consider that there are important inherent differences in the quality of care that a patient might receive in certain types of procedures and treatments. In other words, let's not take the journey with one eye open and the other one closed.

Teledentistry in orthodontics is one such example. A typical scenario with Smile Direct Club, or a reasonable facsimile, offers minimal direct patient contact throughout the necessarily prolonged treatment process. Any prudent orthodontist realizes that treatment involves an accurate collection of adequate diagnostic materials leading to an individualized treatment plan, which must be fluid as treatment progresses. That is, mechanical changes to the plan are the rule rather than the exception in the vast majority of cases. These changes are rarely radical ones, but timely decisions on the part of the practitioner to make such decisions insures that the patient is receiving both the most efficient and the most successful treatment result.

Furthermore, effective orthodontic treatment often entails the need to motivate patient compliance, monitor for pathology, and promote long term retention success for a long lasting and healthy result. If the nature of the new teledentistry rules legitimizes Smile Direct Club type protocol without regard to these important long standing principles, then the Iowa Dental Board will be creating a set of new rules with good intentions that inadvertently will have a devastating impact to the quality of orthodontic care for Iowans.

Just to clarify, I understand the need to carve out a niche for teledentistry. However, as an experienced orthodontist and past chairperson of your board, I implore you to do so in such a manner that protects the people of Iowa from falling prey to commercial endeavors that may ultimately and unwittingly be detrimental to their oral health.

Thank you in advance for your consideration to my comments as well as those submitted by other concerned practitioners.

Respectfully submitted,

Michael Rovner DDS, MS
Central Iowa Orthodontics

Garrison, Steven <steven.garrison@iowa.gov> Thu, Apr 11, 2019 at 10:51 AM
To: Michael <topspn@aol.com>

Thank you Dr. Rovner. Your comments will be submitted to the Board.

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309
Please see the public comment below from Dr. Rovner regarding the proposed teledentistry rules.

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

Ensuring that Iowans receive professional, competent, and safe dental care of the highest quality.

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Hello Mr. Garrison,

As a dentist working in a Federally Qualified Health Center, I believe that Teledentistry in Iowa would be beneficial for our patient population, many of whom already struggle with access to care. It would help to ease the time commitment and burden of transportation for our patients. Lack of adequate transportation or inability take time off work for their appointments or their children’s appointments are among the reasons cited by our patients for canceling their appointments. It would also create time in our schedule to accommodate more patients in the clinic. With proper training and technique, photographic and radiographic examination of a patient provides the ability to accurately diagnose dental disease. We also already have a school-based screening program with one of our dental hygienists, and I believe teledentistry is the next step in providing good care to underserved patients.

Thank you for your consideration.

Regards,

Alison Uhl, D.D.S.
General Dentist
Siouxland Community Health Center
1021 Nebraska Street, Sioux City, IA 51105

Thank you Dr. Uhl. I'll submit your comments to the Board for review.

Sincerely,

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309
Ensuring that Iowans receive professional, competent, and safe dental care of the highest quality.

We value your feedback! Click here to tell us how we’re doing.

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[Quoted text hidden]
Good morning Mr. Garrison,

I am commenting on the dental board’s discussion for teledentistry in Iowa.

I am currently a dental hygienist at Siouxland Community Health Center in Sioux City, Iowa working as the Community Care Coordinator. I have been a hygienist for 22 years with 11 of those years in public health. My role is public health outreach in the form of dental screenings in schools, child care centers, preschools, head starts, and summer camps. I also offer dental screenings to woman’s and children’s shelters, transitional housing for homeless individuals and families, and mental health facilities for children in our area. Our goal is to reach children with a dental screening and then provide follow up care to SCHC for urgent dental care needs or comprehensive care and a dental home.

The Boys and Girls Home in Sioux City is a treatment facility for children and families providing outpatient therapy, residential services and alternative education. We have partnered with Boys and Girls to provide a screening at intake and referral to SCHC if the patient needs urgent care, recall as a current patient or a comprehensive exam and prophy as a new patient. Some of the patients will stay in the facility for several months so we follow up with treatment plans and recalls when needed. One of the biggest issues in public health is access to care. Access is inhibited at Boys and Girls when patients may be having a behavior issue that day and may not be well enough to transport. It is also common for a patient to be dismissed or leave the program before they are seen for preventive care or treatment. We believe teledentistry would be a perfect fit for SCHC and Boys and Girls Home to improve their access to care.

Teledentistry would provide the opportunity to see these children onsite and provide all of their preventive dental care like prophies, fluoride and sealants. Our plan would be to use the asynchronous technology or store and forward to communicate with the supervising dentist at SCHC. We would be able to provide the consents for x-rays and intraoral photos necessary for diagnosis by the dentist. Care would be coordinated with the dentist at SCHC only if treatment needs are diagnosed, thereby freeing up operatory time for the high patient demand at SCHC.

We are excited to move forward with calibration training and to learn all that we can about teledentistry. Again, our goal is to reach as many children as we can and provide them a dental home. We have other facilities in mind to expand to in the future if teledentistry is passed in Iowa. Please consider expanding the law in Iowa to include teledentistry as there is a great need in the Sioux City area for underserved children.

Christi Johnson, RDH
Community Care Coordinator
712-202-1185 direct line
Siouxland Community Health Center
1021 Nebraska Street
This message is confidential and is intended only for the names recipient(s) and may contain information that is privileged or exempt from disclosure under applicable law. If you are not the intended recipient(s), you are notified that the dissemination, distribution or copying of this message is strictly prohibited. If you receive this message in error or are not the named recipient(s), please notify the sender and delete this message.
Dear Dental Board,

My Mom called and wants to know why I went to 10 years of college when she can just go to her salon and get her teeth straightened. How are we, as caring and responsible dental professionals, allowing this to happen?

I believe the 10 years were well spent. The undergrad was necessary to learn basic chemistry, physics, art and biology. Dental school was needed to learn details of anatomy, pathology and all things related to the oral cavity plus how to repair and replace what has gone wrong. I added 2 more years of detailed study to learn about moving teeth, growth & development plus occlusion since it is very complex process to do a good job and how to individually treat every patient is very different.

Over the years of being in Des Moines, I along with others had input into the “expanded function” portion of dental assisting along with the dental assistant group and hygiene group. We spent quite a bit of time on what is “direct supervision” and final impressions were important. I guess my question is; if a scan is used for crown and bridge- is it a final impression. If so, a scan for any orthodontics is also a “final impression” and has to be done with direct supervision no matter the training of staff.

My main concern is harm to Iowa patients. I have a patient who had a supernumerary between his maxillary centrals- if I had moved his teeth without knowing he could have had permanent damage. My own son had a cyst the size of a grape in his chin- if I had moved his teeth without resolving this issue first he would have lost all of his lower incisors.

What about bone loss and periodontal disease? This is not often picked up without a detailed exam and x-rays. Moving those teeth - well they might be lost forever. Plus who knows how many seeking this type of treatment actually have a dentist and are getting any regular care.

Plus don’t get me started on the forces on the teeth- I prefer light gentle forces and trust me the clear aligners are not always light forces. Well my Mom was convinced. I hope you can understand why many of us in the state of Iowa are concerned with the proposed “new rules”. I believe you have to be very careful for it is our job to protect the citizens of Iowa and of course give them great smiles and a functional occlusion.

Sincerely,

Oliver Lee Willham DDS MS
Willham Orthodontics PC
7400 Fleur ste 100
Des Moines, IA 50321
Hi Steve,

I am the dental director at the Siouxland Community Health Center. I would like to provide you with some comments for your adoption of teledentistry rules.

As I have attended many conferences with other health center dental staff I have seen what benefits teledentistry can bring to the underserved population. In Sioux City, like many other cities, we find that health centers become the safety net for many patients that may not be able to receive care at other locations (be it whatever barrier they face, financial, transportation, language, etc). So just like in other parts on the country we are looking for ways to expand our services in efficient ways.

Two main ways that teledentistry can help us with this.

1. If we have a hygienist performing preventive services offsite we can ease the access to care issue. For example if our public health hygienist can go to the Boys and Girls home and complete the prophy, xrays, and photos all necessary off site, she can then store and forward that for one of my dentist to perform the exam at our location. (The hygienist and dentist will have completed the calibration as stated in the rules you have presented – this is vital to comply with the standard of care of diagnosis.) Once the exam is completed the care (if needed) of this child then is coordinated by the hygienist. But in an ideal situation if this child’s care can be maintained with only preventive services off site wouldn’t this be a great outcome? The child can be taught to maintain his oral health without having to step foot in a dental office – saving the child time away from school and parents time off work.

2. By completing these preventive services off site instead of in an operatory we can free up operatory space for those procedures that require an operatory. Open spaces in an operatory means that we can provide more services to more patients- thereby increasing access for all patients across the board.

Please consider how teledentistry can benefit health centers and the underserved populations as you consider moving forward with teledentistry.

Thank you.

Brenda Hausman-Miller D.D.S.
Dental Director
Comment - Proposed Action - Dental Board 650 - Teledentistry

3 messages

Kuthy, Raymond A <raymond-kuthy@uiowa.edu> Wed, May 8, 2019 at 9:15 AM
To: "steven.garrison@iowa.gov" <steven.garrison@iowa.gov>

RE: New Rule 650 (Teledentistry)

Before making the following comments, I am stating my opinion as an individual and not a representative of the University of Iowa.

First and foremost, I wholeheartedly support the recognition of teledentistry as another method for increasing access to dental care.

The proposed section 27.12(5) baffles me because it is inconsistent with other technological advances that have taken place in dentistry, such as electronic records, radiologic equipment, etc. Moreover, there is no mention about how this calibration should occur nor who has oversight. While ‘(T)he purpose of calibration training is to diminish practice inconsistencies and ensure coordinated efforts’, that same rationale should/could then also relate to any other technologic advances in dentistry. Since technologic changes so rapidly, it would be impractical to re-calibrate with each new advance.

My other comment requires some context. When I was a young associate in a medical-dental group practice in another state, we had a centralized main office and three satellite offices in remote areas – one of which was in close proximity to a ski resort. We had a (now antiquated) video system that allowed physicians and dentists to consult with providers at the satellite offices. Approximately, 5-6 times per year I was asked to provide consultation about triaging true emergency situations to the mouth/teeth (e.g., facial lacerations from chain saw accidents; facial trauma from ski accidents; tooth avulsions). The closest oral surgeon was more than 90 minutes away. I had to make a decision about (1) how the local provider should perform emergency health services and (2) based on the person’s condition, where to transport the injured person for subsequent care (i.e., local ED, oral surgeon, tertiary care center, or – if it was relatively simple, me). In those instances, would I be in violation of section 27.12(7) of the proposed new code (i.e., performing an ‘examination’) because (1) I was obligated to make a note in the medical record and (2) a bill was generated for that triage/consultative service? I daresay that such emergency situations may be rare, but it would seem that might be one of the most beneficial uses for teledentistry. Thus, the intended rule should not be a deterrent for the dentist’s involvement with efforts that require immediate judgment based on limited armamentarium. This may be a debatable about what the ‘standard of care’ is for such circumstances.

Thank you for the opportunity to comment about this intended action.

Raymond A. Kuthy, DDS, MPH
Professor, Preventive & Community Dentistry
University of Iowa College of Dentistry
Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

2 messages

Melissa Bernhardt <drb@bernhardtandsmith.com>  
Fri, May 10, 2019 at 3:04 PM

To: "steven.garrison@iowa.gov" <steven.garrison@iowa.gov>

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in West Des Moines, employing 15 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1) (b), “an oral presentation regarding this rule making 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," as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 515-987-9130 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525.

Thank you for all you do,

Melissa Bernhardt

Bernhardt & Smith Orthodontics, 9295 Bishop Drive, Suite 120, West Des Moines, IA 50266

Garrison, Steven <steven.garrison@iowa.gov>  
Mon, May 13, 2019 at 8:02 AM

Draft To: Melissa Bernhardt <drb@bernhardtandsmith.com>

Good morning Dr. Berhardt,

Thank you for your comments. I will forward these to the Board.
Steve,

I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

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If you have any questions, please do not hesitate to call me at 904-671-3927 or my orthodontic association- the American Association of Orthodontists via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do.

Kindly,

Daniel Garrison, DMD, ABO
Board Certified Orthodontist
114 E Van Weiss Blvd
West Burlington, IA 52655
givemebraces@gmail.com
904-671-3927

Thank you Dr. Garrison. I will forward your comments to the Board.

Best,
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in the Des Moines metro area. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), “an oral presentation regarding this rule making 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,” as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 515-987-8300 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Jeremy C. Karras DDS, MS
5890 Morning Star Court
Pleasant Hill, IA 50327
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Iowa City, employing seven staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), “an oral presentation regarding this rule making 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,” as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 319-338-8658 or my orthodontic association – the American Association of Orthodontists – via Trey Lawrence, who is available at 314-292-6525.

Thank you for all you do,

Suzanne Stock <drss@drssortho.com>
Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

2 messages

Karl Swenson <karl.e.swenson@gmail.com> Fri, May 10, 2019 at 8:20 AM
To: steven.garrison@iowa.gov

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Cedar Rapids, employing 14 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1) (b), “an oral presentation regarding this rule making 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," as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 319-396-8364 (office phone) or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525.

Thank you for all you do,

Karl Swenson

222 Edgewood Rd NW

Cedar Rapids, IA 52405

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Karl Swenson, DDS, MS
Cell: (319) 531-0969
VIA E-MAIL: steven.garrison@iowa.gov

Steve Garrison, Program Officer
Iowa Dental Board
400 S.W. Eighth Street, Suite D
Des Moines, Iowa 50309

Re: Proposed Rules Related to Teledentistry (ARC 4359C)

Dear Mr. Garrison:

The Iowa Dental Association (the “Association”) is the largest trade association representing the oral health profession in the State of Iowa. With members in every one of Iowa’s 99 counties, the Association counts as members nearly 84 percent of all practicing dentists in the state. The Association and its members place a high priority on ensuring access to oral health care for Iowans of all socioeconomic levels. As you know, the Iowa Dental Board (the “Board”) recently proposed rules related to the use of teledentistry in Iowa (the “Proposed Rules”). While the Association appreciates the Board’s efforts to ensure that patients treated via teledentistry receive the same standard of care as patients treated in an Iowa dental office, the Association is concerned that the Proposed Rules may not provide the Board with sufficient authority to ensure that Iowa dental patients receive that standard of care. The Association is pleased to provide the following comments regarding the Proposed Rules.

**An Initial In-Person Examination Should Be Required.** Section 27.12(7) of the Proposed Rules would permit a dentist to use teledentistry to conduct an examination for a new patient unless the “standard of care necessitates an in-person dental examination.” The Proposed Rules would imply that an initial in-person examination is the exception rather than the rule. The Association disagrees. There are many conditions that a dentist can only diagnose through an in-person examination of the patient, such as advanced decay, gum disease, and even oral cancer. Failure to provide an initial in-person examination could result in serious missed diagnoses that place patients’ health at risk. Therefore, the Association recommends the Board amend the Proposed Rules as follows:

**27.12(7) Examination.** A dentist may use teledentistry to conduct an examination for a new patient or for a new diagnosis of a current patient if the examination is conducted in accordance with evidence-based standards of practice to sufficiently establish an informed diagnosis. A dentist shall not perform any treatment of a new patient until the dentist has conducted an initial in-person dental examination. A dentist shall not conduct a dental examination using teledentistry if the standard of care necessitates an in-person dental examination. Once an examination has been conducted, a dentist may delegate the services to be provided.
A Dentist Utilizing Teledentistry Should Be Located Sufficiently Close to the Patient to Be Familiar with Available Emergency Services or Have an Agreement with a Qualified Local Dentist. The Proposed Rules require a dentist using teledentistry to have “adequate knowledge of the nature and availability of local dental resources” to provide appropriate follow-up care to a patient following a teledentistry encounter and to “refer a patient to an acute care facility or an emergency department” when necessary for the patient’s safety. These are critical protections for patients, but without more objective standards for what qualifies as “adequate knowledge,” the Proposed Rules fail to ensure patient safety. For example, would a dentist be deemed to have “adequate knowledge” if the dentist simply has a phone number for the local emergency department? Would the dentist be deemed to have “adequate knowledge” if the dentist simply provides patients with the name and telephone number of another dentist located near the patient who may or may not have any prior experience with the patient?

In order to ensure the availability of adequate follow-up care, the Association recommends the Board amend the Proposed Rules to require any dentist using teledentistry to have a physical presence located within a specific distance of the patient’s location or to have a written agreement with another dentist located in that area by which the other dentist agrees to provide necessary follow-up care. Therefore, the Association recommends the Board amend the Proposed Rules as follows:

\[27.12(8) \text{ Follow-up and emergency care.} \text{ A dentist who uses teledentistry shall have adequate knowledge of the nature and availability of local dental resources to provide appropriate follow-up care to a patient following a teledentistry encounter. A dentist who uses teledentistry shall have either (a) a practice location located within - miles of the patient's location at the time of examination or treatment; or (b) shall have a written agreement with another dentist who holds an active Iowa license to practice dentistry who has a practice location located within --- miles of the patient's location at the time of examination or treatment and by which the dentist agrees to provide follow-up care to any patient of the dentist who uses teledentistry. A dentist shall refer a patient to an acute care facility or an emergency department when referral is necessary for the safety of the patient or in the case of emergency.}\]

It is important to note that all Iowa dentists have an obligation to make reasonable arrangements for emergency care of patients who are not of record pursuant to section 27.3(2) of the Board’s rules. If a patient experiences an emergency situation following a teledentistry encounter, the patient may seek treatment from a local dentist who would have an obligation to make reasonable arrangements for the patient but would not have the benefit of having the patient’s dental record. By requiring dentists using teledentistry to have a practice location or a written agreement with another dentist, the Board will be able to ensure the continuity of care for patients in this situation.

A Dentist Utilizing Teledentistry Should be Required to Disclose Information About the Dentist to the Patient. Section 10.2 of the Board’s current rules requires every dentist, dental hygienist, and dental assistant to “prominently display” his or her license or registration in each
practice location. The Proposed Rules require dentists using teledentistry to provide certain information as a component of the patient’s informed consent, but fail to require disclosure of the dentist’s practice location or to make this information publicly available. The Proposed Rules should be amended to require dentists using teledentistry to disclose their practice location and to make this information publicly available on the dentist’s website, as follows:

27.12(6) Informed consent. When teledentistry will be utilized, a dentist shall ensure informed consent covers the following additional information, which information shall be prominently displayed on the dentist’s website and shall be publicly available:

   a. A description of the types of dental care services provided via teledentistry, including limitations on services;

   b. The identity, contact information, practice location, licensure, credentials, and qualifications of all dentists, dental hygienists, and dental assistants involved in the patient’s dental care; and

   c. Precautions for technological failures or emergency situations.

Teledentistry promises to fill a growing role in the provision of dental care to Iowans. It is important that this service be provided in a way that ensures Iowans continue to have access to the high quality dental care they have come to expect. I would be happy to schedule a meeting to discuss these concerns.

Sincerely,

Laurie Traetow, IDA Executive Director
May 10, 2019

Steve Garrison, Iowa Dental Board
400 SW 8th Street, Suite D
Des Moines, IA 50309

Dear Mr. Garrison:

We support use of teledentistry in Iowa, which has the potential to improve access to dental care for underserved Iowans.

Regarding the proposed rules for Chapter 27, we have the following questions and comments.

27.12(4): What are the “evidence-based teledentistry standards” that are referenced?

27.12(5): Why is calibration training required? How will this be tracked? Is calibration training required for other aspects of the practice of dentistry in Iowa?

27.12(7): What are the “evidence-based standards of practice” that are referenced? Are there evidence-based standards of practice for dentistry?

27.12(7): The requirement that “once an examination has been conducted, a dentist may delegate the services…” would prohibit use of public health supervision of dental hygienists within teledentistry and in turn, reduce access to dental services for underserved Iowans. For example, in a situation where a hygienist using public health supervision collected examination information and transmitted that information to a dentist to conduct an exam, that hygienist would not be allowed to provide any additional services until the exam is complete. With teledentistry, it is unlikely that a dentist would review the transmitted records at the time of transmission. The requirement written into the draft rules would eliminate the ability of a patient to receive any additional services although a hygienist is present, available, and has a public health supervision agreement for provision of preventive services. This would actually limit access and reduce the positive impact that teledentistry may have on access to care.

Thank you for your consideration.

Sincerely,

Tracy Rodgers, RDH; Mary Kay Brinkman, RDH; Stephanie Chickering, RDH; Katie McBurney, RDH
Iowa Department of Public Health, Bureau of Oral and Health Delivery Systems
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Marshalltown, employing seven staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1) (b), “an oral presentation regarding this rule making 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,” as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 641-752-6458 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

John Hermanson

John Hermanson, DDS, MS
Hermanson Orthodontics, PC
233 N 13th Street
Marshalltown, IA 50158
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Marshalltown employing 7 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), “an oral presentation regarding this rule making 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,” as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 641-752-6458 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525.

Thank you for all you do,

Paul C. Hermanson, DDS, MS
233 N. 13th St.
Marshalltown, IA 50158
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have practices located in Newton and Grinnell, employing 11 staff members. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

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If you have any questions, please do not hesitate to call me at 641-792-7811 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Jennifer Buren
Garrison, Steven <steven.garrison@iowa.gov>

To: Jennifer Buren <orthojenni@hotmail.com>

Thu, May 14, 2019 at 7:52 AM

Thank you for your comments Dr. Buren. They will be forwarded to the board.

Sincerely,

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

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Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

Chris Holahan <wrbndr@hotmail.com>  
To: "steven.garrison@iowa.gov" <steven.garrison@iowa.gov>

Mon, May 13, 2019 at 11:57 AM

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Cedar Falls, Iowa, employing 8 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), "an oral presentation regarding this rule making 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." as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 319-260-2077 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Christopher M. Holahan DDS,MS
3408 Waterbury Drive
Thank you Dr. Holahan. Your message will be forwarded to the board.

Sincerely,

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

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[Quoted text hidden]
Garrison, Steven <steven.garrison@iowa.gov>

Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment
2 messages

Michael <topspn@aol.com>  
To: steven.garrison@iowa.gov  
Cc: tlawrence@aaortho.org  

Mon, May 13, 2019 at 11:30 AM

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Pleasant Hill, Waukee, Ankeny, Altoona, and Indianola employing 50 staff. I'm also a former chairperson of the Iowa Dental Board. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction.

Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor.

I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment.

Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), "an oral presentation regarding this rule making 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." as stated in the NOIRA published on March 27th, 2019.
If you have any questions, please do not hesitate to call me at 515-988-3889 or my orthodontic association-the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Dr. Michael Rovner
Central Iowa Orthodontics

Garrison, Steven <steven.garrison@iowa.gov>  
To: Michael <topspn@aol.com>  
Cc: "Lawrence, Trey" <tlawrence@aaortho.org>  

Thank you. Your comments will be forwarded to the Board.

Sincerely,

Steve Garrison, MPA | Program Officer  
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309  

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Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

2 messages

Southard, Thomas E <tom-southard@uiowa.edu>  
To: "steven.garrison@iowa.gov" <steven.garrison@iowa.gov>  
Mon, May 13, 2019 at 11:16 AM

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Iowa City, employing 10 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1) (b), "an oral presentation regarding this rule making 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." as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 319-335-7538 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Tom Southard, DDS, MS
Professor and Chair
Department of Orthodontics
The University of Iowa

Garrison, Steven <steven.garrison@iowa.gov>  
To: "Southard, Thomas E" <tom-southard@uiowa.edu>  
Mon, May 13, 2019 at 11:42 AM
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Council Bluffs Iowa, employing 15 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), “an oral presentation regarding this rule making 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,” as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 712-323-7589 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Michelle Wulf, D.D.S
Southwest Orthodontic Associates
40th Northcrest Drive, Suite 2
Council Bluffs, IA 51503
www.swortho.net
712-323-7589

Garrison, Steven <steven.garrison@iowa.gov> Mon, May 13, 2019 at 1:15 PM
To: Michelle <sarkiss77@yahoo.com>

Thank you Dr. Wulf. Your comments will be forwarded to the Board.
Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309
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[Quoted text hidden]
May 14, 2019

Mr. Steve Garrison  
Iowa Dental Board  
400 S.W. Eighth Street, Suite D  
Des Moines, IA  50309-4686

Dear Mr. Garrison:

We appreciate the opportunity to provide comment on the Iowa Dental Board’s proposal to amend 650 IAC Chapter 27, “Standards of Practice and Principles of Professional Ethics.” Delta Dental supports Iowa joining a growing number of states that have established or, are discussing establishing standards of practice for teledentistry. With the adoption of new teledentistry CDT codes, the time is right to address how technology can benefit patients and advance oral health care.

Iowa is in need of innovative solutions to reduce oral health disparities in underserved populations. Fifty-five of Iowa’s 99 counties, 56 percent, are designated as dental Health Professional Shortage Areas. In 2017, only 50 percent of Iowa children enrolled in Medicaid had any dental service. One third of Iowa’s private practicing dentists are located in three urban counties therefore our rural communities struggle to maintain and recruit private practitioners. Technology is ubiquitous today and can address common problems that hinder patients from seeking care, such as taking time off work for a dental appointment, lack of transportation, and no or little access to dentists or dental specialists in rural areas.

We are pleased to see in the proposed 650-27.12(8) a requirement that a dentist who uses teledentistry shall have appropriate knowledge of local dental resources to ensure appropriate follow-up and emergency care. We expect the use of local resources includes the service of I-Smile™ and I-Smile™ Silver Coordinators who are an integral part of the infrastructure for the referral of care. The coordinators currently play a key role in connecting community members to their local health care providers. In time and with the right referral system in place, teledentistry can promote the integration of dentistry and medicine and change the misconception that oral health is separate from overall health.

Delta Dental of Iowa is also supportive of the proposed language in 650-27.12(9) outlining delegation and supervision authority by a dentist. Iowa is facing a dental workforce shortage as more Iowa dentists retire and more dentists preferring more flexible work hours or part-time hours. If dental care in the future is to include teledentistry, then the Board must ensure that the dental workforce is able to work to the top of their licensure. We recommend the Board review Iowa law and regulations that would conflict or create barriers to implementing teledentistry in Iowa. In particular, the Board may want to pursue amending Iowa Code section 153.15 that limits dental hygienists to practicing in a dental office, a public or private school, public health agencies, hospitals, and the armed forces. This language is unnecessarily restrictive and doesn’t meet the intent of using teledentistry through allied diverse workforce to increase access to oral health care. Increasing access to oral health care in a variety of settings that maintain quality of care is critical to achieve better oral health outcomes.
Delta Dental of Iowa and its Foundation are committed to supporting initiatives that improve the oral health of Iowans. The proposed rule is a step in the right direction. We encourage the Board to support the dental referral system and remove regulatory barriers to promote the success of teledentistry in Iowa.

Thank you for considering our comments.

Sincerely,

Suzanne Heckenlaible, MPA    Jeff Chaffin, DDS, MPA, MBA, MHA
Vice President, Public Affairs    Dental Director
Delta Dental of Iowa    Delta Dental of Iowa
Dear Mr. Garrison and the Iowa Dental Board:

I am an Iowa orthodontist and have a practice located in Cedar Rapids where I employ 8 assistants and staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Many issues have been brought before the Board that have challenged the integrity of our profession and health and safety of the patients we serve. One such issue was the preservation of dental specialty designation. Thank you for your previous action to ensure the continued integrity of dental specialties in Iowa.

I am seriously concerned about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I am hopeful that the Board responds to the concerns of the dentists in Iowa since these issues have a direct effect on the health and safety of Iowa’s citizens.

Please consider the following considerations to guide revisions to the proposed rules before they are voted on and approved by the Iowa Board.

- The scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction.
Any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located.

In case the patient experiences an emergency or other condition requiring immediate treatment, any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient.

The doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor.

Patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI.

The current draft Rule is unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment.

The Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

Finally, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), "an oral presentation regarding this rule making 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." as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at (319) 378-3333 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at (314) 292-6525.

I appreciate your efforts and timely consideration of these concerns.
Sincerely,

David C. Gehring, DDS, MS
5012 Center Point Rd NE
Cedar Rapids, IA  52402

Garrison, Steven <steven.garrison@iowa.gov>  
To: David Gehring <DCGdds@aol.com>

Thank you Dr. Gehring. Your comments will be provided to the Board.

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

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[Quoted text hidden]
Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Sioux City, employing 30+ staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), "an oral presentation regarding this rule making 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," as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 712-253-9109 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525.

Thank you for all you do,

Jeremy Grabouski, DDS, MS
Wagner, Kuntz & Grabouski Orthodontics
3012 Hamilton Blvd
Sioux City, IA 51104
Proposed changes to Iowa Dental Code Teledentistry (IAC 650-27.12)
2 messages

Jim Grabouski <jjgrabouski@gmail.com> To: steven.garrison@iowa.gov
Tue, May 14, 2019 at 8:15 AM

Issue/Subject Line: Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Sioux City, Sioux Center, Onawa and Cherokee, employing over 40 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the

Garrison, Steven <steven.garrison@iowa.gov> To: Jim Grabouski <jjgrabouski@gmail.com>
Tue, May 14, 2019 at 8:32 AM

Thank you for your comments. They will be provided to the board.

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309

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Proposed rulemaking related to teledentistry

2 messages

Danelle McDonald <danelle@siouxlandsmiles.com>  
To: “steven.garrison@iowa.gov” <steven.garrison@iowa.gov>

Tue, May 14, 2019 at 8:16 AM

Issue/Subject Line: Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Sioux City, employing 37 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), "an oral presentation regarding this rule making 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." as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 712-258-0501 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Tim Kuntz

3012 Hamilton Blvd

Sioux City, IA 51104

Garrison, Steven <steven.garrison@iowa.gov>  
To: Danelle McDonald <danelle@siouxlandsmiles.com>

Tue, May 14, 2019 at 8:32 AM

Danelle, I appreciate your comments and concerns about the proposed teledentistry rules. I agree that it is important to ensure patient health and safety, and I assure you that the Iowa Dental Board will consider your suggestions carefully. I will share your thoughts with the Board and provide feedback on how they plan to address your concerns. If you have any further questions or comments, please do not hesitate to reach out.

Thank you for your input.

Steven
Proposed rulemaking related to teledentistry

2 messages

Danelle McDonald <danelle@siouxlandsmiles.com> Tue, May 14, 2019 at 8:18 AM

To: "steven.garrison@iowa.gov" <steven.garrison@iowa.gov>

Issue/Subject Line: Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment

Dear Mr. Garrison and the Iowa Dental Board,

I am an Iowa orthodontist and have a practice located in Sioux City, employing 37 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, "Standards of Practice and Principles of Professional Ethics," Iowa Administrative Code.

Mr. Garrison, I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, I believe that the scope of services that can be rendered under the current draft of the rules, "dental care," is too broad and should be limited to cover only "limited diagnostic and treatment planning services," since ongoing treatment should not take place without some in-person doctor interaction. Additionally, I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, I feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. I also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor's office, the phone number of the doctor's office, and the educational background of the doctor. I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. I believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, I would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1) (b), "an oral presentation regarding this rule making 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." as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 712-258-0501 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Rick Wagner

3012 Hamilton Blvd

Sioux City IA 51104

Garrison, Steven <steven.garrison@iowa.gov> Tue, May 14, 2019 at 8:33 AM

To: Danelle McDonald <danelle@siouxlandsmiles.com>
ARC 4359C, Dental Board’s rules on teledentistry
2 messages

Susan R. Hyland <klas-hyland@juno.com>   Tue, May 14, 2019 at 11:04 PM
To: steven.garrison@iowa.gov
Cc: jill.stuecker@iowa.gov

May 14, 2019

Steve Garrison
Iowa Dental Board
400 S.W. Eighth Street, Suite D
Des Moines, Iowa 50309
Email: steven.garrison@iowa.gov; jill.stuecker@iowa.gov
RE: ARC 4359C, Dental Board’s rules on teledentistry

Dear Mr. Garrison;

I am writing in support of the ARC 4359C, the Dental Board’s proposed rules that establish standards for the practice of teledentistry in Iowa.

The rules appear well thought out to cover supervision, patient consent and to ensure utilization of evidence based standards.

Utilization of this technology has allowed other states to increase access to dental care for their citizens and I believe it will do the same for Iowa citizens. I have practiced in public health settings and am very aware of the problems of access to oral care for children and for older Iowans. I recently spoke to a mother who has dental insurance, but lives in a rural area where she has no dentist to see her young child. I believe this technology could be utilized in this type of situation, also.

I would encourage the Dental Board to support final adoption of these rules.

Sincerely,
Susan R. Hyland, RDH, BS
Altoona, IA
klas-hyland@juno.com

Garrison, Steven <steven.garrison@iowa.gov>   Wed, May 15, 2019 at 8:19 AM
To: "Susan R. Hyland" <klas-hyland@juno.com>

Thank you Ms. Hyland for your comments. I will provide them to the board.

Best,

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St, Suite D | Des Moines, IA 50309

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Garrison, Steven <steven.garrison@iowa.gov>

Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment
2 messages

Tanner Clark <tannerdds@yahoo.com> Tue, May 14, 2019 at 10:35 PM
To: “steven.garrison@iowa.gov” <steven.garrison@iowa.gov>

Dear Mr. Garrison and the Iowa Dental Board,

We are Iowa orthodontists and have two practices located in North Liberty and Muscatine employing 8 staff. I appreciate the opportunity to provide comment to the proposed amendments to Chapter 27, “Standards of Practice and Principles of Professional Ethics,” Iowa Administrative Code.

Mr. Garrison, I am contacting you because we have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential effects on patient health and safety. We believe that certain revisions should be made to the proposed rules before they are voted on and approved by the Iowa Board. For instance, we believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction. Additionally, we believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. In case the patient experiences an emergency or other condition requiring immediate treatment, we feel that any teledentistry rule should require that the doctor be physically located within 120 miles (or approximately a two hour drive) of the patient. We also believe that the doctor should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including such things as the physical address of the doctor’s office, the phone number of the doctor’s office, and the educational background of the doctor. We further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed. See Ark. Admin. Code 038.00.1-XXI. We believe that the draft Rule is currently unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment. Finally, the Board should require that any teledentistry platform, services or companies be owned or controlled by a licensed Iowa doctor, just as the rules require in nearly every state for dental practices.

In addition, we would like to request that a public hearing be held, in accordance with Iowa Code section 17A.4(1)(b), “an oral presentation regarding this rule making 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,” as stated in the NOIRA published on March 27th, 2019.

If you have any questions, please do not hesitate to call me at 319-626-3161 or my orthodontic association- the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525

Thank you for all you do,

Sarah E. Clark DDS, MS
Tanner J. Clark DDS, MS
Clark Orthodontics
650 W. Cherry St. Suite 5
North Liberty, IA 52317

Garrison, Steven <steven.garrison@iowa.gov> Wed, May 15, 2019 at 8:17 AM
To: Tanner Clark <tannerdds@yahoo.com>

https://mail.google.com/mail/u/0?ik=987c77d366&view=pt&search=all&permthid=thread-f%3A1633567457663689608&simpl=msg-f%3A16335674576... 1/2
regarding IAC 650-27.12 draft and providing public comment

2 messages

M W <welgeorthodontics@gmail.com>       Wed, May 15, 2019 at 4:21 PM
To: steven.garrison@iowa.gov

**text below is the same as in the attached .pdf which may have better formatting.

May 15, 2019

Re: Proposed rulemaking related to teledentistry (IAC 650-27.12) and providing public comment.

Dear Mr. Garrison and the Iowa Dental Board,

Thank you for your me and eﬀort to help update the rules related to teledentistry in the state of Iowa. I am an orthodontist practicing here in the West Des Moines and surrounding areas for the past 15 years or so. I appreciate the chance to provide comment to the proposed amendments to Chapter 27, “Standards or Practice and Principles of Professional Ethics,” Iowa Administrative Code.

I am contacting you because I have concerns about the current draft amendments to Chapter 27, regarding the proposed teledentistry rules and their potential eﬀects on patient health and safety. I believe that certain revisions should be made to the proposed rules before they are voted on approved by the Iowa Dental Board.

I believe that the scope of services that can be rendered under the current draft of the rules, “dental care,” is too broad and should be limited to cover only “limited diagnostic and treatment planning services,” since ongoing treatment should not take place without some in-person doctor interaction.

I believe that any doctor providing services via teledentistry to an Iowa patient should be required to be licensed not only in Iowa, but also in the state in which the doctor is physically located. If the patient experiences an emergency or other condition requiring immediate treatment, the rule should require that the doctor be physically located near the patient, within a few hours drive of the patient.

I also believe that the doctor providing teledentistry services should be required to provide full contact information, publicly via a website or the like, and to the patient at the beginning of treatment, including things such as physical address of the doctor’s office, the phone number of the doctor’s office, and the educational credentials of the doctor.

I further believe that patient health and safety is best served by requiring that an in-person examination/evaluation be done before teledentistry services can be rendered, much like the requirement that Arkansas recently passed (See Arkansas Admin. Code 038.00.1-XXI).

I believe that in the current draft, the rule is unclear with respect to direct supervision, and should be revised to clarify that direct supervision is required via teledentistry to the same extent that it is required in non-teledentistry treatment.

In addition, I the Board should require that any teledentistry pla. orm, services or companies be owned or controlled by a licensed Iowa dentist, just as the rules require in nearly every state for dental practices.
Finally I would like to request that a public hearing be held, in accordance with the Iowa Code section 17A .4(1)(b) “an oral presentation regarding this rule making may be demanded by 25 interested persons, a governmental subdivision, the Administrative Rules Review Committee, an agency, or association having 25 or more members,” as stated in the NOIRA published on March 27th, 2019.

If you have questions, please call me at my office at 515.225.3370 or contact my orthodontic association-the American Association of Orthodontists-via Trey Lawrence, who is available at 314-292-6525.

Again, thank you for your role in framing rules regarding teledentistry for our state that focus on and protect the health and safety of the people of Iowa.

Sincerely,
Marc S. Welge, DDS, MS
1200 Valley West Dr. Suite 203
West Des Moines, IA 50266

---

Garrison, Steven <steven.garrison@iowa.gov> Wed, May 15, 2019 at 4:23 PM
To: M W <welgeorthodontics@gmail.com>

Thank you Dr. Welge. Your comments will be provided to the board.

[Quoted text hidden]
ARCC 4359C, Dental Board’s rules on Teledentistry
2 messages

Jennifer Pierce <JenniferPierceRDH@hotmail.com> Wed, May 15, 2019 at 5:45 PM
To: “steven.garrison@iowa.gov” <steven.garrison@iowa.gov>, "jill.stuecker@iowa.gov" <jill.stuecker@iowa.gov>

May 15, 2019

Steve Garrison

Iowa Dental Board

400 S.W. Eighth Street, Suite D

Des Moines, Iowa 50309

Email: steven.garrison@iowa.gov; jill.stuecker@iowa.gov

RE: ARC 4359C, Dental Board’s rules on Teledentistry

Dear Mr. Garrison;

On behalf of the Iowa Dental Hygienists’ Association, I am writing in support of the ARC 4359C, the Dental Board’s proposed rules that establish standards for the practice of Tele-dentistry in Iowa. The draft rules were drafted by a Board appointed committee that provided a diverse set of perspectives to the development process.

The Dental Board’s rules follow a similar set of rules that were established regarding the practice of Telemedicine by the Iowa Board of Medicine. That board’s track record with their rules should give the Dental Board peace of mind that these rules will not result in unintended consequences.

Instead, these rules reflect the reality that new video technologies exist today which allow dental professionals to perform tasks in new and different settings, and help expand the number of Iowans who can receive a diagnosis from a Dentist.

We would encourage the Dental Board to support final adoption of these rules.

Sincerely,
Jennifer Pierce  
President  
Iowa Dental Hygienists Association

---

**Garrison, Steven** <steven.garrison@iowa.gov>  
To: Jennifer Pierce <JenniferPierceRDH@hotmail.com>  
Wednesday, May 15, 2019 at 5:58 PM

Thank you for your comments. They will be provided to the board.

Best,

Steve Garrison, MPA | Program Officer  
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309  

*Ensuring that Iowans receive professional, competent, and safe dental care of the highest quality.*

*We value your feedback! Click here to tell us how we're doing.*

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[Quoted text hidden]
Mr. Garrison,

Thank you for the opportunity to comment on proposed Administrative Rule 4359C, we appreciate the Dental Board’s work to improve the opportunities to access dental care in rural and underserved Iowa, especially given the current shortage of dentists taking Medicaid patients. We are supportive of the current proposed rules.

We believe teledentistry is an excellent opportunity to expand dental care to more Iowans in their communities, particularly in rural Iowa where providers are increasingly relying on telemedicine or remote care. We appreciate the board’s diligence in developing these comprehensive teledenistry rules, we particularly are in favor of the portions of the rule which refer to technology calibration.

We note that California and Colorado are having success reaching more patients outside the four walls of a dental office and are demonstrating success. With the development of these rules, Iowa may be able to expand to those communities with limited dental resources utilizing new technologies and assuring that the whole health of persons, especially in rural and underserved areas, is taken into consideration. Further, we believe this rule would allow Iowans to reduce the amounts of time off work for dental visits in larger communities and support local dental businesses.

Thank you for your consideration of our comments on Administrative Rule 4359C, if you have further questions, please contact Nancy Adrianse (adriansen@iowapca.org) or Erica Shannon (eshannon@iowapca.org).

Sincerely,

Nancy Adrianse

Oral Health Manager
Iowa Primary Care Association
9943 Hickman Road,
Urbandale, IA 50322
(515) 333-5032
Proposed changes to Iowa Code Teledentistry (IAC 650-27.12)

5 messages

Jim Grabouski <jjgrabouski@gmail.com>
To: Steven Garrison <steven.garrison@iowa.gov>
Wed, May 22, 2019 at 12:43 PM

Sent from my iPad

Begin forwarded message:

From: Jim Grabouski <jjgrabouski@gmail.com>
Date: May 22, 2019 at 11:07:54 AM CDT
To: jjgrabouski@gmail.com
Subject: Proposed changes to Iowa Code Teledentistry (IAC 650-27.12)

Dear Mr. Garrison and the members of the Iowa Dental Board,

My name is Jim Grabouski, I was a general dentist in Nebraska for 8 years before attending the Orthodontic Program at the University of Iowa. I have been in a group practice for the past 24 years with Iowa locations in Sioux City, Sioux Center, Onawa, Cherokee. I have served as President of the Sioux City Dental Society, President of the Iowa Society of Dentists, and as a Board Member of the Western Iowa Technical Dental Assisting program.

As a result of an event that I recently witnessed, I am concerned about the future, safety, and quality of the dental profession in the State of Iowa. I feel that the Iowa Dental Board has the opportunity to reverse the slippery slope of deleterious sequelae of teledentistry by tailoring the rules to embrace technology but maintain the public safeguards.

I noticed an RV bus in the Sioux City Mall parking lot on Monday, May 20, 2019 advertising Orthodontic Aligners. There was a table set up outside, so I went over to learn more about what they were offering.

A young lady explained that I could fill out a form and have my teeth scanned on the bus for orthodontic aligners. I asked if they had a dentist or an orthodontist on the premises. She said that they did NOT, but they electronically have the scans reviewed by a dentist. I asked if she realized that taking an oral scan for the purpose of making aligners could be considered "The Practice of Dentistry". Another gentleman stepped in (I assume a representative of the company) and wanted to know my name. I introduced myself and explained that I was an orthodontist. I asked him his name, and he said, "Leon", but didn't give me his last name. Leon stated that what they were doing was NOT considered the "Practice of Dentistry". I sited a recent court case in Georgia where the judge affirmed that taking intraoral scans for the purpose of orthodontic movement was indeed considered the "Practice of Dentistry". Leon argued that it was not true. (see reference below)


Leon added that the young lady was a dental assistant and that qualified her to take scans without having a dentist on the premises. (I did not see her dental assisting license posted anywhere). I thanked them for their time and left.

As a follow up, I contacted Jill Stuecker (Executive Director of the Iowa Dental Board). I relayed my contact with the aligners company RV and Jill stated that she could not comment on any particular specific company. Therefore, I asked her the following "hypothetical" scenarios:

1. In the State of Iowa, is a digital scan for the purpose of making orthodontic aligners considered "The Practice of Dentistry"?

Jill Stuecker responded that she was familiar with the Georgia Court ruling, but that the Iowa Dental Board has not made a ruling yet.

2. In the State of Iowa, can a Dental Assistant take a digital scan for the purpose of making orthodontic aligners without direct supervision of a dentist/orthodontist?

Jill Stuecker responded that the Iowa Board of Dentistry has not made a ruling on that specific topic yet.

3. In the State of Iowa, can a digital scan for the purpose of orthodontic aligners be taken by a non-dentist and sent to a dentist remotely to diagnose and have aligners made?

https://mail.google.com/mail/u/0?ik=987c77366&view=pt&search=all&permthid=thread-f%3A1634255013510741473&simpl=msg-f%3A16342550135
Jill Stuecker responded that this was legal as long as the dentist is licensed in the State of Iowa.

It is difficult for me to understand how digital scans used to fabricate orthodontic aligners, taken by a dental assistant on a bus without a dentist present, is in the best interest of the patient's health and safety. These patients blindly trust that they are receiving a safe and efficacious treatment equal to what they would receive at a dental or orthodontic office. As you are well aware, moving teeth with aligners or braces can be detrimental if done in the presence of medical or dental disease (decay and/or periodontal disease). Although digital scans can be used as a diagnostic tool to assist in the evaluation of the patient's alignment and occlusion, it needs to be an addendum to a thorough dental examination including (but not limited to) medical/dental history, radiographs, periodontal probing and treatment, evaluation and treatment of decay, a hands on oral cancer evaluation by an Iowa Dentist/Orthodontist who will be available to continue to monitor the patient before, during, and after any treatments. As far as I could tell, this level of dental care was not was not being offered on the bus by qualified individuals.

I believe that the proposed Teledentistry rules (IAC 650-27.12) needs revision as outlined in my previous email to your office on May 14, 2019 at 8:19. (see below)

Thank you for considering changes to this important subject. If you or any of the board members have any questions, please feel free to contact me via this email address or my cell: 712-253-2495

Jim Grabouski
Re: Proposed changes to Iowa Code Teledentistry (IAC 650-27.12)

Stuecker, Jill <jill.stuecker@iowa.gov>  
To: "Garrison, Steven" <steven.garrison@iowa.gov>  
Cc: "Braness, Christel" <christel.braness@iowa.gov>

Wed, May 22, 2019 at 2:10 PM

Steve,

Thanks for sending this. I appreciate Dr. Grabouski's comments, but I do want to note on #3 below, that I did not provide an opinion as to whether a scan can be taken by a non-dentist. The Board has not weighed in on this issue. I did let Dr. Grabouski that teledentistry can occur even without rules from the Board.

Thanks.

Jill Stuecker, MPA, MA | Executive Director
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309
Ensuring that Iowans receive professional, competent, and safe dental care of the highest quality.

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On Wed, May 22, 2019 at 1:29 PM Garrison, Steven <steven.garrison@iowa.gov> wrote:

Hi Jill,

I received the attached comment on teledentistry today. I'll save a copy in the folder. Should I update the summary as well?

Steve Garrison, MPA | Program Officer
Iowa Dental Board | 400 SW 8th St. Suite D | Des Moines, IA 50309
Ensuring that Iowans receive professional, competent, and safe dental care of the highest quality.

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-------- Forwarded message --------
From: Jim Grabouski <jjgrabouski@gmail.com>
Date: Wed, May 22, 2019 at 12:43 PM
Subject: Proposed changes to Iowa Code Teledentistry (IAC 650-27.12)
To: Steven Garrison <steven.garrison@iowa.gov>

Sent from my iPad

Begin forwarded message:

From: Jim Grabouski <jjgrabouski@gmail.com>
Date: May 22, 2019 at 11:07:54 AM CDT
To: jjgrabouski@gmail.com
Subject: Proposed changes to Iowa Code Teledentistry (IAC 650-27.12)

Dear Mr. Garrison and the members of the Iowa Dental Board,
DENTAL BOARD[650]

Adopt & File

Proposing rule making related to sedation and nitrous oxide and providing an opportunity for public comment


Legal Authority for Rule Making

This rule making was proposed under the authority provided in Iowa Code sections 147.76 and 153.33.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 153.33 and 153.33B.

Purpose and Summary

The primary purpose of this proposed rule making is to update the requirements for providing sedation and nitrous oxide in dental offices. The rule making was drafted based on updated recommendations from the American Dental Association and input from the Board’s Anesthesia Credentials Committee.

This rule making updates requirements for providing moderate sedation, deep sedation and general anesthesia in dental offices. This rule making specifies the conditions under which the administration of the sedation services may be delegated to another health care provider, such as an anesthesiologist or nurse anesthetist.

This rule making clarifies that training in the use of nitrous oxide during enrollment in an accredited school of dentistry or dental hygiene is approved for the purposes of these rules. This rule making also clarifies what a dental assistant is allowed to do or required to do, or both, while monitoring the administration of nitrous oxide.

This rule making establishes a requirement for training in the monitoring of patients under moderate sedation, deep sedation or general anesthesia. Due to the increased risk of these levels of sedation, the training could focus on additional training in observation of a patient under sedation and prepare staff to recognize signs of an adverse reaction or occurrence.

This rule making establishes a prohibition of the use of drugs intended for deeper levels of sedation from being employed for the purposes of moderate sedation. This rule making clarifies the facilities and locations subject to inspection and the equipment required to be maintained at each facility where moderate sedation, deep sedation or general anesthesia, or all three, are performed.

This rule making updates terminology to be more specific and to clarify the requirements for providing sedation or nitrous oxide inhalation analgesia. These amendments also reorder some of the rules for clearer understanding and reference.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.
Waivers

Any person who believes that the 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—Chapter 7.

Public Comment

Any interested person may submit written or oral comments concerning this proposed rule making. Written or oral comments in response to this rule making must be received by the Board no later than 4:30 p.m. on May 15, 2019. Comments should be directed to:

Steve Garrison
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

No public hearing was scheduled. Four written comments were received, which were reviewed by the Board.

One of the comments received was fully support in support of the amendments and recommended that the Board adopt the amendments as originally drafted.

The remaining three comments, submitted the Iowa Association of Nurse Anesthetists (IANA) and the Iowa Society of Anesthesiologists (ISA) were generally supportive of the rules with recommendations for changes to some of the provisions of the original rule making as proposed in ARC 4358C. The suggestions are summarized below.

Comments from the Iowa Association of Nurse Anesthetists (IANA):

1. IANA disagrees with the use of the term “delegated” in conjunction with request the services of another anesthesia provider. The IANA requests that the Board update the language in the preamble to strike “delegated to” from the language, and use other terminology such as “performed by” or other similar language.

2. IANA requests that the use of “patient monitor” as defined in IAC 650-29.1 be changed to other terminology to minimize confusion. IANA states that “patient monitor”, generally, refers to a piece of equipment, and not a licensee/registrant, whose purpose is to observe the patient while under sedation. IANA suggests use of “patient observer” or “patient supervisor” in lieu of monitor.

3. IANA requests that the Board clarify or update rules (650-29.6(2), 29.7(2)) to allow another anesthesia provider (as defined in the draft) to be allowed to provide sedation services to pediatric patients and ASA III, IV patients even in cases where the dentist permit holder may not have that specific qualification. IANA indicates that the scope of practice would allow a CRNA or anesthesiologist to provide those services without additional qualifications or training.

4. IANA requests that the Board clarify or update the rule (650-29.6(3)) to allow an anesthesia provider (CRNA, anesthesiologist) to be counted as one of the licensees/registrants required to monitor a patient under sedation.

5. IANA requests that the Board clarify that the proposed amendments (650-29.9(2)) would allow a moderate sedation permit holder or a general anesthesia permit holder to allow an anesthesia
provider to administer moderate sedation, deep sedation, or general anesthesia in a dental office regardless of the specific permit held by the dentist.

6. IANA requests that the Board clarify or update rule 650-29.9(2) that the dentist need not remain present in the recovery room/area following completion of the dental procedure in cases when an anesthesia provider has administered the sedation.

7. IANA requests that the Board clarify or update rule 650-29.9(4) to clarify that an anesthesia provider be allowed (or not restricted) to determine patient suitability for sedation separate and apart from any decisions made by the dentist.

Comments from the Iowa Society of Anesthesiologists (ISA):

In its first written comment, the ISA primarily referenced the 2015 “Standards for Basic Anesthetic Monitoring” issued by the American Society of Anesthesiologists (ASA), and legal changes related to sedation in California.

The ISA submitted a second written comment on May 15, 2019. The comments are intended to be a supplement to the comments submitted previously.

1. ISA referenced the ASA recommendation that “qualified anesthesia personnel shall be present in the room throughout the conduct of all general anesthetics, regional anesthetics and monitored anesthesia care.”

2. ISA requests that an individual other than the practitioner performing the procedure be designated to monitor the patient throughout the procedure. The letter later references a recommendation for a dedicated and independent anesthesia provider if the patient is under age 7, “a recommendation contained in the California Dental Board’s new rules.”

3. ISA requests that the individual responsible for monitoring the patient be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help.

4. ISA requests that the individual responsible for monitoring the patient not be a member of the procedural team, and that the individual only be allowed to assist with minor, interruptible tasks.

5. ISA requests that two patient monitors be required for moderate sedation.

6. ISA requests that the Board require that a licensed sedation provider be required to serve as one of the two patient monitors required when deep sedation or general anesthesia is administered in a dental office. ISA does not believe that a dentist with general anesthesia permit is able to adequately supervise the patient monitors. More specifically, the ISA believed that the proposed requirements for patient monitors are inadequate in situations where a patient requires the sedation to be re-dosed during the procedure.

Following discussion at the meeting, the Iowa Dental Board chose to adopt and file the rules without any changes.

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 action is proposed:

Rescind 650—Chapter 29 and adopt the following new chapter in lieu thereof:
650—29.1(153) Definitions. For the purpose of these rules, relative to the administration of deep sedation, general anesthesia, moderate sedation, minimal sedation, and nitrous oxide inhalation analgesia by licensed dentists, the following definitions shall apply:

“ACC” means the anesthesia credentials committee of the board.

“ASA” refers to the American Society of Anesthesiologists Patient Physical Status Classification System. Category I means normal healthy patients, and category II means patients with mild systemic disease. Category III means patients with severe systemic disease, and category IV means patients with severe systemic disease that is a constant threat to life.

“Board” means the Iowa dental board established in Iowa Code section 147.14(1) “d.”

“Capnography” means the monitoring of the concentration of exhaled carbon dioxide in order to assess physiologic status or determine the adequacy of ventilation during anesthesia.

“Current ACLS or PALS certification” means current certification in Advanced Cardiac Life Support (ACLS) or Pediatric Advanced Life Support (PALS). Current certification means certification by an organization on an annual basis or, if that certifying organization requires certification on a less frequent basis, evidence that the individual has been properly certified for each year covered by the renewal period. The course for the purposes of certification must include a clinical component.

“DAANCE” means the Dental Anesthesia Assistant National Certification Examination as offered by the American Association of Oral and Maxillofacial Surgeons (AAOMS).

“Deep sedation” means drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

“Facility” means any dental office or clinic where sedation is used in the practice of dentistry. The term “facility” does not include a hospital.

“General anesthesia” means a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

“Licensed sedation provider” means a physician anesthesiologist currently licensed by the Iowa board of medicine or a certified registered nurse anesthetist (CRNA) currently licensed by the Iowa board of nursing.

“Minimal sedation” means a minimally depressed level of consciousness produced by a pharmacological method that retains the patient’s ability to independently and continuously maintain an airway and respond normally to tactile stimulation and verbal command. Although cognitive function and coordination may be modestly impaired, ventilatory and cardiovascular functions are unaffected. A patient whose only response reflex is withdrawal from repeated painful stimuli is not considered to be in a state of minimal sedation.

“Moderate sedation” means a drug-induced depression of consciousness, either by enteral or parenteral means, during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. A patient whose only response reflex is withdrawal from a painful stimulus is not considered to be in a state of moderate sedation.

“Monitoring nitrous oxide inhalation analgesia” means continually observing the patient receiving nitrous oxide and recognizing and notifying the dentist of any adverse reactions or complications.

“MRD” means the manufacturer’s maximum recommended dose of a drug as printed in FDA-approved labeling.
“Nitrous oxide inhalation analgesia” refers to the administration by inhalation of a combination of nitrous oxide and oxygen producing an altered level of consciousness that retains the patient’s ability to independently and continuously maintain an airway and respond appropriately to physical stimulation or verbal command.

“Patient monitor” means a dental assistant, dental hygienist, nurse or dentist who is designated to continuously monitor a patient receiving moderate sedation, deep sedation or general anesthesia until the patient meets the criteria to be discharged to the recovery area.

“Pediatric” means patients aged 12 or under.

“Permit holder” means an Iowa licensed dentist who has been issued a moderate sedation or general anesthesia permit by the board.

“Time-oriented anesthesia record” means documentation at appropriate time intervals of drugs, doses and physiologic data obtained during patient monitoring.

650—29.2(153) Advertising. A dentist shall ensure that any advertisements related to the availability of antianxiety premedication or minimal sedation clearly reflect the level of sedation provided and are not misleading.

650—29.3(153) Nitrous oxide inhalation analgesia.

29.3(1) A dentist may use nitrous oxide inhalation analgesia sedation on an outpatient basis for dental patients provided the dentist has completed training and complies with the following:
   a. Has adequate equipment with fail-safe features.
   b. Has routine inspection, calibration, and maintenance on equipment performed every two years and maintains documentation of such and provides documentation to the board upon request.
   c. Ensures the patient is continually monitored by a patient monitor while receiving nitrous oxide inhalation analgesia.

29.3(2) A dentist shall provide direct supervision of the administration and monitoring of nitrous oxide and establish a written office protocol for taking vital signs, adjusting anesthetic concentrations, and addressing emergency situations that may arise. The dentist shall be responsible for dismissing the patient following completion of the procedure.

29.3(3) A dental hygienist may administer and monitor nitrous oxide inhalation analgesia provided the services have been prescribed by a dentist and the hygienist has completed training while a student in an accredited school of dental hygiene or a board-approved course of training.

29.3(4) A dental assistant may monitor a patient who is under nitrous oxide after the dentist has induced a patient and established the maintenance level, provided the dental assistant has completed a board-approved expanded function course. A dental assistant may make adjustments to decrease the nitrous oxide concentration while monitoring the patient or may turn off oxygen delivery at the completion of the dental procedure.

29.3(5) Record keeping. The patient chart must include the concentration administered and duration of administration, as well as any vital signs taken.


29.4(1) A dentist shall evaluate a patient prior to the start of any sedative procedure. In healthy or medically stable patients (ASA I, II), the dentist should review the patient’s current medical history and medication use. For a patient with significant medical considerations (ASA III, IV), a dentist may need to consult with the patient’s primary care provider or consulting medical specialist. A dentist shall obtain informed consent from the patient or the patient’s parent or legal guardian prior to providing minimal sedation.

29.4(2) Record keeping. A time-oriented anesthesia record must be maintained and must contain the names of all drugs administered, including local anesthetics and nitrous oxide, dosages, time administered, and monitored physiological parameters, including oxygenation, ventilation, and circulation.

29.4(3) Minimal sedation for ASA I or II nonpediatric patients.
a. A dentist may prescribe or administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for unmonitored home use. A dentist may administer a supplemental dose of the same drug provided the total aggregate dose does not exceed 1.5 times the MRD on the day of treatment. The dentist shall not administer a supplemental dose until the clinical half-life of the initial dose has passed.

b. A dentist may administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for monitored use on the day of treatment.

c. A dentist may utilize nitrous oxide inhalation analgesia in combination with a single enteral drug.

29.4(4) Minimal sedation for ASA III, ASA IV or pediatric patients.

a. A dentist may prescribe or administer a single medication for minimal sedation via the enteral route for ASA III or IV patients or pediatric patients that does not exceed the MRD for unmonitored home use.

b. A dentist may administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for monitored use on the day of treatment.

c. A dentist may administer nitrous oxide inhalation analgesia for minimal sedation of ASA III or IV patients or pediatric patients provided the concentration does not exceed 50 percent and is not used in combination with any other drug.

650—29.5(153) Shared standards for moderate sedation, deep sedation and general anesthesia.

29.5(1) Prior to administering moderate sedation, deep sedation or general anesthesia, a dentist must obtain a current moderate sedation permit or general anesthesia permit pursuant to rule 650—29.11(153).

29.5(2) A dentist administering moderate sedation, deep sedation or general anesthesia must maintain current ACLS certification. A dentist administering moderate sedation to pediatric patients may maintain current PALS certification in lieu of current ACLS certification.

29.5(3) A dentist shall evaluate a patient prior to the start of any sedative procedure. A dentist should review a patient’s medical history, medication(s) and NPO (nothing by mouth) status. For a patient with significant medical considerations (ASA III, IV), a dentist may need to consult with the patient’s primary care provider or consulting medical specialist. The dentist should consult the body mass index as part of the preprocedural workup.

29.5(4) A dentist who administers sedation or anesthesia shall ensure that each facility where sedation services are provided is appropriately staffed to reasonably handle emergencies incident to the administration of sedation. A patient monitor shall be present in the treatment room and continually monitor the patient until the patient returns to a level of minimal sedation.

29.5(5) The dentist must provide postoperative verbal and written instructions to the patient and caregiver prior to discharging the patient.

29.5(6) The dentist must not leave the facility until the patient meets the criteria for discharge.

29.5(7) The dentist or another designated permit holder or licensed sedation provider must be available for postoperative aftercare for a minimum of 48 hours following the administration of sedation.

29.5(8) The dentist must establish emergency protocols which comply with the following:

a. A dentist must establish a protocol for immediate access to backup emergency services;

b. A patient monitor shall employ initial life-saving measures in the event of an emergency and shall activate the EMS system for life-threatening complications;

c. A dentist who utilizes an immobilization device must avoid chest or airway obstruction when applying the device and shall allow a hand or foot to remain exposed; and

d. The recovery room for a pediatric patient must include a functioning suction apparatus as well as the ability to provide >90% oxygen and positive-pressure ventilation, along with age- and size-appropriate rescue equipment.

29.5(9) Record keeping. A time-oriented anesthesia record must include preoperative and postoperative vital signs, drugs administered, dosage administered, anesthesia time in minutes, and monitors used. Pulse oximetry, heart rate, respiratory rate, and blood pressure must be recorded.
continually until the patient is fully ambulatory. The chart should contain the name of the person to whom the patient was discharged.

650—29.6(153) Moderate sedation standards.

29.6(1) Moderate sedation for ASA I or II nonpediatric patients.
   a. A dentist may prescribe or administer a single enteral drug in excess of the MRD on the day of treatment.
   b. A dentist may prescribe or administer a combination of more than one enteral drug.
   c. A dentist may administer a medication for moderate sedation via the parenteral route.
   d. A dentist may administer a medication for moderate sedation via the parenteral route in incremental doses.
   e. A dentist shall ensure the drug(s) or techniques, or both, carry a margin of safety wide enough to render unintended loss of consciousness unlikely.
   f. A dentist may administer nitrous oxide with more than one enteral drug.

29.6(2) Moderate sedation for ASA III, ASA IV or pediatric patients. A dentist who does not meet the requirements of paragraph 29.11(3)“c.” is prohibited from administering moderate sedation to pediatric or ASA III or IV patients. The following constitutes moderate sedation:
   a. The use of one or more enteral drugs in combination with nitrous oxide.
   b. The administration of any intravenous drug.

29.6(3) A dentist administering moderate sedation in a facility shall have at least one patient monitor observe the patient while under moderate sedation. The patient monitor shall be capable of administering emergency support and shall complete one of the following:
   a. A minimum of three hours of on-site training in airway management that provides the knowledge and skills necessary for a patient monitor to competently assist with emergencies;
   b. Current ACLS or PALS certification; or
   c. Current DAANCE certification.

29.6(4) Use of capnography or pretracheal/precordial stethoscope is required for moderate sedation providers.
   a. All moderate sedation permit holders shall use capnography to monitor end-tidal carbon dioxide unless the use of capnography is precluded or invalidated by the nature of the patient, procedure or equipment.
   b. In cases where the use of capnography is precluded or invalidated for the reasons listed previously, a pretracheal or precordial stethoscope must be used to continually monitor the auscultation of breath sounds at all facilities where licensed sedation providers provide sedation.

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.

650—29.8(153) Facility and equipment requirements for moderate sedation, deep sedation or general anesthesia.

29.8(1) Change of address or addition of facility location(s). A permit holder shall notify the board
office in writing within 60 days of a change in location or the addition of a sedation facility.

29.8(2) Facilities shall be permanently equipped. A dentist who administers moderate sedation, deep sedation or general anesthesia in a facility is required to be trained in and maintain, at a minimum, the following equipment to be properly equipped:

a. Electrocardiogram (EKG) monitor;
b. Positive pressure oxygen;
c. Suction;
d. Laryngoscope and blades;
e. Endotracheal tubes;
f. Magill forceps;
g. Oral airways;
h. Stethoscope;
i. Blood pressure monitoring device;

29.8(3) The board or designated agents of the board may conduct facility inspections. The actual costs associated with the on-site evaluation of the facility shall be the primary responsibility of the licensee. The cost to the licensee shall not exceed the fee specified in 650—Chapter 15.

650—29.9(153) Use of another licensed sedation provider or permit holder.

29.9(1) A permit holder may use a licensed sedation provider or another permit holder to administer moderate sedation, deep sedation or general anesthesia in a dental facility. A dentist who does not hold a sedation permit is prohibited from using a licensed sedation provider or permit holder to provide moderate sedation, deep sedation or general anesthesia.

29.9(2) A permit holder who has a licensed sedation provider or another permit holder administer moderate sedation, deep sedation or general anesthesia must remain present in the treatment room for the duration of the dental procedure.

29.9(3) A permit holder who has a licensed sedation provider or another permit holder administer moderate sedation, deep sedation or general anesthesia services must maintain a permanently and properly equipped facility pursuant to the provisions of this chapter.

29.9(4) A permit holder shall assess the need and the patient suitability for sedation services.

650—29.10(153) Reporting of adverse occurrences related to sedation or nitrous oxide.

29.10(1) All licensed dentists must submit a report to the board office within a period of seven days of any mortality related to sedation or nitrous oxide or any other incident related to sedation or nitrous oxide which results in temporary or permanent physical or mental injury requiring inpatient treatment at a hospital or clinic. The report shall include a complete copy of the patient record and include responses to the following:

a. Description of dental procedure.
b. Description of preoperative physical condition of patient.
c. List of drugs and dosage administered.
d. Description, in detail, of techniques utilized in administering the drugs utilized.
e. Description of adverse occurrence:
   (1) Description, in detail, of symptoms of any complications, to include but not be limited to onset, and type of symptoms in patient.
   (2) Treatment instituted on the patient.
   (3) Response of the patient to the treatment.
Description of the patient’s condition on termination of any procedures undertaken.

29.10(2) Failure to report an adverse occurrence, when the occurrence is related to the use of sedation or nitrous oxide, may result in disciplinary action.

650—29.11(153) Requirements for issuance of a moderate sedation or general anesthesia permit.

29.11(1) No dentist shall administer moderate sedation, deep sedation or general anesthesia for dental patients unless the dentist possesses a current permit issued by the board.

29.11(2) A dentist who intends to obtain a sedation permit must submit a completed application and pay the fee specified in 650—Chapter 15.

29.11(3) To qualify for a moderate sedation permit, the applicant shall have successfully completed the following education and training:

a. A training program, approved by the board, that consists of a minimum of 60 hours of instruction and management of at least 20 patients, or an accredited residency program that includes formal training and clinical experience in moderate sedation.

b. Training that includes rescuing patients from a deeper level of sedation than intended, including managing the airway, intravascular or intraosseous access, and reversal medications.

c. For a dentist who intends to utilize moderate sedation on pediatric or ASA III or IV patients: an accredited residency program that includes formal training in anesthesia and clinical experience in managing pediatric or ASA III or IV patients.

29.11(4) To qualify for a general anesthesia permit, the applicant shall have successfully completed the following education and training:

a. An advanced education program accredited by the Commission on Dental Accreditation that provides training in deep sedation and general anesthesia.

b. A minimum of one year of advanced training in anesthesiology and related academic subjects beyond the undergraduate dental school level, in a training program approved by the ACC.

c. Formal training in airway management.

d. Current ACLS certification.

29.11(5) Prior to issuance of a new permit, all facilities where the applicant intends to provide sedation services must have passed inspection by the board or designated agent.

29.11(6) The applicant may be required to complete a peer review evaluation, if requested by the ACC, prior to issuance of a permit.

650—29.12(153) ACC.

29.12(1) The ACC shall be chaired by a member of the board and shall include at least six additional members who are licensed to practice dentistry in Iowa. At least four members of the ACC shall hold deep sedation/general anesthesia or moderate sedation permits issued under this chapter.

29.12(2) The ACC shall perform the following duties:

a. Review all permit applications and take action as authorized.

b. Perform peer reviews as needed and report the results to the board.

c. Other duties as delegated by the board.


29.13(1) Referral to the ACC. All applications will be referred to the ACC for review at its next scheduled meeting.

29.13(2) Review by the ACC. Following review and consideration of an application, the ACC may take any of the following actions:

a. Request additional information;

b. Request that the applicant appear for an interview;

c. Approve issuance of the permit;

d. Approve issuance of the permit under certain terms and conditions or with certain restrictions;

e. Recommend denial of the permit;

f. Refer the permit application to the board for review and consideration with or without
recommendation; or

g. Request a peer review evaluation.

29.13(3) Review by board. The board shall consider applications and recommendations referred by the ACC. The board may take any of the following actions:

a. Request additional information;

b. Request that the applicant appear for an interview;

c. Grant the permit;

d. Grant the permit under certain terms and conditions or with certain restrictions; or

e. Deny the permit.

29.13(4) Appeal process for denials. If a permit application is denied, an applicant may file an appeal of the final decision using the process described in rule 650—11.10(147).

650—29.14(153) Renewal. A permit to administer deep sedation/general anesthesia or moderate sedation shall be renewed biennially at the time of license renewal. Permits expire August 31 of every even-numbered year.

29.14(1) To renew a permit, a licensee must submit the following:

a. Evidence of renewal of current ACLS certification or of current PALS certification if the permit holder provides sedation services for pediatric patients.

b. A minimum of six hours of continuing education in the area of sedation. These hours may also be submitted as part of license renewal requirements.

c. The appropriate fee for renewal as specified in 650—Chapter 15.

29.14(2) Failure to renew the permit prior to November 1 following its expiration shall cause the permit to lapse and become invalid for practice.

29.14(3) A permit that has been lapsed may be reinstated upon submission of a new application for a permit in compliance with the provisions of this chapter and payment of the application fee as specified in 650—Chapter 15.

650—29.15(147,153,272C) Grounds for nonrenewal. A request to renew a permit may be denied on any of the following grounds:

29.15(1) After proper notice and hearing, for a violation of these rules or Iowa Code chapter 147, 153, or 272C during the term of the last permit renewal.

29.15(2) Failure to pay required fees.

29.15(3) Failure to obtain required continuing education.

29.15(4) Failure to provide documentation of current ACLS or PALS certification.

29.15(5) Failure to provide documentation of maintaining a properly equipped facility.

29.15(6) Receipt of a certificate of noncompliance from the college student aid commission or the child support recovery unit of the department of human services in accordance with 650—Chapter 33 or 650—Chapter 34.

650—29.16(153) Noncompliance. Violations of the provisions of this chapter may result in revocation or suspension of the dentist’s permit or other disciplinary measures as deemed appropriate by the board.

These rules are intended to implement Iowa Code sections 153.13, 153.33, and 153.33B.
DENTAL BOARD[650]

Adopt & File

Proposing rule making related to sedation and nitrous oxide and providing an opportunity for public comment


Legal Authority for Rule Making

This rule making was proposed under the authority provided in Iowa Code sections 147.76 and 153.33.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 153.33 and 153.33B.

Purpose and Summary

The primary purpose of this proposed rule making is to update the requirements for providing sedation and nitrous oxide in dental offices. The rule making was drafted based on updated recommendations from the American Dental Association and input from the Board’s Anesthesia Credentials Committee.

This rule making updates requirements for providing moderate sedation, deep sedation and general anesthesia in dental offices. This rule making specifies the conditions under which the administration of the sedation services may be performed by another health care provider, such as an anesthesiologist or nurse anesthetist.

This rule making clarifies that training in the use of nitrous oxide during enrollment in an accredited school of dentistry or dental hygiene is approved for the purposes of these rules. This rule making also clarifies what a dental assistant is allowed to do or required to do, or both, while monitoring the administration of nitrous oxide.

This rule making establishes a requirement for training in the monitoring of patients under moderate sedation, deep sedation or general anesthesia. Due to the increased risk of these levels of sedation, the training would allow an option to focus on additional training in observation of a patient under sedation and prepare staff to recognize signs of an adverse reaction or occurrence.

This rule making establishes a prohibition of the use of drugs intended for deeper levels of sedation from being employed for the purposes of moderate sedation. This rule making clarifies the facilities and locations subject to inspection and the equipment required to be maintained at each facility where moderate sedation, deep sedation or general anesthesia, or all three, are performed.

This rule making updates terminology to be more specific and to clarify the requirements for providing sedation or nitrous oxide inhalation analgesia. These amendments also reorder some of the rules for clearer understanding and reference.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.
Waivers

Any person who believes that the 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—Chapter 7.

Public Comment

Any interested person may submit written or oral comments concerning this proposed rule making. Written or oral comments in response to this rule making must be received by the Board no later than 4:30 p.m. on May 15, 2019. Comments should be directed to:

Steve Garrison
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

No public hearing was scheduled. Four written comments were received, which were reviewed by the Board.

One of the comments received was fully in support of the amendments and recommended that the Board adopt the amendments as originally drafted.

The remaining three comments, submitted the Iowa Association of Nurse Anesthetists (IANA) and the Iowa Society of Anesthesiologists (ISA) were generally supportive of the rules with recommendations for changes to some of the provisions of the original rule making as proposed in ARC 4358C. The suggestions are summarized below.

Comments from the Iowa Association of Nurse Anesthetists (IANA):

1. IANA disagrees with the use of the term “delegated” in conjunction with request the services of another anesthesia provider. The IANA requests that the Board update the language in the preamble to strike “delegated to” from the language, and use other terminology such as “performed by” or other similar language.

2. IANA requests that the use of “patient monitor” as defined in IAC 650-29.1 be changed to other terminology to minimize confusion. IANA states that “patient monitor”, generally, refers to a piece of equipment, and not a licensee/registrant, whose purpose is to observe the patient while under sedation. IANA suggests use of “patient observer” or “patient supervisor” in lieu of monitor.

3. IANA requests that the Board clarify or update rules (650-29.6(2), 29.7(2)) to allow another anesthesia provider (as defined in the draft) be allowed to provide sedation services to pediatric patients and ASA III, IV patients even in cases where the dentist permit holder may not have that specific qualification. IANA indicates that the scope of practice would allow a CRNA or anesthesiologist to provide those services without additional qualifications or training.

4. IANA requests that the Board clarify or update the rule (650-29.6(3)) to allow an anesthesia provider (CRNA, anesthesiologist) to be counted as one of the licensees/registrants required to monitor a patient under sedation.
5. IANA requests that the Board clarify that the proposed amendments (650-29.9(2)) would allow a moderate sedation permit holder or a general anesthesia permit holder to allow an anesthesia provider to administer moderate sedation, deep sedation, or general anesthesia in a dental office regardless of the specific permit held by the dentist.

6. IANA requests that the Board clarify or update rule 650-29.9(2) that the dentist need not remain present in the recovery room/area following completion of the dental procedure in cases when an anesthesia provider has administered the sedation.

7. IANA requests that the Board clarify or update rule 650-29.9(4) to clarify that an anesthesia provider be allowed (or not restricted) to determine patient suitability for sedation separate and apart from any decisions made by the dentist.

Comments from the Iowa Society of Anesthesiologists (ISA):

In its first written comment, the ISA primarily referenced the 2015 “Standards for Basic Anesthetic Monitoring” issued by the American Society of Anesthesiologists (ASA), and legal changes related to sedation in California.

The ISA submitted a second written comment on May 15, 2019. The comments are intended to be a supplement to the comments submitted previously.

1. ISA referenced the ASA recommendation that “qualified anesthesia personnel shall be present in the room throughout the conduct of all general anesthetics, regional anesthetics and monitored anesthesia care.”

2. ISA requests that an individual other than the practitioner performing the procedure be designated to monitor the patient throughout the procedure. The letter later references a recommendation for a dedicated and independent anesthesia provider if the patient is under age 7, “a recommendation contained in the California Dental Board’s new rules.”

3. ISA requests that the individual responsible for monitoring the patient be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help.

4. ISA requests that the individual responsible for monitoring the patient not be a member of the procedural team, and that the individual only be allowed to assist with minor, interruptible tasks.

5. ISA requests that two patient monitors be required for moderate sedation.

6. ISA requests that the Board require that a licensed sedation provider be required to serve as one of the two patient monitors required when deep sedation or general anesthesia is administered in a dental office. ISA does not believe that a dentist with general anesthesia permit is able to adequately supervise the patient monitors. More specifically, the ISA believed that the proposed requirements for patient monitors are inadequate in situations where a patient requires the sedation to be re-dosed during the procedure.

Following discussion at the board meeting, the Iowa Dental Board adopted the rule making with updates to the final language in response to the following comments as follows:

IANA Comments/Suggestions:

1. Updated language in the preamble as suggested.
2. The Iowa Dental Board did not adopt the recommendations made in this comment. The ADA guidelines almost exclusively reference the term “monitor” with respect to the service provided by the licensee/registrant to the patient who is under sedation.
3. Amended rule 650-29.9(1) to update the rule as requested.
4. Amended rule 650-29.9(3) to clarify the rule as requested.
5. Amended rule 650-29.9(1) to clarify the rule as requested.
6. Amended rule 650-29.9(2) to clarify the rule as requested.
7. Amended rule 650-29.9(5) to clarify the rule as requested.

ISA Comments/Suggestions:

1. The Iowa Dental Board did not adopt the recommendations made in this comment as the board believed that the sedation training requirements are sufficient for the purposes of administering sedation in dental offices.
2. The Iowa Dental Board did not adopt the recommendations made in this comment since the standard referenced in this comment was not included in the California legislation that was signed into law. Additionally, the new California law will not become effective until 2022.
3. Amended rule 650-29.6(3) to further clarify the training required of licensees/registrants to serve as a patient monitor.
4. Amended rule 650-29.6(1) to clarify that the primary responsibility of the patient monitor shall be to observe the patient under sedation.
5. The Iowa Dental Board did not adopt the recommendations made in this comment since studies have not conclusively shown that two patient monitors increase safety to the patient when moderate sedation is administered.
6. The Iowa Dental Board did not adopt the recommendations since the rules provide minimum training standards for deep sedation/general anesthesia, which includes successful completion of a CODA-accredited advanced education program that includes training in deep sedation and general anesthesia and a minimum of one year of advanced training in anesthesiology and related academic subjects. Additionally, the rules allow a licensed dentist to request the services of another licensed sedation provider (e.g. anesthesiologist, nurse anesthetist, or another dentist with a sedation permit) if they believe that this is preferable or warranted. There is not any evidence that suggests that the higher standard of regulation increases patient safety. Should the evidence become available, the Board could revisit the issue quickly and amend the rules as deemed appropriate. Lastly, concerns have been raised about diminished access to care due to increased costs for services if these standards were to be adopted.

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 action is proposed:

Rescind 650—Chapter 29 and adopt the following new chapter in lieu thereof:

CHAPTER 29
SEDATION AND NITROUS OXIDE

650—29.1(153) Definitions. For the purpose of these rules, relative to the administration of deep sedation, general anesthesia, moderate sedation, minimal sedation, and nitrous oxide inhalation analgesia by licensed dentists, the following definitions shall apply:

“ACC” means the anesthesia credentials committee of the board.

“ASA” refers to the American Society of Anesthesiologists Patient Physical Status Classification System. Category I means normal healthy patients, and category II means patients with mild systemic disease. Category III means patients with severe systemic disease, and category IV means patients with severe systemic disease that is a constant threat to life.
“Board” means the Iowa dental board established in Iowa Code section 147.14(1) “d.”

“Capnography” means the monitoring of the concentration of exhaled carbon dioxide in order to assess physiologic status or determine the adequacy of ventilation during anesthesia.

“Current ACLS or PALS certification” means current certification in Advanced Cardiac Life Support (ACLS) or Pediatric Advanced Life Support (PALS). Current certification means certification by an organization on an annual basis or, if that certifying organization requires certification on a less frequent basis, evidence that the individual has been properly certified for each year covered by the renewal period. The course for the purposes of certification must include a clinical component.

“DAANCE” means the Dental Anesthesia Assistant National Certification Examination as offered by the American Association of Oral and Maxillofacial Surgeons (AAOMS).

“Deep sedation” means drug-induced depression of consciousness during which patients cannot be easily aroused but respond normally following repeated painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

“Facility” means any dental office or clinic where sedation is used in the practice of dentistry. The term “facility” does not include a hospital.

“General anesthesia” means a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

“Licensed sedation provider” means a physician anesthesiologist currently licensed by the Iowa board of medicine or a certified registered nurse anesthetist (CRNA) currently licensed by the Iowa board of nursing.

“Minimal sedation” means a minimally depressed level of consciousness produced by a pharmacological method that retains the patient’s ability to independently and continuously maintain an airway and respond normally to tactile stimulation and verbal command. Although cognitive function and coordination may be modestly impaired, ventilatory and cardiovascular functions are unaffected. A patient whose only response reflex is withdrawal from repeated painful stimuli is not considered to be in a state of minimal sedation.

“Moderate sedation” means a drug-induced depression of consciousness, either by enteral or parenteral means, during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. A patient whose only response reflex is withdrawal from a painful stimulus is not considered to be in a state of moderate sedation.

“Monitoring nitrous oxide inhalation analgesia” means continually observing the patient receiving nitrous oxide and recognizing and notifying the dentist of any adverse reactions or complications.

“MRD” means the manufacturer’s maximum recommended dose of a drug as printed in FDA-approved labeling.

“Nitrous oxide inhalation analgesia” refers to the administration by inhalation of a combination of nitrous oxide and oxygen producing an altered level of consciousness that retains the patient’s ability to independently and continuously maintain an airway and respond appropriately to physical stimulation or verbal command.

“Patient monitor” means a dental assistant, dental hygienist, nurse or dentist, whose primary responsibility is designated to continuously monitor a patient receiving moderate sedation, deep sedation or general anesthesia until the patient meets the criteria to be discharged to the recovery area.

“Pediatric” means patients aged 12 or under.
“Permit holder” means an Iowa licensed dentist who has been issued a moderate sedation or general anesthesia permit by the board.

“Time-oriented anesthesia record” means documentation at appropriate time intervals of drugs, doses and physiologic data obtained during patient monitoring.

650—29.2(153) Advertising. A dentist shall ensure that any advertisements related to the availability of antianxiety premedication or minimal sedation clearly reflect the level of sedation provided and are not misleading.

650—29.3(153) Nitrous oxide inhalation analgesia.

29.3(1) A dentist may use nitrous oxide inhalation analgesia sedation on an outpatient basis for dental patients provided the dentist has completed training and complies with the following:
   a. Has adequate equipment with fail-safe features.
   b. Has routine inspection, calibration, and maintenance on equipment performed every two years and maintains documentation of such and provides documentation to the board upon request.
   c. Ensures the patient is continually monitored by a patient monitor while receiving nitrous oxide inhalation analgesia.

29.3(2) A dentist shall provide direct supervision of the administration and monitoring of nitrous oxide and establish a written office protocol for taking vital signs, adjusting anesthetic concentrations, and addressing emergency situations that may arise. The dentist shall be responsible for dismissing the patient following completion of the procedure.

29.3(3) A dental hygienist may administer and monitor nitrous oxide inhalation analgesia provided the services have been prescribed by a dentist and the hygienist has completed training while a student in an accredited school of dental hygiene or a board-approved course of training.

29.3(4) A dental assistant may monitor a patient who is under nitrous oxide after the dentist has induced a patient and established the maintenance level, provided the dental assistant has completed a board-approved expanded function course. A dental assistant may make adjustments to decrease the nitrous oxide concentration while monitoring the patient or may turn off oxygen delivery at the completion of the dental procedure.

29.3(5) Record keeping. The patient chart must include the concentration administered and duration of administration, as well as any vital signs taken.


29.4(1) A dentist shall evaluate a patient prior to the start of any sedative procedure. In healthy or medically stable patients (ASA I, II), the dentist should review the patient’s current medical history and medication use. For a patient with significant medical considerations (ASA III, IV), a dentist may need to consult with the patient’s primary care provider or consulting medical specialist. A dentist shall obtain informed consent from the patient or the patient’s parent or legal guardian prior to providing minimal sedation.

29.4(2) Record keeping. A time-oriented anesthesia record must be maintained and must contain the names of all drugs administered, including local anesthetics and nitrous oxide, dosages, time administered, and monitored physiological parameters, including oxygenation, ventilation, and circulation.

29.4(3) Minimal sedation for ASA I or II nonpediatric patients.
   a. A dentist may prescribe or administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for unmonitored home use. A dentist may administer a supplemental dose of the same drug provided the total aggregate dose does not exceed 1.5 times the MRD on the day of treatment. The dentist shall not administer a supplemental dose until the clinical half-life of the initial dose has passed.
   b. A dentist may administer a single medication for minimal sedation via the enteral route that
does not exceed the MRD for monitored use on the day of treatment.

c. A dentist may utilize nitrous oxide inhalation analgesia in combination with a single enteral drug.

29.4(4) Minimal sedation for ASA III, ASA IV or pediatric patients.

a. A dentist may prescribe or administer a single medication for minimal sedation via the enteral route for ASA III or IV patients or pediatric patients that does not exceed the MRD for unmonitored home use.

b. A dentist may administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for monitored use on the day of treatment.

c. A dentist may administer nitrous oxide inhalation analgesia for minimal sedation of ASA III or IV patients or pediatric patients provided the concentration does not exceed 50 percent and is not used in combination with any other drug.

650—29.5(153) Shared standards for moderate sedation, deep sedation and general anesthesia.

29.5(1) Prior to administering moderate sedation, deep sedation or general anesthesia, a dentist must obtain a current moderate sedation permit or general anesthesia permit pursuant to rule 650—29.11(153).

29.5(2) A dentist administering moderate sedation, deep sedation or general anesthesia must maintain current ACLS certification. A dentist administering moderate sedation to pediatric patients may maintain current PALS certification in lieu of current ACLS certification.

29.5(3) A dentist shall evaluate a patient prior to the start of any sedative procedure. A dentist should review a patient’s medical history, medication(s) and NPO (nothing by mouth) status. For a patient with significant medical considerations (ASA III, IV), a dentist may need to consult with the patient’s primary care provider or consulting medical specialist. The dentist should consult the body mass index as part of the preprocedural workup.

29.5(4) A dentist who administers sedation or anesthesia shall ensure that each facility where sedation services are provided is appropriately staffed to reasonably handle emergencies incident to the administration of sedation. A patient monitor shall be present in the treatment room and continually monitor the patient until the patient returns to a level of minimal sedation.

29.5(5) The dentist must provide postoperative verbal and written instructions to the patient and caregiver prior to discharging the patient.

29.5(6) The dentist must not leave the facility until the patient meets the criteria for discharge.

29.5(7) The dentist or another designated permit holder or licensed sedation provider must be available for postoperative aftercare for a minimum of 48 hours following the administration of sedation.

29.5(8) The dentist must establish emergency protocols which comply with the following:

a. A dentist must establish a protocol for immediate access to backup emergency services;

b. A patient monitor shall employ initial life-saving measures in the event of an emergency and shall activate the EMS system for life-threatening complications;

c. A dentist who utilizes an immobilization device must avoid chest or airway obstruction when applying the device and shall allow a hand or foot to remain exposed; and

d. The recovery room for a pediatric patient must include a functioning suction apparatus as well as the ability to provide >90% oxygen and positive-pressure ventilation, along with age- and size-appropriate rescue equipment.

29.5(9) Record keeping. A time-oriented anesthesia record must include preoperative and postoperative vital signs, drugs administered, dosage administered, anesthesia time in minutes, and monitors used. Pulse oximetry, heart rate, respiratory rate, and blood pressure must be recorded continually until the patient is fully ambulatory. The chart should contain the name of the person to whom the patient was discharged.

650—29.6(153) Moderate sedation standards.
29.6(1) Moderate sedation for ASA I or II nonpediatric patients.
   a. A dentist may prescribe or administer a single enteral drug in excess of the MRD on the day of treatment.
   b. A dentist may prescribe or administer a combination of more than one enteral drug.
   c. A dentist may administer a medication for moderate sedation via the parenteral route.
   d. A dentist may administer a medication for moderate sedation via the parenteral route in incremental doses.
   e. A dentist shall ensure the drug(s) or techniques, or both, carry a margin of safety wide enough to render unintended loss of consciousness unlikely.
   f. A dentist may administer nitrous oxide with more than one enteral drug.

29.6(2) Moderate sedation for ASA III, ASA IV or pediatric patients. A dentist who does not meet the requirements of paragraph 29.11(3) “c” is prohibited from administering moderate sedation to pediatric or ASA III or IV patients. The following constitutes moderate sedation:
   a. The use of one or more enteral drugs in combination with nitrous oxide.
   b. The administration of any intravenous drug.

29.6(3) A dentist administering moderate sedation in a facility shall have at least one patient monitor observe the patient while under moderate sedation. The patient monitor shall be capable of administering emergency support and shall complete one of the following:
   a. A minimum of three hours of on-site training in airway management that provides the knowledge and skills necessary for a patient monitor to competently assist with emergencies including, but not limited to, recognizing apnea and airway obstruction;
   b. Current ACLS or PALS certification; or
   c. Current DAANCE certification.

29.6(4) Use of capnography or pretracheal/precordial stethoscope is required for moderate sedation providers.
   a. All moderate sedation permit holders shall use capnography to monitor end-tidal carbon dioxide unless the use of capnography is precluded or invalidated by the nature of the patient, procedure or equipment.
   b. In cases where the use of capnography is precluded or invalidated for the reasons listed previously, a pretracheal or precordial stethoscope must be used to continually monitor the auscultation of breath sounds at all facilities where licensed sedation providers provide sedation.

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.

650—29.8(153) Facility and equipment requirements for moderate sedation, deep sedation or general anesthesia.

29.8(1) Change of address or addition of facility location(s). A permit holder shall notify the board office in writing within 60 days of a change in location or the addition of a sedation facility.
29.8(2) Facilities shall be permanently equipped. A dentist who administers moderate sedation, deep sedation or general anesthesia in a facility is required to be trained in and maintain, at a minimum, the following equipment to be properly equipped:

- Electrocardiogram (EKG) monitor;
- Positive pressure oxygen;
- Suction;
- Laryngoscope and blades;
- Endotracheal tubes;
- Magill forceps;
- Oral airways;
- Stethoscope;
- Blood pressure monitoring device;
- Pulse oximeter;
- Emergency drugs;
- Defibrillator;
- Capnography machine to monitor end-tidal carbon dioxide;
- Pretracheal or precordial stethoscope; and
- Any additional equipment necessary to establish intravascular or intraosseous access, which shall be available until the patient meets discharge criteria.

29.8(3) The board or designated agents of the board may conduct facility inspections. The actual costs associated with the on-site evaluation of the facility shall be the primary responsibility of the licensee. The cost to the licensee shall not exceed the fee specified in 650—Chapter 15.

650—29.9(153) Use of another licensed sedation provider or permit holder.

29.9(1) A dentist may only use the services of a licensed sedation provider or another permit holder to administer moderate sedation, deep sedation, or general anesthesia in a dental facility if the dentist holds a current moderate sedation or general anesthesia permit. A permit holder may use a licensed sedation provider or another permit holder to administer moderate sedation, deep sedation, or general anesthesia in a dental facility. A permit holder who does not meet the training requirement in paragraph 29.11(3) "c" to administer moderate sedation to pediatric or ASA III or IV patients may use a licensed sedation provider or another qualified permit holder to administer moderate sedation to pediatric or ASA III or IV patients. A dentist who does not hold a sedation permit is prohibited from using a licensed sedation provider or permit holder to provide moderate sedation, deep sedation, or general anesthesia.

29.9(2) The dentist must remain present in the treatment room for the duration of any dental treatment. A permit holder who has a licensed sedation provider or another permit holder administer moderate sedation, deep sedation, or general anesthesia must remain present in the treatment room for the duration of the dental procedure.

29.9(3) When a licensed sedation provider or another permit holder is used to administer moderate sedation, deep sedation, or general anesthesia, that provider constitutes one patient monitor for the purpose of complying with subrule 29.6(3) or 29.7(2).

29.9(4) A permit holder who has a licensed sedation provider or another permit holder administer moderate sedation, deep sedation, or general anesthesia services must maintain a permanently and properly equipped facility pursuant to the provisions of this chapter.

29.9(45) A permit holder shall assess the need and the patient suitability for sedation services. A permit holder shall not interfere with any independent assessment performed by a licensed sedation provider.

650—29.10(153) Reporting of adverse occurrences related to sedation or nitrous oxide.

29.10(1) All licensed dentists must submit a report to the board office within a period of seven days of any mortality related to sedation or nitrous oxide or any other incident related to sedation or nitrous oxide which results in temporary or permanent physical or mental injury requiring the patient receiving
inpatient treatment at a hospital or clinic. The report shall include a complete copy of the patient record and include responses to the following:

a. Description of dental procedure.
b. Description of preoperative physical condition of patient.
c. List of drugs and dosage administered.
d. Description, in detail, of techniques utilized in administering the drugs utilized.
e. Description of adverse occurrence:
   (1) Description, in detail, of symptoms of any complications, to include but not be limited to onset, and type of symptoms in patient.
   (2) Treatment instituted on the patient.
   (3) Response of the patient to the treatment.
f. Description of the patient’s condition on termination of any procedures undertaken.

29.10(2) Failure to report an adverse occurrence, when the occurrence is related to the use of sedation or nitrous oxide, may result in disciplinary action.

650—29.11(153) Requirements for issuance of a moderate sedation or general anesthesia permit.

29.11(1) No dentist shall administer moderate sedation, deep sedation or general anesthesia for dental patients unless the dentist possesses a current permit issued by the board.

29.11(2) A dentist who intends to obtain a sedation permit must submit a completed application and pay the fee specified in 650—Chapter 15.

29.11(3) To qualify for a moderate sedation permit, the applicant shall have successfully completed the following education and training:
   a. A training program, approved by the board, that consists of a minimum of 60 hours of instruction and management of at least 20 patients, or an accredited residency program that includes formal training and clinical experience in moderate sedation.
   b. Training that includes rescuing patients from a deeper level of sedation than intended, including managing the airway, intravascular or intraosseous access, and reversal medications.
   c. For a dentist who intends to utilize moderate sedation on pediatric or ASA III or IV patients: an accredited residency program that includes formal training in anesthesia and clinical experience in managing pediatric or ASA III or IV patients.

29.11(4) To qualify for a general anesthesia permit, the applicant shall have successfully completed the following education and training:
   a. An advanced education program accredited by the Commission on Dental Accreditation that provides training in deep sedation and general anesthesia.
   b. A minimum of one year of advanced training in anesthesiology and related academic subjects beyond the undergraduate dental school level, in a training program approved by the ACC.
   c. Formal training in airway management.
   d. Current ACLS certification.

29.11(5) Prior to issuance of a new permit, all facilities where the applicant intends to provide sedation services must have passed inspection by the board or designated agent.

29.11(6) The applicant may be required to complete a peer review evaluation, if requested by the ACC, prior to issuance of a permit.

650—29.12(153) ACC.

29.12(1) The ACC shall be chaired by a member of the board and shall include at least six additional members who are licensed to practice dentistry in Iowa. At least four members of the ACC shall hold deep sedation/general anesthesia or moderate sedation permits issued under this chapter.

29.12(2) The ACC shall perform the following duties:
   a. Review all permit applications and take action as authorized.
   b. Perform peer reviews as needed and report the results to the board.

29.13(1) Referral to the ACC. All applications will be referred to the ACC for review at its next scheduled meeting.

29.13(2) Review by the ACC. Following review and consideration of an application, the ACC may take any of the following actions:
   a. Request additional information;
   b. Request that the applicant appear for an interview;
   c. Approve issuance of the permit;
   d. Approve issuance of the permit under certain terms and conditions or with certain restrictions;
   e. Recommend denial of the permit;
   f. Refer the permit application to the board for review and consideration with or without recommendation; or
   g. Request a peer review evaluation.

29.13(3) Review by Board. The board shall consider applications and recommendations referred by the ACC. The board may take any of the following actions:
   a. Request additional information;
   b. Request that the applicant appear for an interview;
   c. Grant the permit;
   d. Grant the permit under certain terms and conditions or with certain restrictions; or
   e. Deny the permit.

29.13(4) Appeal process for denials. If a permit application is denied, an applicant may file an appeal of the final decision using the process described in rule 650—11.10(147).

650—29.14(153) Renewal. A permit to administer deep sedation/general anesthesia or moderate sedation shall be renewed biennially at the time of license renewal. Permits expire August 31 of every even-numbered year.

29.14(1) To renew a permit, a licensee must submit the following:
   a. Evidence of renewal of current ACLS certification or of current PALS certification if the permit holder provides sedation services for pediatric patients.
   b. A minimum of six hours of continuing education in the area of sedation. These hours may also be submitted as part of license renewal requirements.
   c. The appropriate fee for renewal as specified in 650—Chapter 15.

29.14(2) Failure to renew the permit prior to November 1 following its expiration shall cause the permit to lapse and become invalid for practice.

29.14(3) A permit that has been lapsed may be reinstated upon submission of a new application for a permit in compliance with the provisions of this chapter and payment of the application fee as specified in 650—Chapter 15.

650—29.15(147,153,272C) Grounds for nonrenewal. A request to renew a permit may be denied on any of the following grounds:

29.15(1) After proper notice and hearing, for a violation of these rules or Iowa Code chapter 147, 153, or 272C during the term of the last permit renewal.

29.15(2) Failure to pay required fees.

29.15(3) Failure to obtain required continuing education.

29.15(4) Failure to provide documentation of current ACLS or PALS certification.

29.15(5) Failure to provide documentation of maintaining a properly equipped facility.

29.15(6) Receipt of a certificate of noncompliance from the college student aid commission or the child support recovery unit of the department of human services in accordance with 650—Chapter 33.
or 650—Chapter 34.

650—29.16(153) Noncompliance. Violations of the provisions of this chapter may result in revocation or suspension of the dentist’s permit or other disciplinary measures as deemed appropriate by the board.

These rules are intended to implement Iowa Code sections 153.13, 153.33, and 153.33B.
Mr. Steve Garrison  
Iowa Dental Board  
400 S.W. Eighth Street, Suite D  
Des Moines, Iowa 50309  
Also sent via Email: steven.garrison@iowa.gov

RE: ARC 4358C - Sedation and Nitrous Oxide Inhalation Analgesia

Mr. Garrison,

On behalf of the over 400 members of the Iowa Association of Nurse Anesthetists (IANA), we would like to thank you and the staff of the Iowa Dental Board (Board) for your patience and diligence in developing ARC 4358C. The IANA greatly appreciates the Anesthesia Credentialing Committee’s and Board’s consideration of concerns raised by the IANA as they developed these rules. The IANA is generally supportive of ARC 4358C.

As the Board reviews this Notice of Intended Action and prepares to consider the adoption of a final rule, the IANA would like to share the following:

• The second sentence of the second paragraph of the Purpose and Summary states: “This rule making specifies the conditions under which the administration of the sedation services may be delegated to another health care provider, such as an anesthesiologist or nurse anesthetist.” The IANA strongly disagrees with the term “delegated” in the sentence. As independently licensed anesthesia providers in the state of Iowa, Certified Registered Nurse Practitioners (CRNAs) do not require delegation of the ability to provide anesthesia or supervision by another health care provider. The use of the term is not accurate and does not depict the actual mechanism for use of a licensed sedation provider described in the rule. The IANA suggests that “delegated to” be replaced with “performed by” or some other term.

• 650-29.1 The definition of “Patient monitor” is confusing to the IANA. While the IANA understands the staff person the Board is attempting to identify, the term “patient monitor” is commonly used in reference to devices and not people/staff. The IANA would suggest changing the term to “patient observer” or “patient supervisor.”

• 650-29.6(2) The Board places restrictions on dentists administering moderate anesthesia to pediatric or ASA III, IV patients. The IANA requests clarification that this limitation does not apply if a dentist is a permit holder and is using a licensed sedation provider acting within their scope of practice.
• 650-29.6(3) the Board requires a dentist administering moderate sedation to have at least one patient monitor observing the patient while under moderate sedation. The IANA requests clarification on the applicability of 29.6(3) when a permit holder is utilizing a licensed sedation provider to provide the anesthesia and monitor the patient. As written, the rule could be interpreted to require the permit holder, patient monitor, and licensed sedation provider to be present. IANA suggests adding a provision that 29.6(3) is not applicable if anesthesia is being administered by a licensed sedation provider.

• 650-29.7(2) the Board requires a permit holder to have two patient monitors present when a patient is under deep sedation or general anesthesia. The IANA requests clarification on the applicability of 29.7(2) when a permit holder is utilizing a licensed sedation provider to provide deep sedation or general anesthesia and monitor the patient. As written, the rule could be interpreted to require the permit holder, two patient monitors, and licensed sedation provider to be present in that situation. IANA suggests adding a provision that 29.7(2) is not applicable if anesthesia is being administered by a licensed sedation provider.

• 650-29.9(1) allows a permit holder to utilize another permit holder or a licensed sedation provider to administer moderate sedation, deep sedation, or general anesthesia. A plain reading of 29.9(1) incorporating the definition of “permit holder” would allow a dentist with either a moderate sedation or deep sedation permit to utilize a licensed sedation provider to provide moderate sedation, deep sedation, or general anesthesia, regardless of the type of permit held by the permit holder. The IANA has expressed this understanding to the Board during their deliberations on the rule. The IANA requests confirmation through this comment process that their understanding is the same as the Board’s.

• 650-29.9(2) provides that a permit holder utilizing a licensed sedation provider must remain present in the treatment room for the duration of the dental procedure. The IANA has no concern with the requirement but requests clarification that the permit holder is not required to be in the treatment or recovery room post the dental procedure and that the permit holder is not delegating to or supervising the licensed sedation provider.

• 650-29.9(4) provides that “a permit holder shall assess the need and the patient suitably for sedation services.” The Board’s jurisdiction regulates the activities of
dentists and staff. A licensed sedation provider is regulated by their own board, practice act, and standards of care. The IANA agrees that the permit holder should perform both duties contained in 29.9(4). The IANA's understanding from the text is that the licensed sedation provider in complying with their own practice act and standards will also be making the determination as to the patient's suitability for sedation services. The IANA suggests inserting the following: "The licensed sedation provider shall also assess patient suitability for sedation services."

We welcome the opportunity to discuss these items in greater detail and offer additional insights.
Respectfully,

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Doug Struyk - IANA Legal Counsel at struyk@carneyappleby.com
April 26, 2019

Jill Stuecker, Executive Director
Iowa Dental Board
400 SW 8th Street, Suite D
Des Moines, IA 50309

RE: Comments on Iowa ARC 4358C-sedation and nitrous oxide

Dear Ms. Stuecker,

Thank you for the opportunity to provide comments on Iowa ARC 4358C, the Iowa Dental Board’s proposed changes to its administrative rules on sedation and nitrous oxide. The Iowa Society of Anesthesiologists (ISA) represents over 350 physician anesthesiologists and anesthesiology residents across the state of Iowa. Like the Dental Board, ISA has watched closely the ongoing national debate regarding the best way to ensure that patients who are provided sedation, especially general anesthesia or deep sedation, outside of a hospital or surgical center, respond appropriately.

As the Dental Board is likely aware, several state and national reviews of the proper use and monitoring of sedation have been conducted recently. In 2015, the American Society of Anesthesiologists approved “Standards for Basic Anesthetic Monitoring.” Those standards, which are attached, recommend “Qualified anesthesia personnel shall be present in the room throughout the conduct of all general anesthetics, regional anesthetics and monitored anesthesia care.” (emphasis added) The report goes on to say, “Because of the rapid changes in patient status during anesthesia, qualified anesthesia personnel shall be continuously present to monitor the patient and provide anesthesia care.”

The ASA policy grew out of a concern about inadequate monitoring of patients who receive anesthesia. The state of California’s dental board, sharing that same concern, recently adopted sedation rules that require provision of a separate dedicated and independent anesthesia provider for children less than seven years of age undergoing deep sedation or general anesthesia. Please find attached an article that describes the process that generated this change in the state of California.

In late 2017, several national associations, including the American Society of Anesthesiologists, the American Association of Oral and Maxillofacial Surgeons, and the American Dental Association, developed joint guidelines for moderate sedation. A summary of those guidelines, is below, and the full document is attached.
Availability of an Individual Responsible for Patient Monitoring

- Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure.
- The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help.
- The designated individual should not be a member of the procedural team but may assist with minor, interruptible tasks once the patient’s level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient’s level of sedation is maintained.

In comparing these guidelines to the proposed rules developed by the Iowa Dental Board, ISA believes that the Dental Board’s rules do not meet these guidelines and need to be strengthened. For Deep Sedation or General Anesthesia, Section 29.7(2) of the Dental Board’s proposed rules requires that two patient monitors be present. For Moderate sedation, Section 29.6(3) of the rules requires only one patient monitor be present.

These rules are inconsistent with the recommendations cited above in several different ways. There is no requirement that qualified anesthesia personnel be present as is recommended by the ASA publication. There is no requirement that a separate dedicated and independent anesthesia provider be present if the patient is under the age of seven, a recommendation contained in the California Dental Board’s new rules. And finally, there is no requirement that the patient monitors be independent of the procedural team, as is recommended by the joint ASA-AOMS-ADA report.

The Iowa Society of Anesthesiologists would urge the Iowa Dental Board to review its proposed rules and strengthen its requirements for patient monitoring along the lines of the documents referenced and attached to this letter. If you have additional questions about the issues raised in this letter, please feel free to contact Kevin Kruse, ISA Executive Director at (515) 282-8192 or kevin@iasahq.org.

Sincerely,

Melinda Seering, M.D.
President, Iowa Society of Anesthesiologists

Attached:

American Society of Anesthesiologists, Standards for Basic Anesthesia Monitoring

Dr. Rita Argawal, An Anesthesiologists Thoughts on Dental Sedation Laws

A Report by the American Society of Anesthesiologists Task Force on Moderate Procedural Sedation and Analgesia, the American Association of Oral and Maxillofacial Surgeons, American College of Radiology, American Dental Association, American Society of Dentist Anesthesiologists, and Society of Interventional Radiology, Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018
In 2015, healthy, happy 6-year-old Caleb Sears suffered a cardiac arrest in his oral surgeon’s office after receiving midazolam, ketamine, propofol, fentanyl, and nitrous oxide. He became apneic and later passed away. His devastated family could not understand how this tragedy had happened. They discovered that in California and many other states, dentists and oral surgeons, unlike anyone else in medicine, can provide deep sedation or general anesthesia to patients while performing the procedures. This is called the single operator or operator-anesthetist model. These dentist/oral surgeons support their method of practice by having their dental assistants help monitor the patient’s vital signs. Dental assistants, while excellent at helping care for teeth, have no medical training. The only person with any medical training in the room is the dentist or oral surgeon doing the procedure. Only the dentist or oral surgeon can start an IV, determine which medications to use, manage the airway, and direct the resuscitation. In addition, they found that each state’s dental board determines the requirements and regulations governing anesthesia and sedation in dental offices.

Caleb’s family set about trying to change the California law. Their initial attempt resulted in the passage Caleb’s Law that required the Dental Board of California (DBC) to review and recommend changes of the regulations governing dental anesthesia at that time. The next step was to codify all the recommendations made by the DBC, which included the provision of a separate dedicated and independent anesthesia provider for children less than seven years of age undergoing deep sedation or general anesthesia. This step included a complete representation of all the patient safety recommendations from the DBC. It was sponsored by the American Academy of Pediatrics-California Chapter (AAP-CA), the California Society of Anesthesiologists (CSA) and the California Society of Dentist Anesthesiology (CSDA). (Full disclosure, as a member of the CSA and the Chair of the American Academy of Pediatrics Section on Anesthesiology and Pain Medicine at that time, I was asked to help provide expert testimony. None of us were paid or received any compensation.) Only after much debate and significant amendments to strengthen several provisions was SB 501 eventually signed into law in California in October 2018. The major provisions of SB 501 can be found here. [http://tinyurl.com/y58auym5]

While there were some good things that came out of this law, there was one major area of disagreement for Anesthesiologists, Pediatricians, and other physicians, and that is the continued support for the single operator-anesthetist model of practice, whereby the operating dentist or oral surgeon can supervise and provide anesthesia at the same time. This does not happen anywhere else in medicine, particularly for deep sedation or general anesthesia in children. The standard of care in these situations is to have a separate, medically-qualified
person administer the sedation and monitor the patient, while another (physician, nurse or advanced practice provider) performs the procedure.

There were some positive changes that occurred as a result of this law, the most important of which is the adoption of standard ASA and CMS terminology for levels of sedation and anesthesia instead of the mishmash of terms used in dentistry. The other important changes are the requirement for mandated reporting of adverse events, improved education, and a pediatric endorsement for care of children less than seven years of age.

As part of the team supporting Caleb’s Law, we reached out to Dr. Charles Coté and Dr. Steven Wilson, who are the longtime co-authors of the universally accepted AAP/AAPD “Guidelines for Monitoring and Management of Pediatric Patients Before, During, and After Sedation for Diagnostic and Therapeutic Procedures: Update 2016.” As a result, Dr. Coté was able to come to Sacramento to meet with lawmakers and lobbyists. He quickly realized that parts of the 2016 Guidelines were being misinterpreted to support the use of the single operator-anesthetist model. He also realized that every state had separate and often different requirements and definitions for sedation and anesthesia practices in dentistry. He and Dr. Wilson are currently working on an update to these Guidelines to correct these misinterpretations.

The outrage over unnecessary dental deaths in children and the media attention surrounding Caleb’s Law has also led to increased and sustained coverage and scientific articles around the country, including a law in Hawaii, journal studies in Pediatrics and Anesthesiology, and questions if children should be sedated for dental work at all.

What else can we do? There is still a lot that is unknown, and some of the dental deaths in children are not easily explained. Gathering high-quality data regarding all sedation events could really make a difference in determining best practices. We must encourage all Dental Boards throughout the country to adopt effective data tools, and follow the basic principles of patient safety and the foundational pillars of the Institute of Health Care Improvement. Such tools already exist. One such tool has been developed and used by the Pediatric Sedation Research Consortium, who are willing and able to modify it for use for all dental sedations anywhere in the country. This type of tool would allow for easy and effective data collection and analysis, and development of quality improvement processes for the benefit of all patients.

It seems ludicrous that the same standard of care is not used for sedation and anesthesia in all situations anywhere it is administered. There is nothing inherently different about “dental” sedation/anesthesia versus any other sedation or anesthesia. We must demand the same standards for all patients everywhere. Until that happens, we must continue to educate physicians, health care practitioners, patients, and families on the differences in the practice of dental sedation and anesthesia.

*Modified from CSAOF blog published February 2019*
STANDARDS FOR BASIC ANESTHETIC MONITORING

Committee of Origin: Standards and Practice Parameters
(Approved by the ASA House of Delegates on October 21, 1986, last amended on October 20, 2010, and last affirmed on October 28, 2015)

These standards apply to all anesthesia care although, in emergency circumstances, appropriate life support measures take precedence. These standards may be exceeded at any time based on the judgment of the responsible anesthesiologist. They are intended to encourage quality patient care, but observing them cannot guarantee any specific patient outcome. They are subject to revision from time to time, as warranted by the evolution of technology and practice. They apply to all general anesthetics, regional anesthetics and monitored anesthesia care. This set of standards addresses only the issue of basic anesthetic monitoring, which is one component of anesthesia care. In certain rare or unusual circumstances, 1) some of these methods of monitoring may be clinically impractical, and 2) appropriate use of the described monitoring methods may fail to detect untoward clinical developments. Brief interruptions of continual† monitoring may be unavoidable. These standards are not intended for application to the care of the obstetrical patient in labor or in the conduct of pain management.

1. STANDARD I

Qualified anesthesia personnel shall be present in the room throughout the conduct of all general anesthetics, regional anesthetics and monitored anesthesia care.

1.1 Objective –

Because of the rapid changes in patient status during anesthesia, qualified anesthesia personnel shall be continuously present to monitor the patient and provide anesthesia care. In the event there is a direct known hazard, e.g., radiation, to the anesthesia personnel which might require intermittent remote observation of the patient, some provision for monitoring the patient must be made. In the event that an emergency requires the temporary absence of the person primarily responsible for the anesthetic, the best judgment of the anesthesiologist will be exercised in comparing the emergency with the anesthetized patient’s condition and in the selection of the person left responsible for the anesthetic during the temporary absence.

2. STANDARD II

During all anesthetics, the patient’s oxygenation, ventilation, circulation and temperature shall be continually evaluated.
2.1 **Oxygenation** –

2.1.1 **Objective** –

To ensure adequate oxygen concentration in the inspired gas and the blood during all anesthetics.

2.2 **Methods** –

2.2.1 Inspired gas: During every administration of general anesthesia using an anesthesia machine, the concentration of oxygen in the patient breathing system shall be measured by an oxygen analyzer with a low oxygen concentration limit alarm in use.*

2.2.2 Blood oxygenation: During all anesthetics, a quantitative method of assessing oxygenation such as pulse oximetry shall be employed.* When the pulse oximeter is utilized, the variable pitch pulse tone and the low threshold alarm shall be audible to the anesthesiologist or the anesthesia care team personnel.* Adequate illumination and exposure of the patient are necessary to assess color.*

3. **VENTILATION**

3.1 **Objective** –

To ensure adequate ventilation of the patient during all anesthetics.

3.2 **Methods** –

3.2.1 Every patient receiving general anesthesia shall have the adequacy of ventilation continually evaluated. Qualitative clinical signs such as chest excursion, observation of the reservoir breathing bag and auscultation of breath sounds are useful. Continual monitoring for the presence of expired carbon dioxide shall be performed unless invalidated by the nature of the patient, procedure or equipment. Quantitative monitoring of the volume of expired gas is strongly encouraged.*

3.2.2 When an endotracheal tube or laryngeal mask is inserted, its correct positioning must be verified by clinical assessment and by identification of carbon dioxide in the expired gas. Continual end-tidal carbon dioxide analysis, in use from the time of endotracheal tube/laryngeal mask placement, until extubation/removal or initiating transfer to a postoperative care location, shall be performed using a quantitative method such as capnography, capnometry or mass spectroscopy.* When capnography or capnometry is utilized, the end tidal CO2 alarm shall be audible to the anesthesiologist or the anesthesia care team personnel.*
3.2.3 When ventilation is controlled by a mechanical ventilator, there shall be in continuous use a device that is capable of detecting disconnection of components of the breathing system. The device must give an audible signal when its alarm threshold is exceeded.

3.2.4 During regional anesthesia (with no sedation) or local anesthesia (with no sedation), the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs. During moderate or deep sedation the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs and monitoring for the presence of exhaled carbon dioxide unless precluded or invalidated by the nature of the patient, procedure, or equipment.

4. CIRCULATION

4.1 Objective –

To ensure the adequacy of the patient’s circulatory function during all anesthetics.

4.2 Methods –

4.2.1 Every patient receiving anesthesia shall have the electrocardiogram continuously displayed from the beginning of anesthesia until preparing to leave the anesthetizing location.*

4.2.2 Every patient receiving anesthesia shall have arterial blood pressure and heart rate determined and evaluated at least every five minutes.*

4.2.3 Every patient receiving general anesthesia shall have, in addition to the above, circulatory function continually evaluated by at least one of the following: palpation of a pulse, auscultation of heart sounds, monitoring of a tracing of intra-arterial pressure, ultrasound peripheral pulse monitoring, or pulse plethysmography or oximetry.

5. BODY TEMPERATURE

5.1 Objective –

To aid in the maintenance of appropriate body temperature during all anesthetics.

5.2 Methods –

Every patient receiving anesthesia shall have temperature monitored when clinically significant changes in body temperature are intended, anticipated or suspected.
FROM:
SUBJECT:
DATE:

Committee on Standards and Practice Parameters
409-1.3 (PA)
Standards for Basic Anesthetic Monitoring
Page 4
March 8, 2015
FOR BOD / HOD INFORMATION

† Note that “continual” is defined as “repeated regularly and frequently in steady rapid
succession” whereas “continuous” means “prolonged without any interruption at any time.”
* Under extenuating circumstances, the responsible anesthesiologist may waive the requirements
marked with an asterisk (*); it is recommended that when this is done, it should be so stated
(including the reasons) in a note in the patient’s medical record.

4


PRACTICE guidelines are systematically developed recommendations that assist the practitioner and patient in making decisions about health care. These recommendations may be adopted, modified, or rejected according to clinical needs and constraints and are not intended to replace local institutional policies. In addition, these practice guidelines are not intended as standards or absolute requirements, and their use cannot guarantee any specific outcome. Practice guidelines are subject to revision as warranted by the evolution of medical knowledge, technology, and practice. They provide basic recommendations that are supported by a synthesis and analysis of the current literature, expert and practitioner opinion, open forum commentary, and clinical feasibility data.

This document replaces the “Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists: An Updated Report by the American Society of Anesthesiologists (ASA) Task Force on Sedation and Analgesia by Non-Anesthesiologists,” adopted in 2001 and published in 2002.¹

Methodology

Definition of Procedural Moderate Sedation and Analgesia

These guidelines apply to moderate sedation and analgesia before, during, and after procedures. Sedation and analgesia comprises a continuum of states ranging from minimal sedation (anxiolysis) through general anesthesia, as defined by the American Society of Anesthesiologists and accepted by the Joint Commission (table 1).²,³ Level of sedation is entirely independent of the route of administration. Moderate and deep sedation or general anesthesia may be achieved via any route of administration.

*Updated by the American Society of Anesthesiologists Committee on Standards and Practice Parameters: Jeffrey L. Apfelbaum, M.D. (Committee Chair and Task Force Co-Chair), Chicago, Illinois; Jeffrey B. Gross, M.D. (Task Force Co-Chair), Farmington, Connecticut; Richard T. Connis, Ph.D. (Chief Methodologist), Woodinville, Washington; Madhulika Agarkar, M.P.H., Schaumburg, Illinois; Donald E. Arnold, M.D., St. Louis, Missouri; Charles J. Coté, M.D., Boston, Massachusetts; Richard Dutton, M.D., Dallas, Texas; Christopher Madras, M.D., Boston, Massachusetts; David G. Nickinovich, Ph.D., Bellevue, Washington; Paul J. Schwartz, D.M.D., Dunkirk, Maryland; James W. Tom, D.D.S., M.S., Los Angeles, California; Richard Towbin, M.D., Phoenix, Arizona; and Avery Tung, M.D., Chicago, Illinois.

Submitted for publication September 1, 2017. Accepted for publication November 22, 2017. Approved by the American College of Radiology on October 25, 2017. Approved by the American Association of Oral and Maxillofacial Surgeons on September 23, 2017; the American College of Radiology on October 5, 2017; the American Dental Association on September 21, 2017; the American Society of Dentist Anesthesiologists on October 25, 2017. Approved by the American Association of Oral and Maxillofacial Surgeons, American Society of Dentist Anesthesiologists, and Society of Interventional Radiology.*
These guidelines specifically apply to the level of sedation corresponding to moderate sedation/analgesia (previously called conscious sedation), which is defined as a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway when spontaneous ventilation is adequate.‡ Cardiovascular function is usually maintained. For these guidelines, analgesia refers to the management of patient pain or discomfort during and after procedures requiring moderate sedation.

**Purposes of the Guidelines**

The purposes of these guidelines are to allow clinicians to optimize the benefits of moderate procedural sedation regardless of site of service; to guide practitioners in appropriate patient selection; to decrease the risk of adverse patient outcomes (e.g., apnea, airway obstruction, respiratory arrest, cardiac arrest, death); to encourage sedation education, training, and research; and to offer evidence-based data to promote cross-specialty consistency for moderate sedation practice.

Moderate sedation/analgesia provides patient tolerance of unpleasant or prolonged procedures through relief of anxiety, discomfort, and/or pain. If the patient response results in deeper sedation than intended, these sedation practices can be associated with cardiac or respiratory depression that must be rapidly recognized and appropriately managed to avoid the risk of hypoxic brain damage, cardiac arrest, or death. Conversely, inadequate sedation or analgesia can result in undue patient discomfort or patient injury, lack of cooperation, or adverse physiological or psychological responses to stress.

The appropriate choice of agents and techniques for moderate sedation/analgesia is dependent upon the experience, training, and preference of the individual practitioner, requirements or constraints imposed by associated medical issues of the patient or type of procedure, and the risk of producing a deeper level of sedation than anticipated. In some cases, the choice of agents or techniques are limited by federal, state, or municipal regulations or statutes. Because it is not always possible to predict how a specific patient will respond to sedative and analgesic medications, practitioners intending to produce a given level of sedation should be able to rescue patients whose level of sedation becomes deeper than initially intended. For moderate sedation, this implies the ability to manage a compromised airway or hypoventilation, and support cardiovascular function in patients who become hypotensive, hypertensive, bradycardic, or tachycardic.

**Focus**

These guidelines focus specifically on the administration of moderate sedation and analgesia for adults and children. The guidelines exclude patients who are not undergoing a diagnostic or therapeutic procedure (e.g., postoperative analgesia). Because minimal sedation (anxiolysis) may entail minimal risk, the guidelines specifically exclude it. Examples of minimal sedation are (1) less than 50% nitrous oxide in oxygen with no other sedative or analgesic medications by any route and (2) a single, oral sedative or analgesic medication administered in doses appropriate for the unsupervised treatment of anxiety or pain. The guidelines do not apply to patients receiving deep sedation, general anesthesia, or major conduction (i.e., neuraxial) anesthesia. Additional interventions excluded from these guidelines include but are not limited to patient-controlled sedation/analgesia, sedatives administered before or during regional and central neuraxis anesthesia, premedication for general anesthesia, interventions without sedatives (e.g., hypnosis, acupuncture), new or rarely administered sedative/analgesics, new or rarely used monitoring or delivery devices, and automated sedative delivery systems. These guidelines do not address education, training, or certification requirements for practitioners who provide moderate procedural sedation.

**Application**

These guidelines are intended for use by all providers who perform moderate procedural sedation and analgesia in any inpatient or outpatient setting including but not limited to hospitals, ambulatory procedural centers, hospital-connected or freestanding office practices (e.g., dental, urology, or ophthalmology offices), endoscopy suites, plastic surgery suites, radiology suites (magnetic resonance imaging, computed tomography), oral and maxillofacial surgery suites, cardiac catheterization laboratories, oncology clinics, electrophysiology laboratories, interventional radiology laboratories, neurointerventional laboratories, echocardiography laboratories, and evoked auditory testing laboratories. They are intended to serve as a resource for other physicians and patient care personnel who are involved in the care of these patients, including those involved in local policy development.
Task Force Members and Consultants
These guidelines were developed by an ASA–appointed task force of 13 members, consisting of physician anesthesiologists in both private and academic practices from various geographic areas of the United States, a cardiologist, a dentist anesthesiologist, an oral/maxillofacial surgeon, a radiologist, an ASA staff methodologist, and two consulting methodologists for the ASA Committee on Standards and Practice Parameters. Conflict of interest documentation regarding current or potential financial and other interests pertinent to the practice guideline were disclosed by all task force members and managed.

The task force developed these guidelines by means of a seven-step process. First, criteria for evidence associated with moderate sedation and analgesia techniques were established. Second, original published research studies relevant to the guidelines were reviewed and analyzed; only articles relevant to the administration of moderate sedation were evaluated. Third, a panel of expert consultants was asked to (1) participate in opinion surveys on the effectiveness and safety of various methods and interventions that might be used during sedation/analgesia and (2) review and comment on a draft of the guidelines developed by the task force. Fourth, survey opinions about the guideline recommendations were solicited from a random sample of active members of the ASA and participating medical specialty societies. Fifth, the task force held open forums at major national meetings to solicit input on its draft recommendations.§ National organizations representing specialties whose members typically provide moderate sedation were invited to participate in the open forums. Sixth, the consultants were surveyed to assess their opinions on the feasibility of implementing the guidelines. Seventh, all available information was used to build consensus within the task force to finalize the guidelines.

Availability and Strength of Evidence
Preparation of these updated guidelines followed a rigorous methodological process. Evidence was obtained from two principal sources: scientific evidence and opinion-based evidence

Scientific Evidence. Scientific evidence used in the development of these guidelines is based on cumulative findings from literature published in peer-reviewed journals. Literature citations are obtained from healthcare databases, direct internet searches, task force members, liaisons with other organizations, and manual searches of references located in reviewed articles.

Findings from the aggregated literature are reported in the text of these guidelines by evidence category, level, and direction. Evidence categories refer specifically to the strength and quality of the research design of the studies. Category A evidence represents results obtained from randomized controlled trials (RCTs), and category B evidence represents observational results obtained from nonrandomized study designs or RCTs without pertinent comparison groups. When available, category A evidence is given precedence over category B evidence for any particular outcome. These evidence categories are further divided into evidence levels. Evidence levels refer specifically to the strength and quality of the summarized study findings (i.e., statistical findings, type of data, and the number of studies reporting/replicating the findings). In this document, only the highest level of evidence is included in the summary report for each intervention–outcome pair, including a directional designation of benefit, harm, or equivocality.

Category A. RCTs report comparative findings between clinical interventions for specified outcomes. Statistically significant ($P < 0.01$) outcomes are designated as either beneficial (B) or harmful (H) for the patient; statistically nonsignificant findings are designated as equivocal (E).

- Level 1: The literature contains a sufficient number of RCTs to conduct meta-analysis, and meta-analytic findings from these aggregated studies are reported as evidence.
- Level 2: The literature contains multiple RCTs, but the number of RCTs is not sufficient to conduct a viable meta-analysis for the purpose of these Guidelines. Findings from these RCTs are reported separately as evidence.
- Level 3: The literature contains a single RCT, and findings from this study are reported as evidence.

Category B. Observational studies or RCTs without pertinent comparison groups may permit inference of beneficial or harmful relationships among clinical interventions and clinical outcomes. Inferred findings are given a directional designation of beneficial (B), harmful (H), or equivocal (E). For studies that report statistical findings, the threshold for significance is $P < 0.01$.

- Level 1: The literature contains nonrandomized comparisons (e.g., quasiexperimental, cohort [prospective or retrospective], or case-control research designs) with comparative statistics between clinical interventions for a specified clinical outcome.
Level 2: The literature contains noncomparative observational studies with associative statistics (e.g., relative risk, correlation, sensitivity, and specificity).

Level 3: The literature contains noncomparative observational studies with descriptive statistics (e.g., frequencies, percentages).

Level 4: The literature contains case reports.

**Insufficient Literature.** The lack of sufficient scientific evidence in the literature may occur when the evidence is either unavailable (i.e., no pertinent studies found) or inadequate. Inadequate literature cannot be used to assess relationships among clinical interventions and outcomes because a clear interpretation of findings is not obtained due to methodological concerns (e.g., confounding of study design or implementation) or the study does not meet the criteria for content as defined in the “Focus” of the guidelines.

**Opinion-based Evidence.** All opinion-based evidence (e.g., survey data, open forum testimony, internet-based comments, letters, and editorials) relevant to each topic was considered in the development of these guidelines. However, only the findings obtained from formal surveys are reported in the document.

Opinion surveys were developed by the task force to address each clinical intervention identified in the document. Identical surveys were distributed to expert consultants and a random sample of members of the participating organizations.

**Expert and Participating Membership Opinion Surveys.** Survey findings from task force-appointed expert consultants, a random sample of the ASA membership, and membership samples from the American Association of Oral and Maxillofacial Surgeons (AAOMS) and the American Society of Dentist Anesthesiologists (ASDA) are fully reported in this document. Survey responses were recorded using a 5-point scale and summarized based on median values.

- Strongly Agree: Median score of 5 (at least 50% of the responses are 5)
- Agree: Median score of 4 (at least 50% of the responses are 4 or 5)
- Equivocal: Median score of 3 (at least 50% of the responses are 3, or no other response category or combination of similar categories contain at least 50% of the responses)
- Disagree: Median score of 2 (at least 50% of responses are 2 or 1 and 2)
- Strongly Disagree: Median score of 1 (at least 50% of responses are 1)

**Informal Opinion.** Open forum testimony obtained during development of these guidelines, internet-based comments, letters, and editorials are all informally evaluated and discussed during the formulation of guideline recommendations. When warranted, the task force may add educational information or cautionary notes based on this information.

**Guidelines**

**Patient Evaluation**

Preprocedure patient evaluation consists of the following strategies for reducing sedation-related adverse outcomes:

1. Reviewing previous medical records for underlying medical problems (e.g., abnormalities of major organ systems, obesity, obstructive sleep apnea, anatomical airway problems, congenital syndromes with associated medical/surgical issues, respiratory disease, allergies, intestinal inflammation); sedation, anesthesia, and surgery history; history of or current problems pertaining to cooperation, pain tolerance, or sensitivity to anesthesia or sedation; current medications; extremes of age; psychotropic drug use; use of nonpharmaceuticals (e.g., nutraceuticals); and family history;

2. A focused physical examination; and

3. Preprocedure laboratory testing (where indicated).

**Literature Findings.** Although it is well accepted clinical practice to review medical records, conduct a physical examination, and review laboratory test results, comparative studies are insufficient to evaluate the perioperative impact of these activities. Observational studies indicate that some adverse outcomes (e.g., unintended deep sedation, hypoxemia, hypotension) may occur in patients with preexisting medical conditions when moderate sedation/analgesia is administered. These conditions include: (1) extremes of age, ASA status III or higher, and respiratory conditions (category B2-H evidence); and (2) obstructive sleep apnea, respiratory distress syndrome, obesity, allergies, psychotropic drug use, history of gastric bypass surgery, pediatric patients who are preoperative or who have behavior or attention disorders, cardiovascular disorders, history of gastric bypass, and history of long-term benzodiazepine use (category B3-H evidence).

Case reports indicate similar adverse outcomes for newborns, a patient with mitochondrial disease, a patient with grand mal epilepsy, and a patient with a history of benzodiazepine use (category B4-H evidence).

**Survey Findings.** The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) review previous medical records and interview the patient or family, (2) conduct a focused physical examination of the patient, and (3) review available laboratory test results. The consultants and ASA members agree with the recommendation to, if possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for optimal patient preparation; the AAOMS members and ASDA members strongly agree with this recommendation. Finally, consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendation to reevaluate the patient immediately before the procedure.

*Unless otherwise noted in this document, hypoxemia is reported in the literature to be oxygen desaturation to at most 90%.

**This may not be feasible for urgent or emergency procedures, interventional radiology, or other radiology settings.***
Recommendations for Patient Evaluation

- Review previous medical records and interview the patient or family to identify:
  - Abnormalities of the major organ systems (e.g., cardiac, renal, pulmonary, neurologic, sleep apnea, metabolic, endocrine)
  - Adverse experience with sedation/analgesia, as well as regional and general anesthesia
  - History of a difficult airway
  - Current medications, potential drug interactions, drug allergies, and nutraceuticals
  - History of tobacco, alcohol or substance use or abuse
  - Frequent or repeated exposure to sedation/analgesic agents

- Conduct a focused physical examination of the patient (e.g., vital signs, auscultation of the heart and lungs, evaluation of the airway,†† and, when appropriate to sedation, other organ systems where major abnormalities have been identified)

- Review available laboratory test results
  - Order additional laboratory tests guided by a patient’s medical condition, physical examination, and the likelihood that the results will affect the management of moderate sedation/analgesia
  - Evaluate results of these tests before sedation is initiated

- If possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for optimal patient preparation.**

- Reevaluate the patient immediately before the procedure.

Preprocedure Patient Preparation

Preprocedure patient preparation consists of (1) consultation with a medical specialist when needed; (2) patient preparation for the procedure (e.g., informing patients of the benefits and risks of sedatives and analgesics, preprocedure instruction, medication usage, counseling); and (3) preprocedure fasting from solids and liquids.

Literature Findings. The literature is insufficient regarding the benefits of consultation with a medical specialist or providing the patient (or legal guardian, in the case of a child or impaired adult) with preprocedure information about sedation and analgesia. A nonrandomized comparative study reported equivocal outcomes (e.g., emesis, apnea, oxygen levels) when preprocedure fasting (i.e., liquids or solids) is compared to no fasting (category B1-E evidence).** Another nonrandomized comparison of fasting for less than 2 h versus fasting for greater than 2 h reported equivocal findings for emesis, oxygen saturation levels, and arrhythmia for infants (category B1-E evidence).28 Finally, a third nonrandomized comparison reported equivocal findings for gastric volume and pH when fasting of liquids for 0.5 to 3 h is compared with fasting times of greater than 3 h (category B1-E evidence).29

Survey Findings. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) consult with a medical specialist, when appropriate, before administration of moderate procedural sedation to patients with significant underlying conditions; (2) when feasible before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives, and elicit their preferences; (3) before the day of the procedure, inform patients or legal guardians that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying; and (4) on the day of the procedure, assess the time and nature of the last oral intake. All four groups of survey respondents agreed with the recommendation that in urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone.

Recommendations for Preprocedure Patient Preparation

- Consult with a medical specialist (e.g., physician anesthesiologist, cardiologist, endocrinologist, pulmonologist, nephrologist, pediatrician, obstetrician, or otolaryngologist), when appropriate before administration of moderate procedural sedation to patients with significant underlying conditions
  - If a specialist is needed, select a specialist based on the nature of the underlying condition and the urgency of the situation
  - For severely compromised or medically unstable patients (e.g., ASA status IV, anticipated difficult airway, severe obstructive pulmonary disease, coronary artery disease, or congestive heart failure) or if it is likely that sedation to the point of unresponsiveness will be necessary to obtain adequate conditions, consult with a physician anesthesiologist

- Before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives and elicit their preferences††

- Inform patients or legal guardians before the day of the procedure that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying before the procedure‡‡

††See table 2 for additional information related to airway assessment.

‡‡This may not be feasible for urgent or emergency procedures.

§§See table 3 and/or refer to: American Society of Anesthesiologists: Practice guidelines for preoperative fasting and the use of pharmacologic agents to reduce the risk of pulmonary aspiration: Application to healthy patients undergoing elective procedures: An updated report. ANESTHESIOLOGY 2017; 126:376–93.
• On the day of the procedure, assess the time and nature of last oral intake
  ◦ Evaluate the risk of pulmonary aspiration of gastric contents when determining (1) the target level of sedation and (2) whether the procedure should be delayed
• In urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone

Patient Monitoring
Many of the complications associated with moderate sedation and analgesia may be avoided if adverse drug responses are detected and treated in a timely manner (i.e., before the development of cardiovascular decompensation or cerebral hypoxia). Patients given sedatives or analgesics in unmonitored settings may be at increased risk of these complications. Patient monitoring includes strategies for the following: (1) monitoring patient level of consciousness assessed by the response of patients, including spoken responses to commands or other forms of bidirectional communication during procedures performed with moderate sedation/analgesia; (2) monitoring patient ventilation and oxygenation, including ventilatory function, by observation of qualitative clinical signs, capnography, and pulse oximetry; (3) hemodynamic monitoring, including blood pressure, heart rate, and electrocardiography; (4) contemporaneous recording of monitored parameters; and (5) availability/presence of an individual responsible for patient monitoring.

Literature Findings. The literature is insufficient to determine whether monitoring patients’ level of consciousness improves patient outcomes or decreases risks. Also, the literature is insufficient to evaluate whether observation of the patient, auscultation, chest excursion, or plethysmography are associated with reduced sedation-related risks.

Meta-analysis of RCTs indicate that the use of continuous end-tidal carbon dioxide monitoring (i.e., capnography) is associated with a reduced frequency of hypoxemic events (i.e., oxygen saturation less than 90%) when compared to monitoring without capnography (e.g., practitioners were blinded to capnography results) during procedures with moderate sedation (category A1-B evidence). Findings for this comparison were equivocal for RCTs reporting severe hypoxemic events (i.e., oxygen saturation less than 85%) and for oxygen saturation levels of 92, 93, and 95% (category A2-E evidence). Observational studies indicate that pulse oximetry is effective in the detection of oxygen saturation levels in patients administered sedatives and analgesics (category B3-B evidence).

Observational studies also indicate that electrocardiography monitoring is effective in the detection of arrhythmias, premature ventricular contractions, and bradycardia (category B3-B evidence).

The literature is insufficient to determine the benefits of contemporaneous recording of patients’ level of consciousness, respiratory function, or hemodynamics. In addition, the literature is insufficient to evaluate whether the presence of an individual dedicated to patient monitoring will reduce adverse outcomes related to moderate sedation/analgesia.

Survey Findings. The consultants, ASA members, AAOMS members, and ASDA members agree with the recommendations to (1) periodically monitor a patient’s response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately or during procedures where movement could be detrimental clinically; and (2) during procedures where a verbal response is not possible, check the patient’s ability to give a “thumbs up” or other indication of consciousness in response to verbal or tactile (light tap) stimulation. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) continually monitor ventilatory function by observation of qualitative clinical signs; (2) continually monitor ventilatory function with capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment; (3) monitor all patients by pulse oximetry with appropriate alarms; (4) determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation; (5) once moderate sedation/analgesia is established, continually monitor blood pressure and heart rate during the procedure unless such monitoring interferes with the procedure; (6) use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated; (7) record patients’ level of consciousness, ventilatory and oxygenation status, and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient; (8) set device alarms to alert the care team to critical changes in patient; (9) assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure; and (10) the individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help. The consultants, ASA members, and ASDA members agree that the designated individual may assist with minor, interruptible tasks once the patient’s level of sedation is maintained; the AAOMS members strongly agree with this recommendation.
Recommendations for Patient Monitoring
Monitoring Patient Level of Consciousness

- Periodically (e.g., at 5-min intervals) monitor a patient’s response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately (e.g., patients where age or development may impair bidirectional communication) or during procedures where movement could be detrimental
- During procedures where a verbal response is not possible (e.g., oral surgery, restorative dentistry, upper endoscopy), check the patient’s ability to give a “thumbs up” or other indication of consciousness in response to verbal or tactile (light tap) stimulation; this suggests that the patient will be able to control his airway and take deep breaths if necessary

Monitoring Patient Ventilation and Oxygenation

- Continually*** monitor ventilatory function by observation of qualitative clinical signs
- Continually monitor ventilatory function with capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment
  - For uncooperative patients, institute capnography after moderate sedation has been achieved
- Continuously monitor all patients by pulse oximetry with appropriate alarms

Monitoring Hemodynamics

- Determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation
- Once moderate sedation/analgesia is established, continually monitor blood pressure (e.g., at 5-min intervals) and heart rate during the procedure unless such monitoring interferes with the procedure (e.g., magnetic resonance imaging where stimulation from the blood pressure cuff could arouse an appropriately sedated patient)
- Use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated

Contemporaneous Recording of Monitored Parameters

- Record patients’ level of consciousness, ventilatory and oxygenation status, and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient
  - At a minimum, this should occur (1) before the administration of sedative/analgesic agents†††; (2) after administration of sedative/analgesic agents; (3) at regular intervals during the procedure; (4) during initial recovery; and (5) just before discharge
- Set device alarms to alert the care team to critical changes in patient status

Availability of an Individual Responsible for Patient Monitoring

- Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure
  - The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help
  - The designated individual should not be a member of the procedural team but may assist with minor, interruptible tasks once the patient’s level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient’s level of sedation is maintained

Supplemental Oxygen

Literature Findings. Meta-analysis of RCTs indicate that the use of supplemental oxygen versus no supplemental oxygen is associated with a reduced frequency of hypoxemia‡‡‡ during procedures with moderate sedation (category A1-B evidence).65–71 The literature is insufficient to examine which methods of supplemental oxygen administration (e.g., nasal cannula, face mask, or specialized devices) are more effective in reducing hypoxemia.

Survey Findings. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendation to use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure.

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**#**A response limited to reflex withdrawal from a painful stimulus is not considered a purposeful response and thus represents a state of general anesthesia.


†††For rare uncooperative patients (e.g., children with autism spectrum disorder or attention deficit disorder), recording oxygenation status or blood pressure may not be possible until after sedation.

‡‡‡Reported by authors as oxygen desaturation to at most 95% or oxygen desaturation more than 5 or 10% below baseline.
Recommendations for Supplemental Oxygen

- Use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure.

Emergency Support

Emergency support strategies include (1) the presence of pharmacologic antagonists; (2) the presence of age and weight appropriate emergency airway equipment (e.g., different types of airway devices, supraglottic airway devices); (3) the presence of an individual capable of establishing a patent airway and providing positive pressure ventilation and resuscitation; (4) the presence of an individual to establish intravenous access; and (5) the availability of rescue support.

Literature Findings. Although it is established clinical practice to provide access to emergency support, the literature is insufficient to assess the benefits or harms of keeping pharmacologic antagonists or emergency airway equipment available during procedures with moderate sedation and analgesia. The literature is insufficient to assess whether the presence of an individual capable of establishing a patent airway, positive pressure ventilation, and resuscitation will improve outcomes. In addition, the literature is insufficient to determine the benefits of keeping an individual present to establish intravenous access during procedures with moderate sedation/analgesia. Finally, the literature is insufficient to determine the benefits of rescue support availability during moderate procedural sedation/analgesia.

Survey Findings. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendation to assure that (1) pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure suite or procedure room; (2) an individual is present in the room who understands the pharmacology of the sedative/analgesics administered and potential interactions with other medications and nutraceuticals the patient may be taking; (3) appropriately sized equipment for establishing a patent airway is available; (4) at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room; (5) suction, advanced airway equipment, positive pressure ventilation, and supplemental oxygen are immediately available in the procedure room and in good working order; (6) a member of the procedural team is trained in the recognition and treatment of airway complications (e.g., apnea, laryngospasm, airway obstruction), opening the airway, suctioning secretions, and performing bag-valve-mask ventilation; (7) a member of the procedural team has the skills to establish intravascular access; (8) a member of the procedural team has the skills to provide chest compressions; (9) a functional defibrillator or automatic external defibrillator is immediately available in the procedure area; (10) an individual or service is immediately available with advanced life support skills; and (11) members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room.

Recommendations for Emergency Support

- Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure suite or procedure room.
- Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered (e.g., opioids and benzodiazepines) and potential interactions with other medications and nutraceuticals the patient may be taking.
- Assure that appropriately sized equipment for establishing a patent airway is available.
- Assure that at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room.
- Assure that suction, advanced airway equipment, a positive pressure ventilation device, and supplemental oxygen are immediately available in the procedure room and in good working order.
- Assure that a member of the procedural team is trained in the recognition and treatment of airway complications (e.g., apnea, laryngospasm, airway obstruction), opening the airway, suctioning secretions, and performing bag-valve-mask ventilation.
- Assure that a member of the procedural team has the skills to establish intravascular access.
- Assure that a member of the procedural team has the skills to provide chest compressions.
- Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area.
- Assure that an individual or service (e.g., code blue team, paramedic-staffed ambulance service) with advanced life support skills (e.g., tracheal intubation, defibrillation, resuscitation medications) is immediately available.
- Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room (e.g., telephone, call button).

Sedative/Analgesic Medications Not Intended for General Anesthesia

For these guidelines, sedatives not intended for general anesthesia include benzodiazepines (e.g., midazolam, diazepam, etc.).

Refer to table 4 for examples of emergency support equipment and pharmaceuticals.

“Immediately available in the procedure room” refers to easily accessible shelving, cabinetry, and other measures to assure that there is no delay in accessing medications and equipment during the procedure.
flunitrazepam, lorazepam, or temazepam) and dexmedetomidine. Analgesics administered with sedatives include opioids such as fentanyl, alfentanil, remifentanil, meperidine, morphine, and nalbuphine. This section of the guidelines addresses the following topics: (1) benzodiazepines and dexmedetomidine, (2) sedative/opioid combinations, (3) intravenous versus nonintravenous sedatives/analgesics not intended for general anesthesia, and (4) titration of sedatives/analgesics not intended for general anesthesia.

**Literature Findings.** Meta-analysis of RCTs comparing midazolam combined with opioids versus midazolam alone report equivocal findings for pain and discomfort, hypoxemia, and patient recall of the procedure (category A1-E evidence). When midazolam combined with opioids are compared with opioids alone, RCTs report equivocal findings for patient recall, pain during the procedure, frequency of hypoxemia, hypercarbia and respiratory depression (category A2-E evidence). One RCT comparing midazolam with rectal diazepam reports lower findings for sedation time, duration of the procedure, and the frequency of rescue doses of midazolam administered (category A3-E evidence).

One RCT comparing titration (i.e., administration of small, incremental doses of intravenous midazolam combined with meperidine until the desired level of sedation and/or analgesia is achieved) of midazolam combined with an opioid compared with a single, rapid bolus reports higher total physician times, medication dosages, frequencies of hypoxemia, and somnolence scores for titration (category A3-H evidence).

**Survey Findings.** The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendation that combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient. The consultants, ASA members, and ASDA members agree that dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis; the AAOMS members are equivocal regarding this recommendation. The consultants, ASA members, AAOMS members, and ASDA members agree that dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis; the AAOMS members are equivocal regarding this recommendation. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendation that in patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression. The consultants agree and the ASA members, AAOMS members, and ASDA members strongly agree that in patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of reestablishing intravenous access on a case-by-case basis. Finally, the consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendation to administer intravenous sedative/analgesic drugs in small, incremental doses, or by infusion, titrating to the desired endpoints.

**Recommendations for Sedative or Analgesic Medications Not Intended for General Anesthesia**

- Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient

  - Administer each component individually to achieve the desired effect (e.g., additional analgesic medication to relieve pain; additional sedative medication to decrease awareness or anxiety)
  - Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis

***All routes of administration were considered, including oral, nasal, intramuscular, rectal, subdermal, sublingual, iontophoresis, and nebulization.

****Reported by authors as oxygen desaturation to less than 94.

93, or 90%.

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• In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression.

• In patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of reestablishing intravenous access on a case-by-case basis.

• Administer intravenous sedative/analgesic drugs in small, incremental doses, or by infusion, titrating to the desired endpoints.
  - Allow sufficient time to elapse between doses so the peak effect of each dose can be assessed before subsequent drug administration.

• When drugs are administered by nonintravenous routes (e.g., oral, rectal, intramuscular, transmucosal), allow sufficient time for absorption and peak effect of the previous dose to occur before supplementation is considered.

Sedative/Analgesic Medications Intended for General Anesthesia

For these guidelines, sedatives intended for general anesthesia include propofol, ketamine and etomidate.‡‡‡‡ Sedatives not intended for general anesthesia (e.g., benzodiazepines, nitrous oxide, chloral hydrate, barbiturates, and antihistamines) are included either as comparison groups or in combination with sedatives intended for general anesthesia. Analgesics (e.g., opioids, nonsteroidal antiinflammatory drugs, and local anesthetics) are included either in comparison groups or in combination with sedatives intended for general anesthesia. This section of the guidelines addresses the following topics: (1) propofol versus other sedative/analgesics, (2) ketamine versus other sedative/analgesics, (3) etomidate versus other sedative/analgesics, (4) combinations of sedatives intended for general anesthesia versus other sedatives/analgesics, alone or in combination, (5) intravenous versus nonintravenous sedatives/analgesics intended for general anesthesia, and (6) titration of intravenous sedatives/analgesics intended for general anesthesia.

Literature Findings. Literature comparing propofol with other sedative/analgesic medications, either alone or in combination, report the following findings: (1) Meta-analysis of RCTs report faster recovery times for propofol versus midazolam after procedures with moderate sedation (category A1-B evidence),95–99 with equivocal findings for patient recall,95,100–103 and frequency of hypoxemia (category A1-E evidence).96,100,102,103 One RCT reports shorter sedation time, a lower frequency of recall and higher recovery scores for propofol versus diazepam (category A3-B evidence).104 (2) RCTs comparing propofol versus benzodiazepines combined with opioid analgesics report shorter sedation and recovery times for propofol alone (category A2-B evidence),105,106 with equivocal findings for pain, oxygen saturation levels, and blood pressure (category A2-E evidence).107–109 (3) RCTs comparing propofol combined with benzodiazepines versus propofol alone report equivocal findings for recovery and procedure times, pain with injection, and restlessness (category A2-E evidence).110–112 One RCT comparing propofol combined with midazolam versus propofol alone reports deeper sedation levels and more episodes of deep sedation for the combination group (category A3-H evidence).112 RCTs comparing propofol combined with opioid analgesics versus propofol alone report lower pain scores for the combination group (category A2-B evidence).113,114 with equivocal findings for sedation levels, oxygen saturation levels, and respiratory and heart rates (category A2-E evidence).113–116 (4) One RCT comparing propofol combined with remifentanil versus remifentanil alone reports deeper sedation, less recall (category A3-B evidence), and more respiratory depression (category A3-H evidence) for the combination group.117 (5) RCTs comparing propofol combined with sedatives/analgesics not intended for general anesthesia versus combinations of sedatives/analgesics not intended for general anesthesia report equivocal findings for outcomes including sedation time, patient recall, pain scores, recovery time, oxygen saturation levels, blood pressure, and heart rate (category A2-E evidence).118–120 (6) RCTs comparing propofol with ketamine report equivocal findings for sedation scores, pain during the procedure, recovery, oxygen saturation levels, respiratory rate, blood pressure, and heart rate (category A2-E evidence).121–123 (7) One RCT comparing propofol versus ketamine combined with midazolam reports equivocal findings for recovery agitation, oxygen saturation levels, respiratory rate, blood pressure, and heart rate (category A3-E evidence).124 (8) One RCT comparing propofol versus ketamine combined with fentanyl reports shorter recovery times and less recall for propofol alone (category A3-E evidence).125 (9) RCTs comparing propofol combined with ketamine versus propofol alone report deeper sedation for the combination group (category A3-B evidence), with more respiratory depression and a greater frequency of hypoxemia.126 Literature comparing ketamine with other sedative/analgesic medications, either alone or in combination, report the following findings: (1) RCTs comparing ketamine with midazolam report equivocal findings for sedation scores, recovery time, and oxygen saturation levels (category A2-E evidence),87,143,144 with equivocal findings for sedation levels, oxygen saturation levels, and blood pressure (category A2-E evidence).87 (2) One RCT comparing ketamine versus fentanyl reports longer sedation times and higher levels of sedation (i.e., deeper sedation levels) for ketamine (category A3-H evidence).145 (3) One RCT comparing ketamine with midazolam combined with fentanyl reports a lower

‡‡‡‡Note that these guidelines do not address education, training, or certification requirements for practitioners who provide moderate procedural sedation with these drugs.

Reported by author as oxygen desaturation to less than 94%.
depth of sedation for ketamine (category A3-B evidence), with equivocal findings for recall, pain scores and frequency of hypoxemia (category A3-E evidence).\(^{146}\) (4) RCTs comparing ketamine combined with midazolam versus ketamine alone or midazolam alone report equivocal findings for sedation scores, sedation time, recovery, and recovery agitation (category A2-E evidence).\(^{143,147,148}\) (5) One RCT comparing ketamine combined with midazolam versus midazolam combined with alfentanil reports a lower frequency of hypoxemia (category A3-B evidence) and increased disruptive movements, longer recovery times, and longer times to discharge for ketamine combined with midazolam (category A3-H evidence).\(^{149}\) (6) RCTs comparing ketamine with propofol report equivocal findings for sedation scores, pain during the procedure, oxygen saturation levels, and recovery scores (category A2-E evidence).\(^{137,138}\) RCTs comparing ketamine with etomidate report less airway assistance required and lower frequencies of myoclonus with ketamine (category A2-B evidence).\(^{150,151}\) (7) RCTs comparing ketamine combined with propofol versus propofol combined with fentanyl report equivocal findings for recovery times, oxygen saturation levels, respiratory rate, and heart rate (category A3-H evidence).\(^{152-154}\)

Literature comparing etomidate with other sedative/analgesic medications, either alone or in combination, report the following findings: (1) One RCT comparing etomidate with midazolam reports shorter sedation times for etomidate (category A3-B evidence), with equivocal findings for recovery agitation, oxygen saturation levels, and apnea (category A3-E evidence).\(^{155}\) (2) One RCT comparing etomidate with pentobarbital reports shorter sedation times for etomidate (category A3-B evidence), with equivocal findings for recovery agitation and hypotension (category A3-B evidence).\(^{156}\) (3) One RCT comparing etomidate combined with fentanyl versus midazolam combined with fentanyl reports deeper sedation (i.e., higher sedation scores) for the combination group (category A3-B evidence), with equivocal findings for sedation times, recovery times, frequency of oversedation, and oxygen saturation levels (category A3-E evidence), and a higher frequency of myoclonus (category A3-H evidence).\(^{157}\) (4) One RCT comparing etomidate combined with morphine and fentanyl versus midazolam combined with morphine and fentanyl reports shorter sedation times for the etomidate combination (category A3-B evidence), with equivocal findings for oxygen saturation levels, apnea, hypotension, and recovery agitation (category A3-E evidence), and a higher frequency of patient recall and myoclonus (category A3-H evidence).\(^{158}\)

One RCT reports shorter sedation onset times, shorter recovery times, and fewer rescue doses administered for intravenous ketamine when compared with intramuscular ketamine (category A3-B evidence), with equivocal findings for sedation efficacy, respiratory depression, and time to discharge (category A3-E evidence).\(^{159}\) One RCT comparing intravenous versus intramuscular ketamine with or without midazolam reports equivocal findings for sedation time, recovery agitation, and duration of the procedure (category A3-E evidence).\(^{148}\)

Observational studies reporting titrated administration of sedatives intended for general anesthesia report the frequency of hypoxemia ranging from 1.7 to 4.7% of patients,\(^{14,160-163}\) with oversedation occurring in 0.13%-0.2% of patients.\(^{14,161}\)

**Survey Findings.** The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) provide care consistent with that required for general anesthesia when moderate procedural sedation with sedative or analgesic medications intended for general anesthesia by any route is intended; (2) assure that practitioners administering these drugs are able to reliably rescue patients from unintended deep sedation or general anesthesia; (3) maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression for patients receiving intravenous sedatives intended for general anesthesia; (4) determine the advisability of reestablishing intravenous access on a case-by-case basis in patients who have received sedatives intended for general anesthesia by nonintravenous routes or whose intravenous line has become dislodged or blocked; and (5) administer intravenous sedative/analgesic drugs intended for general anesthesia in small, incremental doses, or by infusion, titrating to the desired endpoints.

**Recommendations for Sedative/Analgesic Medications Intended for General Anesthesia**

- When moderate procedural sedation with sedative/analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia
- Assure that practitioners administering sedative/analgesic medications intended for general anesthesia are able to reliably identify and rescue patients from unintended deep sedation or general anesthesia
- For patients receiving intravenous sedative/analgesic medications intended for general anesthesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression
- In patients who have received sedative/analgesic medications intended for general anesthesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of reestablishing intravenous access on a case-by-case basis
- Administer intravenous sedative/analgesic medications intended for general anesthesia in small, incremental doses or by infusion, titrating to the desired endpoints
  - Allow sufficient time to elapse between doses so the peak effect of each dose can be assessed before subsequent drug administration
Reversal Agents: Naloxone and Flumazenil

Literature Findings. One placebo-controlled RCT reports that naloxone effectively reverses the effects of meperidine as measured by increasing alertness scores and respiratory rate (category A3-B evidence).\(^{164}\) Reversal of respiratory depression, apnea, and oxygen desaturation after naloxone administration in other practice settings is also reported by observational studies (category B3-B evidence)\(^{165,166}\) and case reports (category B4-B evidence).\(^{167-170}\)

Meta-analysis of double-blind placebo-controlled RCTs indicates that flumazenil effectively antagonizes the effects of sedation within 15 min for patients who have been administered benzodiazepines (category A1-B evidence).\(^{171-178}\) Placebo-controlled RCTs also indicate that flumazenil administration is associated with shorter recovery times for benzodiazepine sedation (category A2-B evidence).\(^{176,179-181}\) Meta-analysis of placebo-controlled RCTs indicate that flumazenil effectively antagonizes the effects of benzodiazepines when combined with opioids (category A1-B evidence).\(^{182-186}\)

Survey Findings. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) assure that specific antagonists are immediately available in the procedure room whenever opioid analgesics or benzodiazepines are administered for moderate procedural sedation/analgesia, regardless of route of administration; (2) encourage or physically stimulate patients to breathe deeply if patients become hypoxic or apneic during sedation/analgesia; (3) administer supplemental oxygen if patients become hypoxic or apneic during sedation/analgesia; (4) provide positive pressure ventilation if spontaneous ventilation is inadequate when patients become hypoxic or apneic during sedation/analgesia; (5) use reversal agents in cases where airway control, spontaneous ventilation, or positive pressure ventilation is inadequate; (6) administer naloxone to reverse opioid-induced sedation and respiratory depression; (7) administer flumazenil to reverse benzodiazepine-induced sedation and respiratory depression; (8) after pharmacologic reversal, observe and monitor patients for a sufficient time to ensure that sedation and cardiorespiratory depression does not recur once the effect of the antagonist dissipates; and (9) do not use sedation regimens that are intended to include routine reversal of sedative or analgesic agents.

Recommendations for Reversal Agents

- When drugs intended for general anesthesia are administered by nonintravenous routes (e.g., oral, rectal, intramuscular, transmucosal), allow sufficient time for absorption and peak effect of the previous dose to occur before supplementation is considered.

- If patients develop hypoxemia, significant hypventilation or apnea during sedation/analgesia: (1) encourage or physically stimulate patients to breathe deeply, (2) administer supplemental oxygen, and (3) provide positive pressure ventilation if spontaneous ventilation is inadequate.

- Use reversal agents in cases where airway control, spontaneous ventilation or positive pressure ventilation are inadequate:
  - Administer naloxone to reverse opioid-induced sedation and respiratory depression.
  - Administer flumazenil to reverse benzodiazepine-induced sedation and respiratory depression.

- After pharmacologic reversal, observe and monitor patients for a sufficient time to ensure that sedation and cardiorespiratory depression does not recur once the effect of the antagonist dissipates.

- Do not use sedation regimens that are intended to include routine reversal of sedative or analgesic agents.

Recovery Care

Patients receiving moderate procedural sedation may continue to be at risk for developing complications after their procedure is completed. Decreased stimulation from the proceduralist delayed drug absorption after nonintravenous administration, and slow drug elimination may contribute to residual sedation and cardiorespiratory depression during the recovery period. When sedation/analgesia is administered to outpatients, medical supervision may not be available once the patient leaves the medical facility. This section of the guidelines addresses the following recovery care topics: (1) continued observation and monitoring until discharge and (2) predetermined discharge criteria.

Literature Findings. Although it is well accepted clinical practice to continue patient observation until discharge, the literature is insufficient to evaluate the impact of postprocedural observation and monitoring. The literature is also insufficient to evaluate the effects of using predetermined discharge criteria on patient outcomes.

Survey Findings. The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression, (2) monitor oxygenation continuously until patients are no longer at risk for hypoxemia, (3) monitor ventilation and circulation at regular intervals until patients are suitable for discharge, and (4) design discharge criteria to minimize the risk of central

Practitioners are cautioned that acute reversal of opioid-induced analgesia may result in pain, hypertension, tachycardia, or pulmonary edema.
nervous system or cardiorespiratory depression after discharge from observation by trained personnel.

**Recommendations for Recovery Care**

- After sedation/analgesia, observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression
- Monitor oxygenation continuously until patients are no longer at risk for hypoxemia
- Monitor ventilation and circulation at regular intervals (e.g., every 5 to 15 min) until patients are suitable for discharge
- Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge from observation by trained personnel####

**Creation and Implementation of Patient Safety Processes**

Patient safety processes include quality improvement and preparation for rare events.

**Literature Findings.** Regarding quality improvement, one observational study reported that use of a presedation checklist compared to no checklist use may improve safety documentation in emergency department sedations (category B1-B evidence).187

**Survey Findings.** The consultants, ASA members, AAOMS members, and ASDA members strongly agree with the recommendations to (1) create and implement a quality improvement process based upon established national, regional, or institutional reporting protocols; (2) strengthen patient safety culture through collaborative practices; and (3) create an emergency response plan.

**Recommendations**

- Create and implement a quality improvement process based upon established national, regional, or institutional reporting protocols, (e.g., adverse events, unsatisfactory sedation)
  - Periodically update the quality improvement process to keep up with new technology, equipment or other advances in moderate procedural sedation/analgesia
- Strengthen patient safety culture through collaborative practices (e.g., team training, simulation drills, development and implementation of checklists)
- Create an emergency response plan (e.g., activating “code blue” team or activating the emergency medical response system: 911 or equivalent)

###Appendix I: Summary of Recommendations

**Patient Evaluation**

- Review previous medical records and interview the patient or family to identify:
  - Abnormalities of the major organ systems (e.g., cardiac, renal, pulmonary, neurologic, sleep apnea, metabolic, endocrine)
  - Adverse experience with sedation/analgesia, as well as regional and general anesthesia
  - History of a difficult airway
  - Current medications, potential drug interactions, drug allergies, and nutraceuticals
  - History of tobacco, alcohol or substance use or abuse
  - Frequent or repeated exposure to sedation/analgesic agents
- Conduct a focused physical examination of the patient (e.g., vital signs, auscultation of the heart and lungs, evaluation of the airway,* and when appropriate to sedation, other organ systems where major abnormalities have been identified)
- Review available laboratory test results
  - Order additional laboratory tests guided by a patient’s medical condition, physical examination, and the likelihood that the results will affect the management of moderate sedation/analgesia
  - Evaluate results of these tests before sedation is initiated
- If possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for optimal patient preparation†
- Reevaluate the patient immediately before the procedure.

**Preprocedure Patient Preparation**

- Consult with a medical specialist (e.g., physician anesthesiologist, cardiologist, endocrinologist, pulmonologist, nephrologist, pediatrician, obstetrician, or otolaryngologist), when appropriate before administration of moderate procedural sedation to patients with significant underlying conditions
  - If a specialist is needed, select a specialist based on the nature of the underlying condition and the urgency of the situation
  - For severely compromised or medically unstable patients (e.g., ASA status IV, anticipated difficult airway, severe obstructive pulmonary disease, coronary artery disease, or congestive heart failure) or if it is likely that sedation to the point of unresponsiveness will be necessary to obtain adequate conditions, consult with a physician anesthesiologist

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*See table 2 for additional information related to airway assessment.
†This may not be feasible for urgent or emergency procedures, interventional radiology or other radiology settings.
Before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives, and elicit their preferences.

Inform patients or legal guardians before the day of the procedure that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying before the procedure.

On the day of the procedure, assess the time and nature of last oral intake.

- Evaluate the risk of pulmonary aspiration of gastric contents when determining (1) the target level of sedation and (2) whether the procedure should be delayed.
- In urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone.

**Patient Monitoring**

**Monitoring Patient Level of Consciousness**

- Periodically (e.g., at 5-min intervals) monitor a patient’s response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately (e.g., patients where age or development may impair bidirectional communication) or during procedures where movement could be detrimental.
- During procedures where a verbal response is not possible (e.g., oral surgery, restorative dentistry, upper endoscopy), check the patient’s ability to give a “thumbs up” or other indication of consciousness in response to verbal or tactile (light tap) stimulation; this suggests that the patient will be able to control his airway and take deep breaths if necessary.

**Monitoring Patient Ventilation and Oxygenation**

- Continually* monitor ventilatory function by observation of qualitative clinical signs.
- Continually monitor ventilatory function with capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment.
  - For uncooperative patients, institute capnography after moderate sedation has been achieved.
- Continuously monitor all patients by pulse oximetry with appropriate alarms.

**Monitoring Hemodynamics**

- Determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation.
- Once moderate sedation/analgesia is established, continually monitor blood pressure (e.g., at 5-min intervals) and heart rate during the procedure unless such monitoring interferes with the procedure (e.g., magnetic resonance imaging where stimulation from the blood pressure cuff could arouse an appropriately sedated patient).
- Use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated.

**Contemporaneous Recording of Monitored Parameters**

- Record patients’ level of consciousness, ventilatory and oxygenation status, and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient.
  - At a minimum, this should occur: (1) before the administration of sedative/analgesic agents,** (2) after administration of sedative/analgesic agents, (3) at regular intervals during the procedure, (4) during initial recovery, and (5) just before discharge.
- Set device alarms to alert the care team to critical changes in patient status.

**Availability of an Individual Responsible for Patient Monitoring**

- Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure.
  - The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help.

*This may not be feasible for urgent or emergency procedures.

**See table 3 and/or refer to:** American Society of Anesthesiologists. Practice guidelines for preoperative fasting and the use of pharmacologic agents to reduce the risk of pulmonary aspiration: Application to healthy patients undergoing elective procedures: An updated report. *Anesthesiology* 2017; 126:376–93.

*A response limited to reflex withdrawal from a painful stimulus is not considered a purposeful response and thus represents a state of general anesthesia.


*For rare uncooperative patients (e.g., children with autism spectrum disorder or attention deficit disorder) recording oxygenation status or blood pressure may not be possible until after sedation.
Supplemental Oxygen

- Use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure

Emergency Support

- Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure suite or procedure room††
- Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered (e.g., opioids and benzodiazepines) and potential interactions with other medications and nutraceuticals the patient may be taking
- Assure that appropriately sized equipment for establishing a patent airway is available
- Assure that at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room
- Assure that suction, advanced airway equipment, a positive pressure ventilation device, and supplemental oxygen are immediately available in the procedure room and in good working order
- Assure that a member of the procedural team is trained in the recognition and treatment of airway complications (e.g., apnea, laryngospasm, airway obstruction), opening the airway, suctioning secretions, and performing bag-valve-mask ventilation
- Assure that a member of the procedural team has the skills to establish intravascular access
- Assure that a member of the procedural team has the skills to provide chest compressions
- Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area
- Assure that an individual or service (e.g., code blue team, paramedic-staffed ambulance service) with advanced life support skills (e.g., tracheal intubation, defibrillation, resuscitation medications) is immediately available
- Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room (e.g., telephone, call button)

Sedative or Analgesic Medications Not Intended for General Anesthesia

- Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient††
  - Administer each component individually to achieve the desired effect (e.g., additional analgesic medication to relieve pain; additional sedative medication to decrease awareness or anxiety)
  - Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis
  - In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression
  - In patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of reestablishing intravenous access on a case-by-case basis
  - Administer intravenous sedative/analgesic drugs in small, incremental doses, or by infusion, titrating to the desired endpoints
    - Allow sufficient time to elapse between doses so the peak effect of each dose can be assessed before subsequent drug administration
    - When drugs are administered by nonintravenous routes (e.g., oral, rectal, intramuscular, transmucosal), allow sufficient time for absorption and peak effect of the previous dose to occur before supplementation is considered

Sedative/Analgesic Medications Intended for General Anesthesia

- When moderate procedural sedation with sedative/analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia
- Assure that practitioners administering sedative/analgesic medications intended for general anesthesia are able to reliably identify and rescue patients from unintended deep sedation or general anesthesia
- For patients receiving intravenous sedative/analgesics intended for general anesthesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression

††“Immediately available in the procedure room” refers to accessible shelving, unlocked cabinetry, and other measures to assure that there is no delay in accessing medications and equipment during the procedure.

‡‡The propensity for combinations of sedative and analgesic agents to cause respiratory depression and airway obstruction emphasizes the need to appropriately reduce the dose of each component as well as the need to continually monitor respiratory function. Knowledge of each drug’s time of onset, peak response, and duration of action is important. Titration of drug to effect is an important concept; one must know whether the previous dose has taken full effect before administering additional drug.

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  - Administer each component individually to achieve the desired effect (e.g., additional analgesic medication to relieve pain; additional sedative medication to decrease awareness or anxiety)
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  - In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression
  - In patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of reestablishing intravenous access on a case-by-case basis
  - Administer intravenous sedative/analgesic drugs in small, incremental doses, or by infusion, titrating to the desired endpoints
    - Allow sufficient time to elapse between doses so the peak effect of each dose can be assessed before subsequent drug administration
    - When drugs are administered by nonintravenous routes (e.g., oral, rectal, intramuscular, transmucosal), allow sufficient time for absorption and peak effect of the previous dose to occur before supplementation is considered

Sedative/Analgesic Medications Intended for General Anesthesia

- When moderate procedural sedation with sedative/analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia
- Assure that practitioners administering sedative/analgesic medications intended for general anesthesia are able to reliably identify and rescue patients from unintended deep sedation or general anesthesia
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‡‡The propensity for combinations of sedative and analgesic agents to cause respiratory depression and airway obstruction emphasizes the need to appropriately reduce the dose of each component as well as the need to continually monitor respiratory function. Knowledge of each drug’s time of onset, peak response, and duration of action is important. Titration of drug to effect is an important concept; one must know whether the previous dose has taken full effect before administering additional drug.
• In patients who have received sedative/analgesic medications intended for general anesthesia by nonintra-
venous routes or whose intravenous line has become dislodged or blocked, determine the advisability of
reestablishing intravenous access on a case-by-case basis
• Administer intravenous sedative/analgesic medications intended for general anesthesia in small, incremental
doses, or by infusion, titrating to the desired endpoints
  ◦ Allow sufficient time to elapse between doses so the
  peak effect of each dose can be assessed before sub-
sequent drug administration
• When drugs intended for general anesthesia are adminis-
tered by nonintravenous routes (e.g., oral, rectal, intramuscular, transmucosal), allow sufficient time
for absorption and peak effect of the previous dose to
occur before supplementation is considered

Reversal Agents
• Assure that specific antagonists are immediately avail-
able in the procedure room whenever opioid analge-
sics or benzodiazepines are administered for moderate
procedural sedation/analgesia, regardless of route of administration
• If patients develop hypoxemia, significant hypoventi-
lation or apnea during sedation/analgesia: (1) encour-
age or physically stimulate patients to breathe deeply,
(2) administer supplemental oxygen, and (3) provide
positive pressure ventilation if spontaneous ventilation
is inadequate
• Use reversal agents in cases where airway control,
spontaneous ventilation, or positive pressure ventila-
tion is inadequate
  ◦ Administer naloxone to reverse opioid-induced
  sedation and respiratory depression§§
  ◦ Administer flumazenil to reverse benzodiazepine-
induced sedation and respiratory depression
• After pharmacologic reversal, observe and monitor
patients for a sufficient time to ensure that sedation
and cardiorespiratory depression does not recur once
the effect of the antagonist dissipates
• Do not use sedation regimens that are intended to
include routine reversal of sedative or analgesic agents

Recovery Care
• After sedation/analgesia, observe and monitor patients
in an appropriately staffed and equipped area until they
are near their baseline level of consciousness and are no
longer at increased risk for cardiorespiratory depression
• Monitor oxygenation continuously until patients are
no longer at risk for hypoxemia

APPENDIX 2: METHODS AND ANALYSES
For these guidelines, a systematic search and review of peer-
reviewed published literature was conducted, with scientific
findings summarized and reported below and in the document.
Assessment of conceptual issues, practicality and feasibility of the
guideline recommendations was also evaluated, with opinion
data collected from surveys and other sources. Both the system-
atic literature review and the opinion data are based on evidence
linkages, or statements regarding potential relationships between
interventions and outcomes associated with moderate procedural
sedation. The evidence model below guided the search, provid-
ing inclusion and exclusion information regarding patients, pro-
cedures, practice settings, providers, clinical interventions, and
outcomes. After review of all evidentiary information, the task
force placed each recommendation into one of three categories:
(1) provide this intervention or treatment, (2) this intervention or
treatment may be provided to the patient based on circumstances
of the case and the practitioner’s clinical judgment, or (3) do not
provide this intervention or treatment. The policy of the ASA
Committee on Standards and Practice Parameters is to update
practice guidelines every 5 yr. The ASA Committee on Standards
and Practice Parameters reviews all practice guidelines at the ASA
annual meeting and determines update and revision timelines.

Evidence Model

Patients
• Inclusion criteria:
  ◦ Any patient having a diagnostic or therapeutic pro-
cedure for which moderate sedation is planned
• Exclusion criteria:
  ◦ Patients in whom the level of sedation cannot reli-
ably be established

Discharge criteria examples are noted in table 5.
- Patients who do not respond purposefully to verbal or tactile stimulation (e.g., stroke victims, neonates)
- Patients in whom determining the level of sedation interferes with the procedure

**Procedures**

- **Inclusion criteria:**
  - Elective and urgent/emergent procedures
  - Diagnostic and therapeutic procedures
    - Principal procedures (e.g., upper endoscopy, colonoscopy, radiology, ophthalmology, cardiology, dentistry, plastics, orthopedic, urology, podiatry)
    - Diagnostic imaging (radiological scans, endoscopy)
    - Minor surgical procedures in all care areas (e.g., cardioversion)
    - Pediatric procedures (e.g., suture of laceration, setting of simple fracture, lumbar puncture, bone marrow with local, magnetic resonance imaging or computed tomography scan, routine dental procedures)
    - Pediatric cardiac catheterization (e.g., cardiac biopsy after transplantation)
    - Obstetric procedures (e.g., labor and delivery)

- **Exclusion criteria:**
  - Procedures using minimal sedation (e.g., anxiolysis for insertion of peripheral nerve blocks, local or topical anesthesia)
  - Procedures where deep sedation is intended
  - Procedures where general anesthesia is intended
  - Procedures using major conduction anesthesia (i.e., neuraxial anesthesia)
  - Procedures using sedatives in combination with regional anesthesia
  - Nondiagnostic or nontherapeutic procedures (e.g., postoperative analgesia, pain management/chronic pain, critical care, palliative care)

**Practice Settings**

- **Inclusion criteria:**
  - Settings where procedural moderate sedation may be administered
    - Hospitals
    - Ambulatory procedural centers
    - Office practices
      - Hospital connected
      - Free-standing
      - Dental office
      - Urology office
      - Ophthalmology office
    - Emergency settings
    - Endoscopy suite
    - Plastic surgery suite
    - Radiology suite (magnetic resonance imaging, computed tomography, invasive)

- **Exclusion criteria:** (none indicated)

**Providers**

- **Inclusion criteria:**
  - All providers who deliver moderate procedural sedation in any practice setting
    - Physician anesthesiologists and anesthetists
    - Cardiologists
    - Dentists
    - Dentist anesthesiologists
    - Emergency physicians
    - Gastroenterologists
    - Hospitalists
    - Nurse anesthetists
    - Nursing personnel who perform monitoring tasks
    - Oncologists
    - Oral/maxillofacial surgeons
    - Pulmonologists
    - Radiologists
    - Sedation nurses
    - Supervised physicians and dentists in training
    - Surgeons

- **Exclusion criteria:** (none indicated)

**Interventions**

- **Inclusion criteria:**
  - Preprocedure patient evaluation and preparation
    - Medical records review (patient history/condition)
      - Underlying medical problems
        - Abnormalities of major organ systems
        - Obstructive sleep apnea
        - Respiratory distress syndrome
        - Allergies
        - Intestinal inflammation
        - Obesity
      - Sedation history
      - Anesthesia history
      - Surgical history
      - Problems pertaining to cooperation
      - Current medications
      - Extremes of age
      - Psychotropic drug use
      - Nonpharmaceutical (e.g., nutraceutical) use
      - Family history
- Focused physical examination (e.g., heart, lungs, airway)
- Consultation with a medical specialist (e.g., physician anesthesiologist, cardiologist, endocrinologist, pulmonologist, nephrologist, obstetrician)
- Preparation of the patient (e.g., preprocedure instruction, medication usage, counseling, fasting)

- Patient monitoring
  - Level of consciousness (e.g., responsiveness)
  - Breathing/ventilation
    - Observation (color when the procedure allows)
    - Auscultation, chest excursion
    - Continual end tidal carbon dioxide monitoring (e.g., capnography, capnometry) versus observation or auscultation
  - Plethysmography
    - Plethysmography versus observation or auscultation
    - Plethysmography versus capnography
  - Oxygenation
    - Pulse oximetry
  - Hemodynamic monitoring
    - Blood pressure
    - Heart rate
    - Electrocardiography
  - Contemporary recording of monitored parameters
  - Presence of an individual dedicated to patient monitoring
  - Creation and implementation of quality improvement processes

- Supplemental oxygen
  - Supplemental oxygen versus room air or no supplemental oxygen
  - Method of oxygen administration (e.g., nasal cannula, face masks, specialized devices (e.g., high-flow cannula)

- Emergency support
  - Presence of individual(s) capable of establishing a patent airway, positive pressure ventilation and resuscitation (i.e., advanced life-support skills)
  - Presence of emergency and airway equipment
    - Types of airway devices (e.g., nasal cannula, face masks, specialized devices (e.g., high-flow cannula)
    - Supraglottic airway (e.g., laryngeal mask airway)
  - Presence of an individual to establish intravenous access
  - Intravenous access versus no intravenous access

- Sedative or analgesic medications not intended for general anesthesia
  - Sedatives (all routes of administration)
    - Benzodiazepines
    - Dexmedetomidine versus other sedatives or analgesics
  - Sedative/opioid combinations (all routes of administration)
    - Benzodiazepines combined with opioids versus benzodiazepines
    - Benzodiazepines combined with opioids versus opioids
    - Dexmedetomidine combined with other sedatives or analgesics versus dexametomidine
    - Dexmedetomidine combined with other sedatives or analgesics versus other sedatives or analgesics (alone or in combination)

- Intravenous versus nonintravenous sedative/analgesics not intended for general anesthesia (all non-IV routes of administration, including oral, nasal, intramuscular, rectal, transdermal, sublingual, iontophoresis, nebulized)
  - Titration versus single dose, repeat bolus, continuous infusion

- Sedative/analgesic medications intended for general anesthesia
  - Propofol
    - Propofol alone versus non–general anesthesia sedative/analgesics alone
    - Propofol alone versus non–general anesthesia sedative/analgesic combinations
    - Propofol combined with non–general anesthesia sedative/analgesics versus propofol alone
    - Propofol combined with non–general anesthesia sedative/analgesics versus non–general anesthesia sedative/analgesics (alone or in combination)
    - Propofol alone versus other general anesthesia sedatives (alone or in combination)
    - Propofol combined with sedatives intended for general anesthesia versus other sedatives intended for general anesthesia (alone or in combination)
    - Propofol combined with other sedatives intended for general anesthesia versus propofol (alone or in combination)

- Ketamine
  - Ketamine alone versus non–general anesthesia sedative/analgesics alone
  - Ketamine alone versus non–general anesthesia sedative/analgesic combinations
  - Ketamine combined with non–general anesthesia sedative/analgesics versus ketamine alone
Ketamine combined with non–general anesthesia sedative/analgesics versus non–general anesthesia sedative/analgesics (alone or in combination)
- Ketamine alone versus other general anesthesia sedatives (alone or in combination)
- Ketamine combined with sedatives intended for general anesthesia versus other sedatives intended for general anesthesia (alone or in combination)
- Ketamine combined with other sedatives intended for general anesthesia versus ketamine (alone or in combination)

- Etomidate
  - Etomidate alone versus non–general anesthesia sedative/analgesics alone
  - Etomidate alone versus non–general anesthesia sedative/analgesic combinations
  - Etomidate combined with non–general anesthesia sedative/analgesics versus etomidate alone
  - Etomidate combined with non–general anesthesia sedative/analgesics versus non–general anesthesia sedative/analgesics (alone or in combination)
  - Etomidate alone versus other general anesthesia sedatives (alone or in combination)
  - Etomidate combined with sedatives intended for general anesthesia versus other sedatives intended for general anesthesia (alone or in combination)
  - Etomidate combined with other sedatives intended for general anesthesia versus etomidate (alone or in combination)

- Intravenous versus nonintravenous sedatives intended for general anesthesia
- Titration of sedatives intended for general anesthesia

- Reversal agents
  - Naloxone for reversal of opioids with or without benzodiazepines
  - Naloxone versus placebo
  - Intravenous versus nonintravenous naloxone
  - Flumazenil for reversal or benzodiazepines with or without opioids
  - Flumazenil versus placebo
  - Intravenous versus nonintravenous flumazenil

- Recovery care
  - Continued observation and monitoring until discharge
  - Predetermined discharge criteria

- Exclusion criteria:
  - Minimal sedation
  - Deep sedation

- General anesthesia
- Patient-controlled sedation/analgesia
- Major conduction anesthetics (i.e., neuraxial anesthesia)
- Sedatives combined with regional anesthesia
- Premedication administered before general anesthesia
- Interventions without sedatives (e.g., hypnosis, acupuncture)
- New or rarely administered sedative/analgesics (e.g., fospropofol)
- Automated sedative delivery systems
- New or rarely used monitoring or delivery devices
- Bispectral index monitoring

Outcomes
- Expected benefits:
  - Sedation efficacy
    - Induction time
    - Duration of sedation
    - Successful procedure
    - Patient/family satisfaction
    - Proceduralist satisfaction
  - Improved pain management (i.e., pain during a procedure)
  - Speed of recovery
    - Time to recovery
    - Time to discharge-ready
  - Reduced frequency/severity of sedation-related complications
    - Unintended deep sedation or general anesthesia
    - Conversion to deep sedation or general anesthesia
    - Undersedation
    - Unplanned hospitalization and/or intensive care unit admission
    - Unplanned emergency department visits
    - Unplanned use of rescue agents (naloxone, flumazenil)
    - Resedation after discharge criteria met
    - Postprocedure neurologic function
    - Need to change planned procedure or technique
    - Respiratory depression
    - Hypoxemia
    - Oxygen desaturation
    - Upper airway obstruction
    - Airway support required
    - Intubation required
    - Airway adjunct required
    - Pulmonary aspiration
    - Hypotension
    - Arrhythmias
    - Cardiac arrest
    - Bradycardia

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- Hemodynamic support or rescue required
- Assistance request
- Neurologic injury
- Death

**Evidence Collection**

- Literature inclusion criteria:
  - Randomized controlled trials
  - Prospective nonrandomized comparative studies (e.g., quasieperimental, cohort)
  - Retrospective comparative studies (e.g., case-control)
  - Observational studies (e.g., correlational or descriptive statistics)
  - Case reports, case series
- Literature exclusion criteria (except to obtain new citations):
  - Editorials
  - Literature reviews
  - Meta-analyses
  - Absorbs greater than 5 yr old
  - Unpublished studies
  - Studies in non–peer-reviewed journals
  - Newspaper articles
- Survey evidence:
  - Expert consultant survey
  - ASA membership survey
  - Other participating organization surveys
  - Reliability survey
  - Feasibility survey

**State of the Literature.** For the systematic review, potentially relevant clinical studies were identified via electronic and manual searches. Healthcare database searches included PubMed, EMBASE, Web of Science, Google Books, and the Cochrane Central Register of Controlled Trials. The searches covered a 15.6-yr period from January 1, 2002, through July 31, 2017. Accepted studies from the previous guidelines were also reviewed, covering the period of August 1, 1976, through December 31, 2002. Only studies containing original findings from peer-reviewed journals were acceptable. Editorials, letters, and other articles without data were excluded. A literature search strategy and PRISMA* flow diagram are available as Supplemental Digital Content 2, http://links.lww.com/ALN/B597.

In total, 4,349 new citations were identified, with 1,428 articles assessed for eligibility. After review, 1,140 were excluded, with 288 new studies meeting the above criteria. These studies were combined with 209 pre-2002 articles used in the previous guidelines, resulting in a total of 497 articles accepted as evidence for these guidelines. In this document, 187 are referenced, with a complete bibliography of articles used to develop these guidelines, organized by section, available as Supplemental Digital Content 3, http://links.lww.com/ALN/B595.

Results for each pertinent outcome were summarized, and when sufficient numbers of RCTs were found, study grading and meta-analyses were conducted. The literature relating to six evidence linkages contained enough studies with well defined experimental designs and statistical information to conduct formal meta-analyses. These seven evidence linkages are: (1) capnography versus blinded capnography, (2) supplemental oxygen versus no supplemental oxygen, (3) midazolam combined with opioids versus midazolam alone, (4) propofol versus midazolam, (5) flumazenil versus placebo for benzodiazepine reversal, and (6) flumazenil versus placebo for reversal of benzodiazepines combined with opioids (table 6). Fixed and random-effects odds ratios are reported for dichotomous outcomes, and raw and standardized mean differences are reported for findings with continuous data. An acceptable significance level was set at $P < 0.01$. No search for unpublished studies was conducted, and no reliability tests for locating research results were done.

Interobserver agreement among task force members and two methodologists was obtained by interrater reliability testing of 36 randomly selected studies. Agreement levels using a $\kappa$ statistic for two-rater agreement pairs were as follows: (1) research design, $\kappa = 0.57$ to 0.92; (2) type of analysis, $\kappa = 0.60$ to 0.75; (3) evidence linkage assignment, $\kappa = 0.76$ to 0.85; and (4) literature inclusion for database, $\kappa = 0.28$ to 1.00. Three-rater $\kappa$ values were: (1) research design, $\kappa = 0.70$; (2) type of analysis, $\kappa = 0.68$; (3) linkage assignment, $\kappa = 0.79$; and (4) literature database inclusion, $\kappa = 0.43$. These values represent moderate to high levels of agreement.

**Consensus-based Evidence.** Consensus was obtained from multiple sources, including: (1) survey opinion from consultants† who were selected based on their knowledge or expertise in moderate procedural sedation and analgesia; (2) survey opinions from a randomly selected sample of active members of the ASA, AAOMS, and ASDA§; (3) testimony from attendees of publicly held open forums at national anesthesia meetings; (4) internet commentary; and (5) task force opinion and interpretation. The survey rate of return was 81% ($n = 129$ of 159) for consultants. For membership respondents, survey data were collected from 69 ASA members, 104 AAOMS members, and 104 ASDA members. The results of the surveys are reported in tables 7–10 and are summarized in the text of the guidelines.

†Consultants were drawn from the following specialties where moderate procedural sedation/analgesia are commonly administered: anesthesiology, cardiology, dentistry, emergency medicine, gastroenterology, oral and maxillofacial surgery, pediatrics, radiology, and surgery.

§All participating organizations were invited to participate in this survey.


*Preferred reporting items of systematic reviews and meta-analyses.

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Consultants were asked to indicate which, if any, of the evidence linkages would change their clinical practices if the guidelines were instituted. The rate of return was 34.6% (n = 55 of 159). The percent of responding consultants expecting no change associated with each linkage were as follows (preprocedure patient evaluation – %): preprocedure patient preparation – 93.75%; patient preparation – 87.5%; patient monitoring – 68.75%; supplemental oxygen – 93.75%; emergency support – 87.5%; sedative or analgesic medications not intended for general anesthesia – 87.5%; sedative or analgesic medications intended for general anesthesia – 75.0%; availability/use of reversal agents – 87.5%; recovery care – 75%; and creation and implementation of patient safety processes – 56.25%. Forty-four respondents (84.62%) indicated that the guidelines would have no effect on the amount of time spent on a typical case with the implementation of these guidelines. Seven respondents (13.46%) indicated that there would be an increase in the amount of time, with four of these respondents estimating an increase ranging from 5 to 15 min. One respondent (1.92%) estimated a decrease in the amount of time they would spend on a typical case.

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Competing Interests
The authors declare no competing interests.

Correspondence
Address correspondence to the American Society of Anesthesiologists: 1061 American Lane, Schaumburg, Illinois 60173; jeff@duc.ucchicago.edu. These updated Practice Guidelines, and all ASA Practice Parameters, may be obtained at no cost through the Journal Web site, www.anesthesiology.org.

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PRACTICE PARAMETERS


139. Baysal A, Polat TB, Yalcin Y, Celebi A: The use of basic parameters for monitoring the haemodynamic effects of midazolam and ketamine as opposed to propofol during cardiac catheterization. Cardiol Young 2014; 24:351–8


160. Bell A, Treston G, Cardwell R, Schabort WJ, Chand D: Optimization of propofol dose shortens procedural sedation time, prevents resedation and removes the requirement...
Table 1. Continuum of Depth of Sedation, Definition of General Anesthesia, and Levels of Sedation/Analgesia

<table>
<thead>
<tr>
<th></th>
<th>Minimal Sedation (Anxiolysis)</th>
<th>Moderate Sedation/Analgesia (Conscious Sedation)</th>
<th>Deep Sedation/Analgesia</th>
<th>General Anesthesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>Normal response to verbal stimulation</td>
<td>Purposeful* response to verbal or tactile stimulation</td>
<td>Purposeful* response after repeated or painful stimulation</td>
<td>Unarousable, even with painful stimulus</td>
</tr>
<tr>
<td>Airway</td>
<td>Unaffected</td>
<td>No intervention required</td>
<td>Intervention may be required</td>
<td>Intervention often required</td>
</tr>
<tr>
<td>Spontaneous ventilation</td>
<td>Unaffected</td>
<td>Adequate</td>
<td>May be inadequate</td>
<td>Frequently inadequate</td>
</tr>
<tr>
<td>Cardiovascular function</td>
<td>Unaffected</td>
<td>Usually maintained</td>
<td>Usually maintained</td>
<td>May be impaired</td>
</tr>
</tbody>
</table>

Minimal Sedation (Anxiolysis) indicates a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected. Moderate Sedation/Analgesia (Conscious Sedation) indicates a drug-induced depression of consciousness during which patients respond purposefully* to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. Deep Sedation/Analgesia is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully* after repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained. General Anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired. Because sedation is a continuum, it is not always possible to predict how an individual patient will respond. Hence, practitioners intending to produce a given level of sedation should be able to rescue patients whose level of sedation becomes deeper than initially intended. Individuals administering Moderate Sedation/Analgesia (Conscious Sedation) should be able to rescue patients who enter a state of Deep Sedation/Analgesia, whereas those administering Deep Sedation/Analgesia should be able to rescue patients who enter a state of General Anesthesia. (Developed by the American Society of Anesthesiologists: Approved by ASA House of Delegates on October 13, 1999 and last amended on October 15, 2014. Available at: http://www.asahq.org/quality-and-practice-management/practice-guidance-resource-documents/continuum-of-depth-of-sedation-definition-of-general-anesthesia-and-levels-of-sedation-analgesia. Accessed on August 21, 2017.)

*Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.

Table 2. Airway Assessment Procedures for Sedation and Analgesia

Positive pressure ventilation, with or without tracheal intubation, may be necessary if respiratory compromise develops during sedation/analgesia. This may be more difficult in patients with atypical airway anatomy. Also, some airway abnormalities may increase the likelihood of airway obstruction during spontaneous ventilation. Some factors that may be associated with difficulty in airway management are listed below.

History
- Previous problems with anesthesia or sedation
- Stridor, snoring, or sleep apnea
- Advanced rheumatoid arthritis
- Chromosomal abnormality (e.g., trisomy 21)

Physical examination
- Habitus: significant obesity (especially involving the neck and facial structures)
- Head and neck: short neck, limited neck extension, decreased hyoid-mental distance (< 3 cm in an adult), neck mass, cervical spine disease or trauma, tracheal deviation, dysmorphic facial features (e.g., Pierre–Robin syndrome)
- Mouth: small opening (< 3 cm in an adult); edentulous; protruding incisors; loose or capped teeth; dental appliances; high, arched palate; macroGLOSSIA; tonsillar hypertrophy; nonvisible uvula
- Jaw: micrognathia, retrognathia, trismus, significant malocclusion
Table 3. Summary of American Society of Anesthesiologists Recommendations for Preoperative Fasting and Use of Pharmacologic Agents to Reduce the Risk of Pulmonary Aspiration: Application to Healthy Patients Undergoing Elective Procedures

<table>
<thead>
<tr>
<th>Ingested material</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear liquids†</td>
<td>2-h minimum fasting period*</td>
</tr>
<tr>
<td>Breast milk</td>
<td>4-h minimum fasting period*</td>
</tr>
<tr>
<td>Infant formula</td>
<td>6-h minimum fasting period*</td>
</tr>
<tr>
<td>Nonhuman milk‡</td>
<td>6-h minimum fasting period*</td>
</tr>
<tr>
<td>Light meal§</td>
<td>6-h minimum fasting period*</td>
</tr>
<tr>
<td>Fried foods, fatty foods, or meat</td>
<td>Additional fasting time (e.g., 8 h or more) may be needed</td>
</tr>
</tbody>
</table>

Pharmacologic recommendations (medication type and common examples)

- Metoclopramide: May be used/no routine use
- Cimetidine: May be used/no routine use
- Famotidine: May be used/no routine use
- Ranitidine: May be used/no routine use
- Omeprazole: May be used/no routine use
- Lansoprazole: May be used/no routine use
- Antacids: May be used/no routine use
- Sodium citrate: May be used/no routine use
- Sodium bicarbonate: May be used/no routine use
- Magnesium trisilicate: May be used/no routine use
- Antiemetics: May be used/no routine use
- Ondansetron: May be used/no routine use
- Anticholinergics: No use
- Atropine: No use
- Scopolamine: No use
- Glycopyrrolate: No use
- Combinations of the medications above: No routine use

These recommendations apply to healthy patients who are undergoing elective procedures. They are not intended for women in labor. Following the guidelines does not guarantee complete gastric emptying.

*The fasting periods noted above apply to all ages. †Examples of clear liquids include water, fruit juices without pulp, carbonated beverages, clear tea, and black coffee. ‡Because nonhuman milk is similar to solids in gastric emptying time, the amount ingested must be considered when determining an appropriate fasting period. §A light meal typically consists of toast and clear liquids. Meals that include fried or fatty foods or meat may prolong gastric emptying time. Additional fasting time (e.g., 8 h or more) may be needed in these cases. Both the amount and type of foods ingested must be considered when determining an appropriate fasting period.

Table 4. Emergency Equipment for Sedation and Analgesia

Intravenous equipment (age- and size-appropriate)
- Gloves
- Tourniquets
- Alcohol wipes
- Sterile gauze pads
- Intravenous catheters
- Intravenous tubing
- Intravenous fluid
- Assorted needles for drug aspiration, intramuscular injection
- Intraosseous access kit
- Appropriately sized syringes
- Needle

Basic airway management equipment (age- and size-appropriate)
- Source of compressed O₂ (tank with regulator or pipeline supply with flowmeter)
- Source of suction
- Suction catheters
- Yankauer-type suction
- Face masks
- Self-inflating breathing bag-valve set
- Oral and nasal airways
- Lubricant

Advanced airway management equipment (age- and size-appropriate)
- Supraglottic airway devices
- Laryngoscope handles (tested)
- Laryngoscope blades
- Endotracheal tubes
- Stylet

Pharmacologic antagonists
- Naloxone
- Flumazenil

Emergency medications
- Epinephrine
- Ephedrine
- Vasopressin
- Atropine
- Nitroglycerin (tablets or spray)
- Amiodarone
- Lidocaine
- Glucose (IV or oral)
- Diphenhydramine
- Hydrocortisone, methylprednisolone, or dexamethasone
- Benzodiazepines
- β blocker
- Adenosine

Appropriate emergency equipment should be available whenever sedative or analgesic drugs capable of causing cardiorespiratory depression are administered. This table should be used as a guide, which should be modified depending upon the individual practice circumstances.

IV = intravenous.
Table 5. Recovery and Discharge Criteria after Sedation and Analgesia

General principles

- Medical supervision of recovery and discharge after moderate sedation is the responsibility of the operating practitioner or a licensed physician.
- The recovery area should be equipped with or have direct access to age and size appropriate monitoring and resuscitation equipment.
- Patients receiving moderate sedation should be monitored until appropriate discharge criteria are satisfied. The duration and frequency of monitoring should be individualized depending upon the level of sedation achieved, the overall condition of the patient, and the nature of the intervention for which sedation/analgesia was administered. Oxygenation should be monitored until patients are no longer at risk for respiratory depression.
- Level of consciousness, vital signs, and oxygenation (when indicated) should be recorded at regular intervals.
- A nurse or other individual trained to monitor patients and recognize complications should be in attendance until discharge criteria are fulfilled.
- An individual capable of managing complications (e.g., establishing a patent airway, administering a reversal medication when appropriate, and providing positive pressure ventilation) should be immediately available until discharge criteria are fulfilled.

Guidelines for discharge

- Patients should be alert and oriented; infants and patients whose mental or physical status was initially abnormal should have returned to their baseline status.
- Patients should be advised to avoid making life-changing decisions and activities that may impact their safety (e.g., operate a vehicle or heavy equipment) until the effects of the sedatives have worn off.
- Cardiovascular function, airway patency, and protective airway reflexes are satisfactory.
- Practitioners and parents must be aware that pediatric patients are at risk for airway obstruction should the head fall forward while the child is secured in a child safety seat. *
- Vital signs should be stable and within acceptable limits.
- Use of scoring systems may assist in documentation of fitness for discharge.
- Sufficient time (up to 2 h) should have elapsed after the last administration of reversal agents (naloxone, flumazenil) to ensure that patients do not become resedated after reversal effects have worn off.
- Outpatients should be discharged in the presence of a responsible adult who will accompany them home or to a care facility and be able to report any postprocedure complications.
- Outpatients and their escorts should be provided with written instructions regarding postprocedure diet, medications, activities, and a phone number to be called in case of emergency.

Each patient-care facility in which sedation/analgesia is administered should develop recovery and discharge criteria that are suitable for its specific patients and procedures. Some of the basic principles that might be incorporated in these criteria are enumerated in the table.

*Drugs with long durations of action (e.g., chloral hydrate, intramuscular pentobarbital, phenothiazines) will require longer periods of observation even after the child achieves currently used recovery and discharge criteria. This concept is particularly important for infants and toddlers transported in car safety seats who are at risk of resedation after discharge because of residual prolonged drug effects with the potential for airway obstruction.
### Table 6. Meta-analysis Summary

<table>
<thead>
<tr>
<th>Evidence Linkages*</th>
<th>N†</th>
<th>Odds Ratio (CI)‡</th>
<th>Z Value</th>
<th>P Value</th>
<th>Odds Ratio (CI)§</th>
<th>Z Value</th>
<th>P Value</th>
<th>Heterogeneity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient monitoring (capnography versus blinded capnography)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypoxemia (O₂ &lt; 90%)[30-34]</td>
<td>6</td>
<td>0.68 (0.51–0.90)</td>
<td>−3.53</td>
<td>&lt; 0.001</td>
<td>0.70 (0.47–1.02)</td>
<td>−2.44</td>
<td>0.015</td>
<td>0.110</td>
</tr>
<tr>
<td>Supplemental oxygen (supplemental oxygen vs. placebo)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypoxemia (O₂ &lt; 95%)[65-71]</td>
<td>7</td>
<td>0.15 (0.09–0.24)</td>
<td>−10.49</td>
<td>&lt; 0.001</td>
<td>0.24 (0.07–0.81)</td>
<td>−3.01</td>
<td>&lt; 0.001</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Sedative/analgesics not intended for general anesthesia (midazolam combined with opioids vs. midazolam)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain/discomfort during procedure[72-77]</td>
<td>6</td>
<td>0.57 (0.33–1.00)</td>
<td>−2.57</td>
<td>0.010</td>
<td>0.48 (0.16–1.43)</td>
<td>−1.73</td>
<td>0.084</td>
<td>0.061</td>
</tr>
<tr>
<td>Hypoxemia (O₂ &lt; 95%)[74,75,77-80]</td>
<td>6</td>
<td>1.97 (1.00–3.90)</td>
<td>2.57</td>
<td>0.010</td>
<td>2.21 (0.80–6.12)</td>
<td>2.01</td>
<td>0.044</td>
<td>0.111</td>
</tr>
<tr>
<td>Recall (no recall during procedure)[72-77,80-83]</td>
<td>8</td>
<td>1.07 (0.62–1.84)</td>
<td>0.31</td>
<td>0.759</td>
<td>1.09 (0.58–2.06)</td>
<td>0.35</td>
<td>0.726</td>
<td>0.268</td>
</tr>
<tr>
<td>Sedative/analgesics intended for general anesthesia (propofol vs. midazolam)</td>
<td></td>
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<tr>
<td>Recall[95,99-102]</td>
<td>5</td>
<td>0.49 (0.25–0.97)</td>
<td>−2.67</td>
<td>0.008</td>
<td>0.40 (0.07–2.21)</td>
<td>−1.38</td>
<td>0.168</td>
<td>0.002</td>
</tr>
<tr>
<td>Hypoxemia (O₂ &lt; 95%)[95,96,98-100]</td>
<td>7</td>
<td>0.90 (0.47–1.70)</td>
<td>−0.431</td>
<td>0.666</td>
<td>0.92 (0.48–1.78)</td>
<td>−0.32</td>
<td>0.752</td>
<td>0.638</td>
</tr>
<tr>
<td>Sedation recovery (awakening time)[95-99]</td>
<td>5</td>
<td>11.87</td>
<td>&lt; 0.001</td>
<td>4.55</td>
<td>&lt; 0.001</td>
<td>0.001</td>
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</tr>
<tr>
<td>Raw mean difference = −10.01 (CI = −11.63 to −8.39)</td>
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<tr>
<td>Standard mean difference (fixed effects) = −1.23 (CI = −1.49 to −0.96)</td>
<td></td>
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<tr>
<td>Standard mean difference (random effects) = −1.57 (CI = −2.46 to −0.68)</td>
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<tr>
<td>Reversal agents (flumazenil vs. placebo [reversal of benzodiazepines])</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery within 15 min[171-178]</td>
<td>8#</td>
<td>11.67 (6.47–21.05)</td>
<td>10.72</td>
<td>&lt; 0.001</td>
<td>14.07 (5.59–35.45)</td>
<td>7.37</td>
<td>&lt; 0.001</td>
<td>0.064</td>
</tr>
<tr>
<td>Reversal agents (flumazenil vs. placebo [reversal of benzodiazepines combined with opioids])</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Recovery within 30 min[182-186]</td>
<td>7</td>
<td>7.13 (4.49–11.32)</td>
<td>10.94</td>
<td>&lt; 0.001</td>
<td>7.13 (4.49–11.32)</td>
<td>10.94</td>
<td>&lt; 0.001</td>
<td>0.538</td>
</tr>
</tbody>
</table>

Statistics for individual studies and forest plots are available as supplemental digital content 4, http://links.lww.com/ALN/B596.

*Evidence linkage with references for included studies.
†Number of studies included in the meta-analysis.
‡Mantel–Haenszel or Peto fixed-effects analysis (99% CI); using Comprehensive Meta-analysis software, version 3.3.070, November 20, 2014. Licensed to Richard T. Connis, Ph.D., March 20, 2017.
‖Statistical significance values for homogeneity/heterogeneity of effect size; a P value of < 0.01 indicates that the studies are significantly heterogeneous.
#Double-blind studies only.
<table>
<thead>
<tr>
<th>Patient evaluation</th>
<th>Percent Responding to Each Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review previous medical records and interview the patient or family</td>
<td>N* Strongly Agree Agree Equivocal Disagree Strongly Disagree</td>
</tr>
<tr>
<td>2. Conduct a focused physical examination of the patient</td>
<td>129 87.6* 10.1 2.3 0.0 0.0</td>
</tr>
<tr>
<td>3. Review available laboratory test results and order additional laboratory tests when needed</td>
<td>129 86.0* 13.2 0.8 0.0 0.0</td>
</tr>
<tr>
<td>4. If possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for proper patient preparation</td>
<td>129 35.7 35.7* 19.4 4.7 4.7</td>
</tr>
<tr>
<td>5. Reevaluate the patient immediately before the procedure</td>
<td>127 80.3* 18.1 0.8 0.0 0.8</td>
</tr>
<tr>
<td>Preprocedure patient preparation</td>
<td></td>
</tr>
<tr>
<td>6. Consult with a medical specialist, when appropriate, before administration of moderate procedural sedation to patients with significant underlying conditions</td>
<td>127 51.2* 22.8 15.7 5.5 4.7</td>
</tr>
<tr>
<td>7. When feasible before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives and elicit their preferences</td>
<td>129 75.2* 20.2 1.6 2.3 0.8</td>
</tr>
<tr>
<td>8. Before the day of the procedure, inform patients or legal guardians that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying</td>
<td>128 71.9* 14.1 4.7 4.7 4.7</td>
</tr>
<tr>
<td>9. On the day of the procedure, assess the time and nature of last oral intake</td>
<td>128 82.0* 13.3 2.3 1.6 0.8</td>
</tr>
<tr>
<td>10. In urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone</td>
<td>128 38.3 25.0* 17.2 10.2 9.4</td>
</tr>
<tr>
<td>Monitoring patient level of consciousness</td>
<td></td>
</tr>
<tr>
<td>11. Periodically monitor a patient’s response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately or during procedures where movement could be detrimental clinically</td>
<td>129 46.5 37.2* 9.3 4.7 2.3</td>
</tr>
<tr>
<td>12. During procedures where a verbal response is not possible, check the patient’s ability to give a “thumbs up” or other indication of consciousness in response to verbal or tactile stimulation</td>
<td>128 39.1 38.3* 16.4 4.7 1.6</td>
</tr>
<tr>
<td>Monitoring patient ventilation and oxygenation</td>
<td></td>
</tr>
<tr>
<td>13. Continually monitor ventilatory function by observation of qualitative clinical signs</td>
<td>126 76.2* 19.8 2.4 1.6 0.0</td>
</tr>
<tr>
<td>14. Continually monitor ventilatory function by capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment</td>
<td>127 67.7* 14.2 10.2 4.7 3.1</td>
</tr>
<tr>
<td>15. Monitor all patients by pulse oximetry with appropriate alarms</td>
<td>127 85.8* 14.2 0.0 0.0 0.0</td>
</tr>
<tr>
<td>Monitoring hemodynamics</td>
<td></td>
</tr>
<tr>
<td>16. Determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation</td>
<td>127 74.8* 22.0 0.0 2.4 0.8</td>
</tr>
<tr>
<td>17. Once moderate sedation/analgesia is established, continually monitor blood pressure and heart rate during the procedure unless such monitoring interferes with the procedure</td>
<td>127 69.3* 23.6 1.6 2.4 3.1</td>
</tr>
<tr>
<td>18. Use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated</td>
<td>127 76.4* 15.7 3.1 0.8 3.9</td>
</tr>
<tr>
<td>Contemporaneous recording of monitored parameters</td>
<td></td>
</tr>
<tr>
<td>19. Record level of consciousness, ventilatory and oxygenation status, and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient</td>
<td>126 60.3* 24.6 4.8 7.9 2.4</td>
</tr>
<tr>
<td>20. Set device alarms to alert the care team to critical changes in patient availability of an individual responsible for patient monitoring</td>
<td>126 75.4* 21.4 3.2 0.0 0.0</td>
</tr>
<tr>
<td>21. Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure</td>
<td>126 78.6* 18.3 0.8 0.8 1.6</td>
</tr>
</tbody>
</table>
### Table 7. (Continued).

**Percent Responding to Each Item**

<table>
<thead>
<tr>
<th>Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be empowered to seek additional help</td>
<td>127</td>
<td>87.4*</td>
<td>11.8</td>
<td>0.0</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>23. The designated individual may assist with minor, interruptible tasks once the patient's level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient's level of sedation is maintained</td>
<td>127</td>
<td>47.2</td>
<td>30.7*</td>
<td>10.2</td>
<td>9.4</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Supplemental oxygen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>24. Use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure</td>
<td>126</td>
<td>54.0*</td>
<td>29.4</td>
<td>11.1</td>
<td>4.0</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Emergency support</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>25. Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure room</td>
<td>127</td>
<td>68.5*</td>
<td>20.5</td>
<td>6.3</td>
<td>3.1</td>
<td>1.6</td>
</tr>
<tr>
<td>26. Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered and potential interactions with other medications and nutraceuticals the patient may be taking</td>
<td>126</td>
<td>84.9*</td>
<td>12.7</td>
<td>1.6</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>27. Assure that appropriately sized equipment for establishing a patient airway is available</td>
<td>124</td>
<td>88.7*</td>
<td>10.5</td>
<td>0.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>28. Assure that at least one individual capable of establishing a patient airway and providing positive pressure ventilation is present in the procedure room</td>
<td>126</td>
<td>84.1*</td>
<td>11.9</td>
<td>3.2</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>29. Assure that suction, advanced airway equipment, positive pressure ventilation, and supplemental oxygen are immediately available in the procedure room and in good working order</td>
<td>127</td>
<td>87.4*</td>
<td>10.2</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>30. Assure that a member of the procedural team is trained in the recognition and treatment of airway complications, opening the airway, suctioning secretions, and performing bag-valve-mask ventilation</td>
<td>127</td>
<td>80.3*</td>
<td>14.2</td>
<td>0.8</td>
<td>3.9</td>
<td>0.8</td>
</tr>
<tr>
<td>31. Assure that a member of the procedural team has the skills to establish intravenous access</td>
<td>127</td>
<td>84.3*</td>
<td>13.4</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>32. Assure that a member of the procedural team has the skills to provide chest compressions</td>
<td>127</td>
<td>77.2*</td>
<td>17.3</td>
<td>3.9</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>33. Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area</td>
<td>126</td>
<td>77.2*</td>
<td>13.4</td>
<td>7.1</td>
<td>2.4</td>
<td>0.0</td>
</tr>
<tr>
<td>34. Assure that an individual or service is immediately available with advanced life support skills</td>
<td>127</td>
<td>89.0*</td>
<td>11.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>35. Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room</td>
<td>127</td>
<td>87.4*</td>
<td>10.2</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Sedative or analgesic medications not intended for general anesthesia</strong></td>
<td></td>
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</tr>
<tr>
<td>36. Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient</td>
<td>124</td>
<td>65.3*</td>
<td>32.3</td>
<td>0.8</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>37. Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis</td>
<td>124</td>
<td>30.6</td>
<td>37.9*</td>
<td>21.0</td>
<td>9.7</td>
<td>0.8</td>
</tr>
<tr>
<td>38. In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression</td>
<td>124</td>
<td>83.1*</td>
<td>12.9</td>
<td>3.2</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>39. In patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis</td>
<td>124</td>
<td>48.4</td>
<td>40.3*</td>
<td>1.6</td>
<td>6.5</td>
<td>3.2</td>
</tr>
<tr>
<td>40. Administer intravenous sedative/analgesic drugs in small, incremental doses or by infusion, titrating to the desired endpoints</td>
<td>124</td>
<td>71.0*</td>
<td>26.6</td>
<td>1.6</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td><strong>Sedative or analgesic medications intended for general anesthesia</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>41. When moderate procedural sedation with sedative or analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia</td>
<td>122</td>
<td>65.6*</td>
<td>18.9</td>
<td>4.9</td>
<td>4.9</td>
<td>5.7</td>
</tr>
</tbody>
</table>

(Continued)
### Table 7. (Continued)

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practitioner Guidelines</strong></td>
<td></td>
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</tr>
<tr>
<td>42. Assure that practitioners administering these drugs are able to reliably rescue patients from unintended deep sedation or general anesthesia</td>
<td>122</td>
<td>87.7*</td>
<td>9.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>43. For patients receiving intravenous sedatives intended for general anesthesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression</td>
<td>123</td>
<td>85.4*</td>
<td>9.8</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>44. In patients who have received sedatives intended for general anesthesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis</td>
<td>121</td>
<td>51.2*</td>
<td>24.8</td>
<td>4.1</td>
<td>13.2</td>
<td>6.6</td>
</tr>
<tr>
<td>45. Administer intravenous sedative/analgesic drugs intended for general anesthesia in small, incremental doses, or by infusion, titrating to the desired endpoints</td>
<td>122</td>
<td>73.0*</td>
<td>21.3</td>
<td>2.5</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Reversal agents</strong></td>
<td></td>
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</tr>
<tr>
<td>46. Assure that specific antagonists are immediately available in the procedure room whenever opioid analgesics or benzodiazepines are administered for moderate procedural sedation/analgesia regardless of administration route</td>
<td>123</td>
<td>74.0*</td>
<td>17.1</td>
<td>5.7</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>47. If patients become hypoxemic or apneic during sedation/analgesia, encourage or physically stimulate patients to breathe deeply</td>
<td>120</td>
<td>82.5*</td>
<td>16.7</td>
<td>0.0</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>48. If patients become hypoxemic or apneic during sedation/analgesia, administer supplemental oxygen</td>
<td>124</td>
<td>84.7*</td>
<td>10.5</td>
<td>3.2</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>49. If patients become hypoxemic or apneic during sedation/analgesia, provide positive pressure ventilation if spontaneous ventilation is inadequate</td>
<td>122</td>
<td>82.8*</td>
<td>13.1</td>
<td>1.6</td>
<td>1.6</td>
<td>0.8</td>
</tr>
<tr>
<td>50. Use reversal agents in cases where airway control, spontaneous ventilation, or positive pressure ventilation is inadequate</td>
<td>124</td>
<td>69.4*</td>
<td>19.4</td>
<td>7.3</td>
<td>4.0</td>
<td>0.0</td>
</tr>
<tr>
<td>51. Administer naloxone to reverse opioid-induced sedation and respiratory depression</td>
<td>118</td>
<td>61.9*</td>
<td>25.4</td>
<td>8.5</td>
<td>3.4</td>
<td>0.8</td>
</tr>
<tr>
<td>52. Administer flumazenil to reverse benzodiazepine-induced sedation and respiratory depression</td>
<td>123</td>
<td>58.5*</td>
<td>23.6</td>
<td>12.2</td>
<td>4.1</td>
<td>1.6</td>
</tr>
<tr>
<td>53. After pharmacologic reversal, observe and monitor patients for a sufficient time to ensure that sedation and cardiorespiratory depression does not recur once the effect of the antagonist dissipates</td>
<td>120</td>
<td>87.5*</td>
<td>10.8</td>
<td>0.0</td>
<td>1.7</td>
<td>0.0</td>
</tr>
<tr>
<td>54. Do not use sedation regimens that include routine reversal of sedative/analgesic agents</td>
<td>123</td>
<td>78.9*</td>
<td>13.0</td>
<td>3.3</td>
<td>3.3</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Recovery care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. After sedation/analgesia, observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression</td>
<td>123</td>
<td>85.4*</td>
<td>14.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>56. Monitor oxygenation continuously until patients are no longer at risk for hypoxemia</td>
<td>123</td>
<td>87.8*</td>
<td>10.6</td>
<td>0.0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>57. Monitor ventilation and circulation at regular intervals until patients are suitable for discharge</td>
<td>122</td>
<td>83.6*</td>
<td>13.9</td>
<td>2.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>58. Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge from observation by trained personnel</td>
<td>123</td>
<td>83.7*</td>
<td>16.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Creation and implementation of patient safety processes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. Create and implement a quality improvement process based upon national, regional, or institutional reporting protocols</td>
<td>123</td>
<td>70.7*</td>
<td>26.0</td>
<td>2.4</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>60. Strengthen patient safety culture through collaborative practices (e.g., team training, simulation drills, development and implementation of checklists)</td>
<td>122</td>
<td>73.8*</td>
<td>22.1</td>
<td>3.3</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>61. Create an emergency response plan (e.g., activating “code blue” team or activating the emergency medical response system: 911 or equivalent)</td>
<td>121</td>
<td>77.7*</td>
<td>19.0</td>
<td>2.5</td>
<td>0.8</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*N = the number of consultants who responded to each item. An asterisk beside a percentage score in the columns to the right indicates the median.
Table 8. ASA Membership Survey Responses

<table>
<thead>
<tr>
<th>Patient evaluation</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review previous medical records and interview the patient or family</td>
<td>444</td>
<td>91.0*</td>
<td>7.0</td>
<td>1.4</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>2. Conduct a focused physical examination of the patient</td>
<td>445</td>
<td>85.2*</td>
<td>13.5</td>
<td>0.9</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>3. Review available laboratory test results and order additional laboratory tests when needed</td>
<td>441</td>
<td>77.6*</td>
<td>19.0</td>
<td>2.7</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>4. If possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for proper patient preparation</td>
<td>441</td>
<td>37.6</td>
<td>34.7*</td>
<td>18.4</td>
<td>7.0</td>
<td>2.3</td>
</tr>
<tr>
<td>5. Reevaluate the patient immediately before the procedure</td>
<td>444</td>
<td>83.8*</td>
<td>14.0</td>
<td>1.6</td>
<td>0.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preprocedure patient preparation</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Consult with a medical specialist, when appropriate, before administration of moderate procedural sedation to patients with significant underlying conditions</td>
<td>445</td>
<td>61.3*</td>
<td>29.7</td>
<td>7.4</td>
<td>1.3</td>
<td>0.2</td>
</tr>
<tr>
<td>7. When feasible before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives and elicit their preferences</td>
<td>443</td>
<td>74.9*</td>
<td>19.9</td>
<td>4.1</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>8. Before the day of the procedure, inform patients or legal guardians that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying</td>
<td>443</td>
<td>89.2*</td>
<td>9.0</td>
<td>1.4</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>9. On the day of the procedure, assess the time and nature of last oral intake</td>
<td>442</td>
<td>91.6*</td>
<td>7.2</td>
<td>0.7</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>10. In urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone</td>
<td>440</td>
<td>27.5</td>
<td>27.5*</td>
<td>11.8</td>
<td>18.6</td>
<td>14.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring patient level of consciousness</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Periodically monitor a patient’s response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately or during procedures where movement could be detrimental clinically</td>
<td>443</td>
<td>48.3</td>
<td>30.5*</td>
<td>13.8</td>
<td>5.4</td>
<td>2.0</td>
</tr>
<tr>
<td>12. During procedures where a verbal response is not possible, check the patient’s ability to give a “thumbs up” or other indication of consciousness in response to verbal or tactile stimulation</td>
<td>444</td>
<td>43.5</td>
<td>35.1*</td>
<td>14.9</td>
<td>4.7</td>
<td>1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring patient ventilation and oxygenation</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Continuously monitor ventilatory function by observation of qualitative clinical signs</td>
<td>418</td>
<td>80.6*</td>
<td>15.3</td>
<td>1.9</td>
<td>1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>14. Continuously monitor ventilatory function by capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment</td>
<td>419</td>
<td>75.4*</td>
<td>17.7</td>
<td>4.1</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>15. Monitor all patients by pulse oximetry with appropriate alarms</td>
<td>415</td>
<td>95.7*</td>
<td>4.1</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring hemodynamics</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation</td>
<td>415</td>
<td>84.3*</td>
<td>12.8</td>
<td>0.5</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>17. Once moderate sedation/analgesia is established, continually monitor blood pressure and heart rate during the procedure unless such monitoring interferes with the procedure</td>
<td>414</td>
<td>82.1*</td>
<td>12.6</td>
<td>1.2</td>
<td>2.4</td>
<td>1.7</td>
</tr>
<tr>
<td>18. Use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated</td>
<td>415</td>
<td>82.2*</td>
<td>13.0</td>
<td>1.0</td>
<td>2.7</td>
<td>1.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contemporaneous recording of monitored parameters</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Record level of consciousness, ventilator and oxygenation status and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient</td>
<td>414</td>
<td>64.7*</td>
<td>26.1</td>
<td>2.7</td>
<td>4.1</td>
<td>2.4</td>
</tr>
<tr>
<td>20. Set device alarms to alert the care team to critical changes in patient</td>
<td>418</td>
<td>76.3*</td>
<td>18.7</td>
<td>3.6</td>
<td>1.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Availability of an individual responsible for patient monitoring</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure</td>
<td>418</td>
<td>90.4*</td>
<td>7.9</td>
<td>1.0</td>
<td>0.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>
22. The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be empowered to seek additional help.

23. The designated individual may assist with minor, interruptible tasks once the patient's level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient's level of sedation is maintained.

Supplemental oxygen

24. Use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure.

Emergency support

25. Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure room.

26. Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered and potential interactions with other medications and nutraceuticals the patient may be taking.

27. Assure that appropriately sized equipment for establishing a patent airway is available.

28. Assure that at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room.

29. Assure that suction, advanced airway equipment, positive pressure ventilation, and supplemental oxygen are immediately available in the procedure room and in good working order.

30. Assure that a member of the procedural team is trained in the recognition and treatment of airway complications, opening the airway, suctioning secretions, and performing bag-valve-mask ventilation.

31. Assure that a member of the procedural team has the skills to establish intravenous access.

32. Assure that a member of the procedural team has the skills to provide chest compressions.

33. Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area.

34. Assure that an individual or service is immediately available with advanced life support skills.

35. Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room.

Sedative or analgesic medications not intended for general anesthesia

36. Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient.

37. Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis.

38. In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression.

39. In patients who have received sedation/analgesia by non-intravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis.

40. Administer intravenous sedative/analgesic drugs in small, incremental doses or by infusion, titrating to the desired endpoints.

Sedative or analgesic medications intended for general anesthesia

41. When moderate procedural sedation with sedative or analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia.

Table 8. (Continued)

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be empowered to seek additional help.</td>
<td>416</td>
<td>93.8*</td>
<td>5.0</td>
<td>0.2</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>23. The designated individual may assist with minor, interruptible tasks once the patient's level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient's level of sedation is maintained.</td>
<td>418</td>
<td>32.5</td>
<td>28.0*</td>
<td>12.0</td>
<td>17.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Supplemental oxygen</td>
<td>417</td>
<td>67.9*</td>
<td>21.1</td>
<td>8.6</td>
<td>1.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Emergency support</td>
<td>415</td>
<td>73.6*</td>
<td>19.4</td>
<td>5.5</td>
<td>1.2</td>
<td>0.2</td>
</tr>
<tr>
<td>25. Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure room.</td>
<td>416</td>
<td>91.6*</td>
<td>7.7</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>26. Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered and potential interactions with other medications and nutraceuticals the patient may be taking.</td>
<td>415</td>
<td>84.8*</td>
<td>12.8</td>
<td>2.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>27. Assure that appropriately sized equipment for establishing a patent airway is available.</td>
<td>416</td>
<td>89.6*</td>
<td>9.4</td>
<td>0.7</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>28. Assure that at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room.</td>
<td>415</td>
<td>88.0*</td>
<td>11.1</td>
<td>1.7</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>29. Assure that suction, advanced airway equipment, positive pressure ventilation, and supplemental oxygen are immediately available in the procedure room and in good working order.</td>
<td>415</td>
<td>88.9*</td>
<td>10.1</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>30. Assure that a member of the procedural team is trained in the recognition and treatment of airway complications, opening the airway, suctioning secretions, and performing bag-valve-mask ventilation.</td>
<td>415</td>
<td>83.5*</td>
<td>13.6</td>
<td>2.2</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>31. Assure that a member of the procedural team has the skills to establish intravenous access.</td>
<td>414</td>
<td>89.8*</td>
<td>9.5</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>32. Assure that a member of the procedural team has the skills to provide chest compressions.</td>
<td>412</td>
<td>83.5*</td>
<td>13.6</td>
<td>2.2</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>33. Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area.</td>
<td>414</td>
<td>74.6*</td>
<td>17.1</td>
<td>5.6</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>34. Assure that an individual or service is immediately available with advanced life support skills.</td>
<td>415</td>
<td>88.4*</td>
<td>11.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>35. Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room.</td>
<td>403</td>
<td>57.8*</td>
<td>37.7</td>
<td>3.2</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>36. Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient.</td>
<td>403</td>
<td>30.5</td>
<td>40.9*</td>
<td>17.4</td>
<td>8.4</td>
<td>2.7</td>
</tr>
<tr>
<td>37. Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis.</td>
<td>400</td>
<td>89.8*</td>
<td>9.5</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>38. In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression.</td>
<td>402</td>
<td>51.2*</td>
<td>33.3*</td>
<td>3.7</td>
<td>6.2</td>
<td>5.5</td>
</tr>
<tr>
<td>39. In patients who have received sedation/analgesia by non-intravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis.</td>
<td>402</td>
<td>82.1*</td>
<td>16.2</td>
<td>0.5</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>40. Administer intravenous sedative/analgesic drugs in small, incremental doses or by infusion, titrating to the desired endpoints.</td>
<td>401</td>
<td>83.5*</td>
<td>11.7</td>
<td>2.2</td>
<td>1.5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

(Continued)
Table 8. (Continued)

| Practice Guidelines | Percent Responding to Each Item |  
|---------------------|---------------------------------|------|
|                     | N* | Strongly Agree | Agree | Equivocal | Disagree | Strongly Disagree |
| 42. Assure that practitioners administering these drugs are able to reliably rescue patients from unintended deep sedation/general anesthesia | 404 | 94.1* | 4.5 | 0.5 | 0.0 | 1.0 |
| 43. For patients receiving intravenous sedatives intended for general anesthesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiopulmonary depression | 399 | 93.7* | 5.8 | 0.0 | 0.0 | 0.5 |
| 44. In patients who have received sedatives intended for general anesthesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis | 401 | 57.4* | 20.2 | 2.7 | 9.5 | 10.2 |
| 45. Administer intravenous sedative/analgesic drugs intended for general anesthesia in small, incremental doses or by infusion, titrating to the desired endpoints | 403 | 83.1* | 12.7 | 2.0 | 1.0 | 1.2 |
| Reversal agents |  |  |  |  |  |  |
| 46. Assure that specific antagonists are immediately available in the procedure room whenever opioid analgesics or benzodiazepines are administered for moderate procedural sedation/analgesia, regardless of administration route | 402 | 78.4* | 16.2 | 3.7 | 1.0 | 0.7 |
| 47. If patients become hypoxemic or apneic during sedation/analgesia, encourage or physically stimulate patients to breathe deeply | 404 | 84.9* | 13.4 | 1.2 | 0.2 | 0.2 |
| 48. If patients become hypoxemic or apneic during sedation/analgesia, administer supplemental oxygen | 402 | 89.1* | 8.0 | 0.7 | 1.5 | 0.7 |
| 49. If patients become hypoxemic or apneic during sedation/analgesia, provide positive pressure ventilation if spontaneous ventilation is inadequate | 397 | 89.4* | 9.8 | 0.8 | 0.0 | 0.0 |
| 50. Use reversal agents in cases where airway control, spontaneous ventilation, or positive pressure ventilation is inadequate | 400 | 72.5* | 22.5 | 3.8 | 0.8 | 0.5 |
| 51. Administer naloxone to reverse opioid-induced sedation and respiratory depression | 399 | 61.2* | 29.1 | 6.5 | 2.3 | 1.0 |
| 52. Administer flumazenil to reverse benzodiazepine-induced sedation and respiratory depression | 396 | 59.6* | 29.0 | 8.1 | 2.0 | 1.3 |
| 53. After pharmacologic reversal, observe and monitor patients for a sufficient time to ensure that sedation and cardiorespiratory depression does not recur once the effect of the antagonist dissipates | 401 | 87.8* | 11.5 | 0.2 | 0.0 | 0.5 |
| 54. Do not use sedation regimens that include routine reversal of sedative/analgesic agents | 401 | 80.3* | 14.5 | 3.5 | 1.2 | 0.5 |
| Recovery care |  |  |  |  |  |  |
| 55. After sedation/analgesia, observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression | 403 | 87.3* | 12.7 | 0.0 | 0.0 | 0.0 |
| 56. Monitor oxygenation continuously until patients are no longer at risk for hypoxemia | 402 | 89.1* | 10.7 | 0.2 | 0.0 | 0.0 |
| 57. Monitor ventilation and circulation at regular intervals until patients are suitable for discharge | 400 | 85.8* | 12.5 | 1.3 | 0.3 | 0.3 |
| 58. Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge from observation by trained personnel | 399 | 85.7* | 14.3 | 0.0 | 0.0 | 0.0 |
| Creation and implementation of patient safety processes |  |  |  |  |  |  |
| 59. Create and implement a quality improvement process based upon national, regional, or institutional reporting protocols | 403 | 73.7* | 21.8 | 4.0 | 0.2 | 0.2 |
| 60. Strengthen patient safety culture through collaborative practices (e.g., team training, simulation drills, development and implementation of checklists) | 401 | 72.1* | 24.2 | 3.5 | 0.0 | 0.2 |
| 61. Create an emergency response plan (e.g., activating “code blue” team or activating the emergency medical response system: 911 or equivalent) | 401 | 82.3* | 16.0 | 1.7 | 0.0 | 0.0 |

*N = the number of consultants who responded to each item. An asterisk beside a percentage score in the columns to the right indicates the median.
Table 9. American Association of Oral and Maxillofacial Surgeons Member Survey Responses

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient evaluation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Review previous medical records and interview the patient or family</td>
<td>68</td>
<td>82.4*</td>
<td>16.2</td>
<td>1.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2. Conduct a focused physical examination of the patient</td>
<td>68</td>
<td>80.9*</td>
<td>17.6</td>
<td>1.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3. Review available laboratory test results and order additional laboratory tests when needed</td>
<td>68</td>
<td>76.5*</td>
<td>17.6</td>
<td>5.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4. If possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for proper patient preparation</td>
<td>67</td>
<td>53.7*</td>
<td>28.4</td>
<td>9.0</td>
<td>9.0</td>
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</tr>
<tr>
<td>5. Reevaluate the patient immediately before the procedure</td>
<td>69</td>
<td>78.3*</td>
<td>17.4</td>
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<td>4.3</td>
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</tr>
<tr>
<td>Preprocedure patient preparation</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consult with a medical specialist, when appropriate, before administration of moderate procedural sedation to patients with significant underlying conditions</td>
<td>69</td>
<td>68.1*</td>
<td>24.6</td>
<td>5.8</td>
<td>1.4</td>
<td>0.0</td>
</tr>
<tr>
<td>7. When feasible before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives and elicit their preferences</td>
<td>69</td>
<td>73.9*</td>
<td>23.2</td>
<td>2.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>8. Before the day of the procedure, inform patients or legal guardians that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying</td>
<td>68</td>
<td>86.8*</td>
<td>10.3</td>
<td>1.5</td>
<td>1.5</td>
<td>0.0</td>
</tr>
<tr>
<td>9. On the day of the procedure, assess the time and nature of last oral intake</td>
<td>68</td>
<td>89.7*</td>
<td>10.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>10. In urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone</td>
<td>62</td>
<td>25.8</td>
<td>30.6*</td>
<td>21.0</td>
<td>22.6</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Monitoring patient level of consciousness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Periodically monitor a patient's response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately or during procedures where movement could be detrimental clinically</td>
<td>67</td>
<td>40.3</td>
<td>29.9*</td>
<td>22.4</td>
<td>7.5</td>
<td>0.0</td>
</tr>
<tr>
<td>12. During procedures where a verbal response is not possible, check the patient's ability to give a &quot;thumbs up&quot; or other indication of consciousness in response to verbal or tactile stimulation</td>
<td>69</td>
<td>30.4</td>
<td>36.2*</td>
<td>26.1</td>
<td>7.2</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Monitoring patient ventilation and oxygenation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Continually monitor ventilatory function by observation of qualitative clinical signs</td>
<td>66</td>
<td>84.8*</td>
<td>13.6</td>
<td>1.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>14. Continually monitor ventilatory function by capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment</td>
<td>61</td>
<td>65.6*</td>
<td>21.3</td>
<td>11.5</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>15. Monitor all patients by pulse oximetry with appropriate alarms</td>
<td>66</td>
<td>87.9*</td>
<td>12.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Monitoring hemodynamics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation</td>
<td>63</td>
<td>84.1*</td>
<td>14.3</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>17. Once moderate sedation/analgesia is established, continually monitor blood pressure and heart rate during the procedure unless such monitoring interferes with the procedure</td>
<td>64</td>
<td>79.7*</td>
<td>18.8</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>18. Use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated</td>
<td>65</td>
<td>76.9*</td>
<td>12.3</td>
<td>7.7</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Contemporaneous recording of monitored parameters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Record level of consciousness, ventilator and oxygenation status, and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient</td>
<td>66</td>
<td>54.5*</td>
<td>24.2</td>
<td>16.7</td>
<td>4.5</td>
<td>0.0</td>
</tr>
<tr>
<td>20. Set device alarms to alert the care team to critical changes in patient</td>
<td>66</td>
<td>72.7*</td>
<td>22.7</td>
<td>4.5</td>
<td>0.0</td>
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</tr>
</tbody>
</table>

(Continued)
### Table 9. (Continued)

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of an individual responsible for patient monitoring</td>
<td>65</td>
<td>53.8*</td>
<td>26.2</td>
<td>10.8</td>
<td>9.2</td>
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</tr>
<tr>
<td>21. Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure</td>
<td>65</td>
<td>63.1*</td>
<td>30.8</td>
<td>3.1</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>22. The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be empowered to seek additional help if necessary</td>
<td>64</td>
<td>50.0*</td>
<td>40.6</td>
<td>1.6</td>
<td>7.8</td>
<td>0.0</td>
</tr>
<tr>
<td>23. The designated individual may assist with minor, interruptible tasks once the patient’s level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient’s level of sedation is maintained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental oxygen</td>
<td>64</td>
<td>78.1*</td>
<td>14.1</td>
<td>4.7</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>24. Use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency support</td>
<td>64</td>
<td>87.5*</td>
<td>12.5</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>25. Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure room</td>
<td>62</td>
<td>74.2*</td>
<td>14.5</td>
<td>9.7</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>26. Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered and potential interactions with other medications and nutraceuticals the patient may be taking</td>
<td>64</td>
<td>71.9*</td>
<td>17.2</td>
<td>6.3</td>
<td>4.7</td>
<td>0.0</td>
</tr>
<tr>
<td>27. Assure that appropriately sized equipment for establishing a patent airway is available</td>
<td>64</td>
<td>85.9*</td>
<td>10.9</td>
<td>1.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>28. Assure that at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room</td>
<td>64</td>
<td>81.3*</td>
<td>12.5</td>
<td>3.1</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>29. Assure that suction, advanced airway equipment, positive pressure ventilation, and supplemental oxygen are immediately available in the procedure room and in good working order</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Assure that a member of the procedural team is trained in the recognition and treatment of airway complications, opening the airway, suctioning secretions, and performing bag-valve-mask ventilation</td>
<td>64</td>
<td>87.5*</td>
<td>10.9</td>
<td>1.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>31. Assure that a member of the procedural team has the skills to establish intravenous access</td>
<td>64</td>
<td>76.6*</td>
<td>17.2</td>
<td>4.7</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>32. Assure that a member of the procedural team has the skills to provide chest compressions</td>
<td>62</td>
<td>87.1*</td>
<td>12.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>33. Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area</td>
<td>64</td>
<td>78.1*</td>
<td>18.8</td>
<td>1.6</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>34. Assure that an individual or service is immediately available with advanced life support skills</td>
<td>64</td>
<td>85.9*</td>
<td>10.9</td>
<td>1.6</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>35. Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedative or analgesic medications not intended for general anesthesia</td>
<td>64</td>
<td>81.3*</td>
<td>18.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>36. Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis</td>
<td>63</td>
<td>14.3</td>
<td>17.5</td>
<td>63.5*</td>
<td>4.8</td>
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</tbody>
</table>
### PRACTICE PARAMETERS

#### Table 9.  (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent Responding to Each Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N*</td>
</tr>
<tr>
<td>38. In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression</td>
<td>64</td>
</tr>
<tr>
<td>39. In patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis</td>
<td>63</td>
</tr>
<tr>
<td>40. Administer intravenous sedative/analgesic drugs in small, incremental doses or by infusion, titrating to the desired endpoints</td>
<td>64</td>
</tr>
<tr>
<td>Sedative or analgesic medications intended for general anesthesia</td>
<td></td>
</tr>
<tr>
<td>41. When moderate procedural sedation with sedative or analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia</td>
<td>61</td>
</tr>
<tr>
<td>42. Assure that practitioners administering these drugs are able to reliably rescue patients from unintended deep sedation or general anesthesia</td>
<td>64</td>
</tr>
<tr>
<td>43. For patients receiving intravenous sedatives intended for general anesthesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression</td>
<td>64</td>
</tr>
<tr>
<td>44. In patients who have received sedatives intended for general anesthesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis</td>
<td>61</td>
</tr>
<tr>
<td>45. Administer intravenous sedative/analgesic drugs intended for general anesthesia in small, incremental doses, or by infusion, titrating to the desired endpoints</td>
<td>64</td>
</tr>
<tr>
<td>Reversal agents</td>
<td></td>
</tr>
<tr>
<td>46. Assure that specific antagonists are immediately available in the procedure room whenever opioid analgesics or benzodiazepines are administered for moderate procedural sedation/analgesia regardless of administration route</td>
<td>63</td>
</tr>
<tr>
<td>47. If patients become hypoxemic or apneic during sedation/analgesia, encourage or physically stimulate patients to breathe deeply</td>
<td>64</td>
</tr>
<tr>
<td>48. If patients become hypoxemic or apneic during sedation/analgesia, administer supplemental oxygen</td>
<td>61</td>
</tr>
<tr>
<td>49. If patients become hypoxemic or apneic during sedation/analgesia, provide positive pressure ventilation if spontaneous ventilation is inadequate</td>
<td>64</td>
</tr>
<tr>
<td>50. Use reversal agents in cases where airway control, spontaneous ventilation or positive pressure ventilation is inadequate</td>
<td>63</td>
</tr>
<tr>
<td>51. Administer naloxone to reverse opioid-induced sedation and respiratory depression</td>
<td>63</td>
</tr>
<tr>
<td>52. Administer flumazenil to reverse benzodiazepine-induced sedation and respiratory depression</td>
<td>63</td>
</tr>
<tr>
<td>53. After pharmacologic reversal, observe and monitor patients for a sufficient time to ensure that sedation and cardiorespiratory depression does not recur once the effect of the antagonist dissipates</td>
<td>64</td>
</tr>
<tr>
<td>54. Do not use sedation regimens that include routine reversal of sedative/analgesic agents</td>
<td>62</td>
</tr>
</tbody>
</table>

(Continued)
Practice Guidelines

55. After sedation/analgesia, observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression.

56. Monitor oxygenation continuously until patients are no longer at risk for hypoxemia.

57. Monitor ventilation and circulation at regular intervals until patients are suitable for discharge.

58. Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge from observation by trained personnel.

59. Create and implement a quality improvement process based upon national, regional, or institutional reporting protocols.

60. Strengthen patient safety culture through collaborative practices (e.g., team training, simulation drills, development and implementation of checklists).

61. Create an emergency response plan (e.g., activating “code blue” team or activating the emergency medical response system: 911 or equivalent).

*N = the number of consultants who responded to each item. An asterisk beside a percentage score in the columns to the right indicates the median.

Table 9. (Continued)

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
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<tbody>
<tr>
<td>Recovery care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. After sedation/analgesia, observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression</td>
<td>63</td>
<td>84.1*</td>
<td>15.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>56. Monitor oxygenation continuously until patients are no longer at risk for hypoxemia</td>
<td>63</td>
<td>85.7*</td>
<td>14.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>57. Monitor ventilation and circulation at regular intervals until patients are suitable for discharge</td>
<td>64</td>
<td>73.4*</td>
<td>21.9</td>
<td>4.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>58. Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge from observation by trained personnel</td>
<td>64</td>
<td>78.1*</td>
<td>17.2</td>
<td>3.1</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Creation and implementation of patient safety processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. Create and implement a quality improvement process based upon national, regional, or institutional reporting protocols</td>
<td>61</td>
<td>54.1*</td>
<td>27.9</td>
<td>16.4</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td>60. Strengthen patient safety culture through collaborative practices (e.g., team training, simulation drills, development and implementation of checklists)</td>
<td>63</td>
<td>71.4*</td>
<td>25.4</td>
<td>3.2</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>61. Create an emergency response plan (e.g., activating “code blue” team or activating the emergency medical response system: 911 or equivalent)</td>
<td>64</td>
<td>75.0*</td>
<td>23.4</td>
<td>1.6</td>
<td>0.0</td>
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</tr>
</tbody>
</table>

Table 10. American Society of Dentist Anesthesiologists Member Survey Responses

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Review previous medical records and interview the patient or family</td>
<td>104</td>
<td>89.4*</td>
<td>10.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2. Conduct a focused physical examination of the patient</td>
<td>104</td>
<td>87.5*</td>
<td>12.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3. Review available laboratory test results and order additional laboratory tests when needed</td>
<td>104</td>
<td>72.1*</td>
<td>24.0</td>
<td>3.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4. If possible, perform the preprocedure evaluation well enough in advance (e.g., several days to weeks) to allow for proper patient preparation</td>
<td>104</td>
<td>55.8*</td>
<td>30.8</td>
<td>9.6</td>
<td>2.9</td>
<td>1.0</td>
</tr>
<tr>
<td>5. Re-evaluate the patient immediately before the procedure</td>
<td>104</td>
<td>83.7*</td>
<td>16.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Preprocedure patient preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Consult with a medical specialist, when appropriate, before administration of moderate procedural sedation to patients with significant underlying conditions</td>
<td>104</td>
<td>81.7*</td>
<td>13.5</td>
<td>4.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>7. When feasible before the procedure, inform patients or legal guardians of the benefits, risks, and limitations of moderate sedation/analgesia and possible alternatives, and elicit their preferences</td>
<td>104</td>
<td>85.6*</td>
<td>12.5</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>8. Before the day of the procedure, inform patients or legal guardians that they should not drink fluids or eat solid foods for a sufficient period of time to allow for gastric emptying</td>
<td>104</td>
<td>94.2*</td>
<td>5.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>9. On the day of the procedure, assess the time and nature of last oral intake</td>
<td>104</td>
<td>93.3*</td>
<td>6.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>10. In urgent or emergent situations where complete gastric emptying is not possible, do not delay moderate procedural sedation based on fasting time alone</td>
<td>103</td>
<td>16.5</td>
<td>35.0*</td>
<td>21.4</td>
<td>13.6</td>
<td>13.6</td>
</tr>
</tbody>
</table>
Table 10. (Continued)

<table>
<thead>
<tr>
<th>Percent Responding to Each Item</th>
<th>N*</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Equivocal</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring patient level of consciousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11. Periodically monitor a patient’s response to verbal commands during moderate sedation, except in patients who are unable to respond appropriately or during procedures where movement could be detrimental clinically</td>
<td>104</td>
<td>39.4</td>
<td>38.5*</td>
<td>12.5</td>
<td>8.7</td>
<td>1.0</td>
</tr>
<tr>
<td>12. During procedures where a verbal response is not possible, check the patient’s ability to give a “thumbs up” or other indication of consciousness in response to verbal or tactile stimulation</td>
<td>104</td>
<td>46.2</td>
<td>38.5*</td>
<td>8.7</td>
<td>4.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Monitoring patient ventilation and oxygenation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Continually monitor ventilatory function by observation of qualitative clinical signs</td>
<td>95</td>
<td>84.2*</td>
<td>13.7</td>
<td>1.1</td>
<td>0.0</td>
<td>1.1</td>
</tr>
<tr>
<td>14. Continually monitor ventilatory function by capnography unless precluded or invalidated by the nature of the patient, procedure, or equipment</td>
<td>95</td>
<td>54.7*</td>
<td>26.3</td>
<td>11.6</td>
<td>7.4</td>
<td>0.0</td>
</tr>
<tr>
<td>15. Monitor all patients by pulse oximetry with appropriate alarms</td>
<td>95</td>
<td>93.7*</td>
<td>6.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Monitoring hemodynamics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Determine blood pressure before sedation/analgesia is initiated unless precluded by lack of patient cooperation</td>
<td>95</td>
<td>85.3*</td>
<td>10.5</td>
<td>1.1</td>
<td>1.1</td>
<td>2.1</td>
</tr>
<tr>
<td>17. Once moderate sedation/analgesia is established, continually monitor blood pressure and heart rate during the procedure unless such monitoring interferes with the procedure</td>
<td>95</td>
<td>84.2*</td>
<td>9.5</td>
<td>1.1</td>
<td>3.2</td>
<td>2.1</td>
</tr>
<tr>
<td>18. Use electrocardiographic monitoring during moderate sedation in patients with clinically significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated</td>
<td>94</td>
<td>81.9*</td>
<td>13.8</td>
<td>1.1</td>
<td>2.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Contemporaneous recording of monitored parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19. Record level of consciousness, ventilator and oxygenation status, and hemodynamic variables at a frequency that depends on the type and amount of medication administered, the length of the procedure, and the general condition of the patient</td>
<td>95</td>
<td>63.2*</td>
<td>18.9</td>
<td>8.4</td>
<td>3.2</td>
<td>6.3</td>
</tr>
<tr>
<td>20. Set device alarms to alert the care team to critical changes in patient</td>
<td>95</td>
<td>74.7*</td>
<td>21.1</td>
<td>3.2</td>
<td>1.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Availability of an individual responsible for patient monitoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Assure that a designated individual other than the practitioner performing the procedure is present to monitor the patient throughout the procedure</td>
<td>95</td>
<td>77.9*</td>
<td>13.7</td>
<td>6.3</td>
<td>0.0</td>
<td>2.1</td>
</tr>
<tr>
<td>22. The individual responsible for monitoring the patient should be trained in the recognition of apnea and airway obstruction and be empowered to seek additional help</td>
<td>94</td>
<td>88.3*</td>
<td>6.4</td>
<td>3.2</td>
<td>0.0</td>
<td>2.1</td>
</tr>
<tr>
<td>23. The designated individual may assist with minor, interruptible tasks once the patient’s level of sedation/analgesia and vital signs have stabilized, provided that adequate monitoring for the patient’s level of sedation is maintained</td>
<td>95</td>
<td>44.2</td>
<td>28.4*</td>
<td>8.4</td>
<td>9.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Supplemental oxygen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Use supplemental oxygen during moderate procedural sedation/analgesia unless specifically contraindicated for a particular patient or procedure</td>
<td>95</td>
<td>63.2*</td>
<td>20.0</td>
<td>13.7</td>
<td>3.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Emergency support</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>25. Assure that pharmacologic antagonists for benzodiazepines and opioids are immediately available in the procedure room</td>
<td>94</td>
<td>79.8*</td>
<td>16.0</td>
<td>2.1</td>
<td>2.1</td>
<td>0.6</td>
</tr>
<tr>
<td>26. Assure that an individual is present in the room who understands the pharmacology of the sedative/analgesics administered and potential interactions with other medications and nutraceuticals the patient may be taking</td>
<td>93</td>
<td>91.4*</td>
<td>7.5</td>
<td>1.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Practice Guidelines

### Table 10. (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent Responding to Each Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N* Strongly Agree</td>
</tr>
<tr>
<td>27. Assure that appropriately sized equipment for establishing a patent airway is available</td>
<td>94 92.6*</td>
</tr>
<tr>
<td>28. Assure that at least one individual capable of establishing a patent airway and providing positive pressure ventilation is present in the procedure room</td>
<td>93 95.7*</td>
</tr>
<tr>
<td>29. Assure that suction, advanced airway equipment, positive pressure ventilation, and supplemental oxygen are immediately available in the procedure room and in good working order</td>
<td>94 94.7*</td>
</tr>
<tr>
<td>30. Assure that a member of the procedural team is trained in the recognition and treatment of airway complications, opening the airway, suctioning secretions, and performing bag-valve-mask ventilation</td>
<td>93 91.4*</td>
</tr>
<tr>
<td>31. Assure that a member of the procedural team has the skills to establish intravenous access</td>
<td>93 81.7*</td>
</tr>
<tr>
<td>32. Assure that a member of the procedural team has the skills to provide chest compressions</td>
<td>93 95.7*</td>
</tr>
<tr>
<td>33. Assure that a functional defibrillator or automatic external defibrillator is immediately available in the procedure area</td>
<td>94 92.6*</td>
</tr>
<tr>
<td>34. Assure that an individual or service is immediately available with advanced life support skills</td>
<td>94 70.2*</td>
</tr>
<tr>
<td>35. Assure that members of the procedural team are able to recognize the need for additional support and know how to access emergency services from the procedure room</td>
<td>93 89.2*</td>
</tr>
</tbody>
</table>

Sedative or analgesic medications not intended for general anesthesia

36. Combinations of sedative and analgesic agents may be administered as appropriate for the procedure and the condition of the patient | 89 62.9* | 30.3 | 6.7 | 0.0 | 0.0 |
| 37. Dexmedetomidine may be administered as an alternative to benzodiazepine sedatives on a case-by-case basis | 90 33.3 | 22.2* | 26.7 | 8.9 | 8.9 |
| 38. In patients receiving intravenous medications for sedation/analgesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression | 90 84.4* | 15.6 | 0.0 | 0.0 | 0.0 |
| 39. In patients who have received sedation/analgesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis | 90 56.7* | 30.0 | 6.7 | 4.4 | 2.2 |
| 40. Administer intravenous sedative/analgesic drugs in small, incremental doses or by infusion, titrating to the desired endpoints | 89 74.2* | 21.3 | 0.0 | 1.1 | 3.4 |

Sedative or analgesic medications intended for general anesthesia

41. When moderate procedural sedation with sedative or analgesic medications intended for general anesthesia by any route is intended, provide care consistent with that required for general anesthesia | 88 81.8* | 13.6 | 3.4 | 1.1 | 0.0 |
| 42. Assure that practitioners administering these drugs are able to reliably rescue patients from unintended deep sedation or general anesthesia | 90 96.7* | 2.2 | 0.0 | 1.1 | 0.0 |
| 43. For patients receiving intravenous sedatives intended for general anesthesia, maintain vascular access throughout the procedure and until the patient is no longer at risk for cardiorespiratory depression | 90 91.1* | 7.8 | 0.0 | 0.0 | 1.1 |
| 44. In patients who have received sedatives intended for general anesthesia by nonintravenous routes or whose intravenous line has become dislodged or blocked, determine the advisability of establishing or reestablishing intravenous access on a case-by-case basis | 90 62.2* | 12.2 | 4.4 | 12.2 | 8.9 |

(Continued)
Administer intravenous sedative/analgesic drugs intended for general anesthesia in small, incremental doses, or by infusion, titrating to the desired endpoints.

Reversal agents

Assure that specific antagonists are immediately available in the procedure room whenever opioid analgesics or benzodiazepines are administered for moderate procedural sedation/analgesia regardless of administration route.

If patients become hypoxemic or apneic during sedation/analgesia, encourage or physically stimulate patients to breathe deeply.

If patients become hypoxemic or apneic during sedation/analgesia, administer supplemental oxygen.

If patients become hypoxemic or apneic during sedation/analgesia, provide positive pressure ventilation if spontaneous ventilation is inadequate.

Use reversal agents in cases where airway control, spontaneous ventilation or positive pressure ventilation is inadequate.

Administer naloxone to reverse opioid-induced sedation and respiratory depression.

Administer flumazenil to reverse benzodiazepine-induced sedation and respiratory depression.

After pharmacologic reversal, observe and monitor patients for a sufficient time to ensure that sedation and cardiorespiratory depression does not recur once the effect of the antagonist dissipates.

Do not use sedation regimens that include routine reversal of sedative/analgesic agents.

Recovery care

After sedation/analgesia, observe and monitor patients in an appropriately staffed and equipped area until they are near their baseline level of consciousness and are no longer at increased risk for cardiorespiratory depression.

Monitor oxygenation continuously until patients are no longer at risk for hypoxemia.

Monitor ventilation and circulation at regular intervals until patients are suitable for discharge.

Design discharge criteria to minimize the risk of central nervous system or cardiorespiratory depression after discharge from observation by trained personnel.

Creation and implementation of patient safety processes

Create and implement a quality improvement process based upon national, regional, or institutional reporting protocols.

Strengthen patient safety culture through collaborative practices (e.g., team training, simulation drills, development and implementation of checklists).

Create an emergency response plan (e.g., activating “code blue” team or activating the emergency medical response system: 911 or equivalent).

*N = the number of consultants who responded to each item. An asterisk beside a percentage score in the columns to the right indicates the median.
May 15, 2019

Jill Stuecker, Executive Director
Iowa Dental Board
400 SW 8th Street, Suite D
Des Moines, IA 50309

RE: Comments on Iowa ARC 4358C-sedation and nitrous oxide

Dear Ms. Stuecker;

Thank you for the opportunity to provide comments on Iowa ARC 4358C, the Iowa Dental Board’s proposed changes to its administrative rules on sedation and nitrous oxide. The Iowa Society of Anesthesiologists (ISA) represents over 350 physician anesthesiologists and anesthesiology residents from across the state of Iowa. The attached letter shall serve as the final comments from the ISA, and should supplement our two previous comment letters that have been submitted.

Like the Dental Board, ISA has watched closely the ongoing national debate regarding the best way to ensure that patients who are provided sedation, especially general anesthesia or deep sedation outside of a hospital or surgical center, are properly monitored.

In the dental board’s proposed revisions to its sedation rules (ARC 4358C), the Board has proposed the following requirements for patient monitors when deep sedation or general anesthesia is being administered:

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.

The Iowa Society of Anesthesiologists believes these proposed rules do not provide adequate protections for patients, and believe that the rules need to revised to require, when deep sedation or general anesthesia is administered, that one of the patient monitors be a “licensed sedation provider” – either a physician anesthesiologist or a certified registered nurse anesthetist. ISA believes that an oral surgeon or a dentist who has a general anesthesia permit and who is performing a procedure on a patient is not able to adequately supervise patient monitors, requiring the presence of an anesthesiologist or a CRNA.
Jill Stuecker, Executive Director
May 15, 2019
Page 2

One of primary reasons ISA believes the proposed requirements for patient monitors in ARC 4358C are inadequate are those situations in which a patient has to have their sedation re-dosed during the procedure, which is not uncommon. Revising the rules to require the presence of an anesthesiologist or CRNA for deep sedation or general anesthesia will greatly reduce the risk to patients in these situations.

"The operator-anesthesia model, where the operating dentist or oral surgeon is simultaneously directing the deep sedation or general anesthesia care AND involved in the conduct of the surgery, is inadequate, outdated according to medical standards, and below the expectations for safety that the public deserves." Dr. Stephen Wilson MA, DMD, PhD, co-author of the nationally agreed upon Guidelines for the Monitoring and Management of Pediatric Patients Before, During, and After Sedation for Diagnostic and Therapeutic Procedures: Update 2016.

The Iowa Society of Anesthesiologists would urge the Iowa Dental Board to review its proposed rules and strengthen its requirements for patient monitoring when deep sedation or general anesthesia is administered. If you have additional questions about the issues raised in this letter, please feel free to contact Kevin Kruse, ISA Executive Director at (515) 282-8192.

Sincerely,

Melinda Seering, M.D.
President, Iowa Society of Anesthesiologists
VIA E-MAIL: steven.garrison@iowa.gov

Steve Garrison, Program Officer
Iowa Dental Board
400 S.W. Eighth Street, Suite D
Des Moines, Iowa 50309

Re: Proposed Rules Related to Sedation and Nitrous Oxide (ARC 4358C)

Dear Mr. Garrison:

The Iowa Dental Association (the “Association”) represents nearly 84 percent of all practicing dentists in the state. As you know, the Iowa Dental Board (the “Board”) recently proposed rules related to the use of sedation and nitrous oxide inhalation analgesia (the “Proposed Rules”), which Proposed Rules were published in the Iowa Administrative Bulletin on March 27, 2019.

The Proposed Rules are the result of a comprehensive, evidence-based, deliberative process by the Anesthesia Credentials Committee (“ACC”) and the Board to ensure that Iowans have access to safe and effective sedation during dental procedures in the state. The ACC and the Board considered not only the historical practices in Iowa, but also considered national research regarding the appropriate standards for the administration of all levels of sedation.

The Association commends the members of the ACC and the Board for their diligent efforts in drafting the Proposed Rules. The Association fully supports the Proposed Rules as published and encourages the Board to reject any effort to modify or otherwise delay implementation of the Proposed Rules.

Representatives of the Association plan to attend the Board’s next meeting on June 7, 2019, and provide further comments in support of the Proposed Rules. In the meantime, please do not hesitate to let me know if you have any questions.

Sincerely,

Laurie Traetow, IDA Executive Director
Anesthesia Provided by the Oral and Maxillofacial Surgeon

Training and the Anesthesia Team Model

Office-based anesthesia has been part of the training and practice, and history of oral and maxillofacial surgery for over 90 years. Pain, fear factors that need to be alleviated to carry out comfortable procedures for patients. Oral and maxillofacial surgeons (OMS) are trained extensively in outpatient anesthetic techniques. Training to become an OMS involves a 4-6 year residency after dental school that includes 5 months of dedicated anesthesia training serving as an anesthesia resident treating both adult and pediatric patients. In addition, after that dedicated anesthesia time, residents continue to receive training in their clinics in all aspects of outpatient anesthesia care.

The model of anesthetic delivery is the anesthesia team model in which the OMS, along with trained assistants, carry out administration of the anesthetic, perform airway monitoring, and the surgical procedure. This model is unique and different from a medical anesthesiologist in which a dedicated anesthesia provider is responsible for the anesthetic management of the patient.

Patient Safety

How can patient safety be assured in the anesthesia team model? Patient safety is based on the extensive training that an OMS receives and additional principles of patient selection, anesthesia technique, patient monitoring and anesthetic depth limit setting. Patient selection refers to the fact that not all patients are appropriate candidates for outpatient medical history, exercise tolerance, and an airway evaluation. Those who do not meet criteria may need to be managed in a hospital setting or outpatient surgical center. Modern anesthetic medications are available that make outpatient anesthesia safe and predictable with smooth induction and short duration of action. Patient monitoring such as pulse oximetry and end-tidal carbon dioxide monitoring allows for better monitoring of ventilation and anesthetic depth. Anesthesia is a continuum and the patient must be able to be rescued from a deeper level of sedation than intended.

Patient Safety Culture

Oral and maxillofacial surgery culture of patient safety. All team members involved in the care of patients seek to reduce risk in all aspects of patient care. The team members are trained and current in the management of the anesthetic patient through programs like the DAANCE (Dental Anesthesia Assistants National Certification Exam) or similar programs. Emergencies and regular emergency drills are outlined in the Anesthesia Evaluation Manual (OAEM)” of the AAOMS. In addition to these drills, understanding of active and latent errors in healthcare and active programs to address error and a “just culture” for staff improve safety. Other techniques to reduce error include surgical “time out,” use of cognitive aids in emergency care, and the principles of crew resource management. Crew resource management is a set of training procedures that allow for effective management of emergencies by using proper leadership, communication, and teamwork to resolve crisis situations.

Simulation Training

In 2014, the AAOMS embarked on an ambitious program to develop and distribute a nationwide anesthesia simulation to a basic emergency airway management course, the second will be a sedation course. Unlike other programs that demonstrate techniques, this program will have objective grading that will measure competency for various tasks.
the spring of 2017.

**History**

Since December 1844, when Dr. Horace Wells, a dentist,

used for medical and dental anesthesia, oral and maxillofacial surgeons have been the recognized leaders among the nation’s dental and medical professionals for the delivery of safe and effective outpatient anesthesia. In addition, the American Association of Oral and Maxillofacial Surgeons, continues to be consulted by other medical and dental specialties, accrediting agencies, and regulatory bodies regarding standards and anesthetic safety.

The history of oral and maxillofacial surgery parallels the emergence of the medical hospital model when, in the 1930’s, Dr. John Lundy developed and used the IV pentothal technique at the Mayo clinic, taught the new IV procedure to Mayo’s Chief of Oral Surgery, Dr. Ed Staffney. Dr. Staffney, in turn, ensured that all oral surgery residents at the Mayo Clinic were taught IV pentothal anesthesia as part of their clinical training. The Mayo Clinic’s senior oral surgery resident at that time was Adrian Hubble, who went on to teach this technique to oral surgeons across United States.

Clearly

nurse anesthetists. Dentistry

- facial surgery

anesthesia. Fearful patients, who are often in pain, are effectively, economically, and safely managed in the oral and maxillofacial sur

general anesthesia that frequently incorporate agents such as propofol and/or ketamine. Prospective and retrospective morbidity and mortality studies of deep sedation/general anesthesia in the oral and maxillofacial sur reveal an enviable safety record that compares favorably with hospital based care.

In April 1985, the National Institute of Dental Research (NIDR) of the National Institutes of Health (NIH), the Food and Drug

of Medical Applications of Research (OMAR) sponsored a National Institutes of Health Consensus Development Conference on “Anesthesia and Sedation in the Dental

Pain is a major factor that brings patients to the

are common reasons patients fail to seek dental care. The magnitude of the public-health problem is indicated by the fact that 35 million Americans

with a toothache. The control of pain and anxiety is therefore an essential part of dental practice. . .

The use of sedative and anesthetic techniques

when compared with their use in the hospital environment. These differences often are not clearly understood, and as a result, the use of sedation

been unduly criticized . . .

After listening to a series of presentations by experts in the relevant basic and clinical science areas, a consensus panel composed of individuals knowledgeable in medical and dental anesthesiology, oral and maxillofacial surgery, pediatric dentistry, pharmacology, behavioral science, biostatistics, epidemiology, general dental practice, dental education, and public interest considered all the material presented and agreed[on the following conclusion]: The use of all effective drugs carry some risk, however small. Available evidence suggest that the use

by appropriately trained professionals has a remarkable record of safety [Emphasis added].

The consensus statement concluded the following regarding personnel:

For conscious sedation, the practitioner responsible for treatment of the patient and/or the administration of drugs must be appropriately trained in

the use of such techniques. The minimum number of people involved should be two, i.e., the dentist and an assistant trained to monitor appropriate physiologic parameters. For deep sedation or general anesthesia at least three individuals, each appropriately trained, are required. One is the operating dentist, who directs the deep sedation or general anesthesia. The second is a person whose
responsibilities are observation and monitoring of the patient... The third person assists the operating dentist.


The President of the American Society of Anesthesiologists has written,

Since members of the AAOMS [American Association of Oral and Maxillofacial Surgeons] have a long history of safely using general anesthesia in the care of their patients, it is the feeling of the American Society of Anesthesiologists that the joint ASA/AANA statement [regarding restrictions on the use of propofol by physicians with no training in the performance of general anesthesia] is not intended for these AAOMS members.

In order to maintain AAOMS membership, oral and maxillofacial surgeons must complete AAOMS’s mandated Anesthesia Evaluation (OAE) program every five years or in accordance with the state law, provided that the state law does not exceed six (6) years between evaluations and otherwise meets anesthesia guidelines. State or component AAOMS members are eligible for malpractice insurance coverage through the OMS National Insurance Company (OMSNIC).

The Bylaws of the American Association of Oral and Maxillofacial Surgeons state:

The Anesthesia Evaluation program is not mandated or suggested by any government or outside agency. It was conceived, developed, implemented, and mandated by the AAOMS through its component state.

The Anesthesia Evaluation program consist of four parts:

Part I. A demonstration by the oral and maxillofacial surgeon and his/her team of the management of simulated office emergencies;

Part II. A discussion between the evaluators and the oral and maxillofacial surgeon that involves a critique of the emergency demonstrations and/or facility;

Part III. An observation of the anesthesia/surgeries (subject to state laws and patient consent);

Part IV. An observation of the anesthesia/surgeries (subject to state laws and patient consent).

The Anesthesia Evaluation process:

equipment and personnel; monitoring; complications and emergencies, including laryngospasm, syncope, venipuncture, bronchospasm, emesis and aspiration of foreign material, airway obstruction by foreign body, angina pectoris, myocardial infraction, and cardiac arrest; cardiopulmonary resuscitation (CPR); management of blood pressure problems; drug allergies; hyperventilation; convulsions; malignant hyperthermia; and anesthesia for patients suspected of substance abuse.

As the surgical specialists of the dental profession, oral and maxillofacial surgeons are trained in all aspects of anesthesia administration. OMS residents complete a rotation on the medical anesthesiology service, during which they train alongside anesthesiology residents under the supervision of an anesthesiologist. Those who complete an oral and maxillofacial surgery residency training program in the outpatient setting. With their training in both patient...
evaluation and emergency management, they are prepared to address any situation they may encounter. The ASA, the physician anesthesiologists, supports the ability of oral and maxillofacial surgeons to safely and competently administer anesthesia in an office-based setting. Quick onset and smooth induction, short duration and recovery time, and few side effects make propofol a necessary agent in providing oral and maxillofacial surgery patients a safe, predictable and comfortable anesthetic experience.

Medical and dental health insurance costs continue to rise and many patients do not have dental health insurance. As a result, when dental problems arise, the emergency room is the place where many of these patients seek treatment. It is especially important for the patient to be admitted and treated in the hospital operating room or intensive care. Often these visits could be avoided by early intervention in the safe and economically reasonable environment of an oral and maxillofacial surgeon.

The oral and maxillofacial anesthesia team model is not only safe, but also of the anesthesia services eliminate out-patient facility fees and fees generated by other medical professionals such as anesthesiologist or CRNAs. The anesthesia model used by oral and maxillofacial surgeons provide safe and cost-effective treatment that allows access to care for fearful patients and permits trained professionals to deliver surgical services.

We must strive to never relinquish our leadership role in providing safe and effective anesthetic care that is essential to the health and well-being of our patients.

References:


Memo from Department of Physician Services, The University of Tennessee Medical Center at Knoxville, stating anesthesiologists and oral and maxillofacial surgeons are exempt from anesthesia testing by nature of their training. Dated January 2008.


An act to amend Sections 1601.4 and 2827 of, to amend, repeal, and add Sections 1682, 1724, and 1750.5 of, to add Sections 1601.8, 1646.10, 1647.9.5, and 1647.17.5 to, to add Article 2.75 (commencing with Section 1646), Article 2.84 (commencing with Section 1647), and Article 2.87 (commencing with Section 1647.30) to Chapter 4 of Division 2 of, to add and repeal Section 1601.7 of, and to repeal Article 2.7 (commencing with Section 1646), Article 2.85 (commencing with Section 1647.10), and Article 2.8 (commencing with Section 1647) of Chapter 4 of Division 2 of, the Business and Professions Code, relating to dentistry.

[Approved by Governor September 29, 2018. Filed with Secretary of State September 29, 2018.]

LEGISLATIVE COUNSEL'S DIGEST


Existing law imposes various functions and duties on the State Department of Public Health with respect to the administration and oversight of various health programs and facilities relating to the prevention of disease and the promotion of health.

This bill, on or before January 1, 2022, and upon appropriation from the Legislature, would require the Office of Oral Health in the State Department of Public Health to provide to the Legislature a report analyzing the effects on access to care for pediatric dental patients, as specified.

The Dental Practice Act provides for the licensure and regulation of dentists by the Dental Board of California within the Department of Consumer Affairs. The act governs the use of general anesthesia, conscious sedation, and oral conscious sedation for pediatric and adult patients. The act makes it unprofessional conduct for a dentist to engage in certain conduct, including failing to obtain written consent prior to administering general anesthesia or conscious sedation. The act also makes a willful violation of its provisions, including practicing without a valid certificate or license, a crime, and defines various terms relating to anesthesia and sedation.

This bill would require the board to review available data on all adverse events related to general anesthesia and deep sedation, moderate sedation, and minimal sedation in dentistry and relevant professional guidelines, recommendations, or best practices for the provision of dental anesthesia and sedation care in dentistry. By January 1, 2022, the bill would require the board to provide a report to the Legislature regarding any findings relevant to inform standards of dental anesthesia and sedation. The bill would also require the board to retain available data on all adverse events...
related to general anesthesia and deep sedation, moderate sedation, and minimal sedation in dentistry for not less than 15 years.

This bill, beginning January 1, 2022, would establish new provisions governing the use of deep sedation and general anesthesia for dental patients. Among other requirements, the bill would require a dentist to possess either a current license in good standing and a general anesthesia permit, or other specified credentials in order to administer or order the administration of deep sedation or general anesthesia on an outpatient basis. The bill would require dentists to possess a pediatric endorsement of their general anesthesia permit to administer or order the administration of deep sedation or general anesthesia to patients under 7 years of age and would require dentists to be present within the dental office during the ordering and administration of general anesthesia or deep sedation. The bill would also require the presence of the operating dentist and at least 2 additional personnel for patients under 13 years of age for procedures involving deep sedation or general anesthesia and would require that certain personnel be present throughout the procedure and to maintain current certification in pediatric life support and airway management, as specified. The bill would require a dentist applying for a pediatric endorsement for the general anesthesia permit to provide proof of successful completion of an accredited or equivalent residency training program, and a certain number of cases of deep sedation or general anesthesia for patients under 7 years of age, along with current certification in specific life support training. Additionally, the bill would permit the board to require onsite inspections and evaluations of licensees and to contract with organizations or individuals to perform onsite inspections and evaluations. The bill would make a violation of these provisions unprofessional conduct and grounds for revocation or suspension of a dentist’s permit or license, or both. The bill would also authorize a licensed physician and surgeon to administer deep sedation or general anesthesia if that physician and surgeon meets certain requirements, including holding a valid general anesthesia permit.

The Dental Practice Act prohibits a dentist from administering or ordering the administration of conscious sedation, as defined, on an outpatient basis unless the dentist meets certain licensing criteria.

This bill, effective January 1, 2022, would repeal existing provisions relating to the use of conscious sedation. The bill would replace the term “conscious sedation” with “moderate sedation,” meaning a drug-induced depression of consciousness during which a patient responds purposefully to verbal commands and meets other criteria. The bill would authorize a dentist to administer or order the administration of moderate sedation on an outpatient basis to a dental patient if the dentist meets specified licensing criteria and has applied to the board, submitted an application fee, and shown successful completion of training in moderate sedation. The bill would require a dentist who orders the administration of moderate sedation to be physically present in the treatment facility while the patient is sedated and would require the presence of additional specified personnel for sedation of patients 13 years of age or younger. The bill would specify that training
in the administration of moderate sedation is acceptable if it consists of a
certain number of instructional hours and completion of cases and complies
with certain guidelines for teaching pain control and sedation. The bill would
require a dentist to obtain a pediatric endorsement on the moderate sedation
permit prior to administering moderate sedation to a patient under 13 years
of age, except as specified, and would require a dentist to obtain specified
training to receive a pediatric endorsement. The bill also would require for
patients under 13 years of age that there be at least 2 support personnel in
addition to the operating dentist present at all times during the procedure,
that the operating dentist and one of the additional personnel maintain
certification in pediatric life support and airway management, as specified,
and that one additional personnel with the certification in pediatric life
support and airway management be dedicated to monitoring the patient
during the procedure.

The bill, beginning January 1, 2022, also would establish new
requirements for dentists administering or ordering the administration of
minimal sedation, defined as a drug-induced state during which patients
respond normally to verbal commands. The bill would authorize a dentist
to administer or order the administration of minimal sedation on pediatric
patients under 13 years of age if the dentist possesses specified licensing
credentials and follows certain procedures. The bill would require any dentist
who desires to administer or order the administration of minimal sedation
to apply to the board, as specified, and to submit an application fee. The
bill would make a violation of these provisions governing minimal sedation
unprofessional conduct, constituting grounds for the revocation or suspension
of the dentist’s permit, or both. Additionally, by expanding the scope of an
existing crime for violations of the Dental Practice Act, the bill would impose
a state-mandated local program.

The California Constitution requires the state to reimburse local agencies
and school districts for certain costs mandated by the state. Statutory
provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for
a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Section 1601.4 of the Business and Professions Code is
amended to read:

1601.4. (a) (1) The board shall review both of the following:
(A) Available data on all adverse events related to general anesthesia
and deep sedation, moderate sedation, and minimal sedation in dentistry.
(B) Relevant professional guidelines, recommendations, or best practices
for the provision of dental anesthesia and sedation care.
(2) By January 1, 2022, the board shall report to the Legislature any
findings pursuant to this subdivision that are relevant to inform dental
anesthesia and sedation standards.
A report to be submitted pursuant to this subdivision shall be submitted in compliance with Section 9795 of the Government Code.

(b) The board shall provide a report on pediatric deaths related to general anesthesia and deep sedation in dentistry at the time of its sunset review pursuant to subdivision (d) of Section 1601.1.

(c) The board shall retain available data on all adverse events related to general anesthesia and deep sedation, moderate sedation, and minimal sedation in dentistry for not less than 15 years.

SEC. 2. Section 1601.7 is added to the Business and Professions Code, to read:

1601.7. (a) On or before January 1, 2022, and upon appropriation from the Legislature, the Office of Oral Health in the State Department of Public Health shall provide to the Legislature a report and analysis that addresses all of the following issues related to access to dental anesthesia care:

(1) An analysis of the costs of anesthesia and a discussion of payer sources for anesthesia services, including, but not limited to, an analysis of any difference in patient charges, patient payments, and public and private third-party reimbursement between both of the following:

(A) Dental anesthesia provided by a single dentist or anesthesia provider.

(B) Dental anesthesia provided by a dentist and a separate anesthesia provider.

(2) An analysis of the overall capacity of the state’s dental anesthesia delivery systems, including, but not limited to, a separate analysis of capacity for care provided by a single dental surgeon or anesthesia provider and dental anesthesia provided by a dental surgeon and a separate anesthesia provider.

(3) An analysis of barriers to access of needed dental anesthesia care including, but not limited to, cost, delivery system capacity, and any other barriers identified in the current system. The analysis shall also include information regarding if provider requirements were to change and, if appropriate, recommendations to address such barriers to improve access.

(4) To the extent data is available, an analysis of disparities to access of needed dental anesthesia care by racial or ethnic background, insurance status, geographic area, or other relevant categories.

(5) The role of pediatric dental anesthesia in meeting the state’s overall dental health goals as expressed in the California Oral Health Plan created by the State Department of Public Health.

(b) The Office of Oral Health may use a contract, grant, or other means to engage an agency appropriate for the type of analysis needed to create the report in subdivision (a), and public or private funds, upon appropriation, may be used. The report shall be made public on the State Department of Public Health’s Internet Web site.

(c) (1) A report to be submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

(2) Pursuant to Section 10231.5 of the Government Code, this section is repealed on January 1, 2025.
SEC. 3. Section 1601.8 is added to the Business and Professions Code, to read:
1601.8. For purposes of training standards for general anesthesia, deep sedation, and moderate sedation, the board may approve a training standard in lieu of Pediatric Advanced Life Support (PALS) certification if the training standard is an equivalent or higher level of training for pediatric dental anesthesia-related emergencies than PALS certification that includes, but is not limited to, pediatric life support and airway management.

SEC. 4. Article 2.75 (commencing with Section 1646) is added to Chapter 4 of Division 2 of the Business and Professions Code, to read:

Article 2.75. Use of Deep Sedation and General Anesthesia

1646. As used in this article, the following definitions apply:
(a) “Deep sedation” means a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.
(b) “General anesthesia” means a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

1646.1. (a) A dentist shall possess either a current license in good standing and a general anesthesia permit issued by the board or a permit under Section 1638 or 1640 and a general anesthesia permit issued by the board in order to administer or order the administration of deep sedation or general anesthesia on an outpatient basis for dental patients.
(b) A dentist shall possess a pediatric endorsement of their general anesthesia permit to administer or order the administration of deep sedation or general anesthesia to patients under seven years of age.
(c) A dentist shall be physically within the dental office at the time of ordering, and during the administration of, general anesthesia or deep sedation.
(d) For patients under 13 years of age, all of the following shall apply:
(1) The operating dentist and at least two additional personnel shall be present throughout the procedure involving deep sedation or general anesthesia.
(2) If the operating dentist is the permitted anesthesia provider, then both of the following shall apply:
(A) The operating dentist and at least one of the additional personnel shall maintain current certification in Pediatric Advanced Life Support...
(PALS) or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8. The additional personnel who is certified in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management shall be solely dedicated to monitoring the patient and shall be trained to read and respond to monitoring equipment including, but not limited to, pulse oximeter, cardiac monitor, blood pressure, pulse, capnograph, and respiration monitoring devices.

(B) The operating dentist shall be responsible for initiating and administering any necessary emergency response.

(3) If a dedicated permitted anesthesia provider is monitoring the patient and administering deep sedation or general anesthesia, both of the following shall apply:

(A) The anesthesia provider and the operating dentist, or one other trained personnel, shall be present throughout the procedure and shall maintain current certification in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8.

(B) The anesthesia provider shall be responsible for initiating and administering any necessary emergency response and the operating dentist, or other trained and designated personnel, shall assist the anesthesia provider in emergency response.

(e) This article does not apply to the administration of local anesthesia, minimal sedation, or moderate sedation.

1646.2. (a) A dentist who desires to administer or order the administration of deep sedation or general anesthesia shall apply to the board on an application form prescribed by the board. The dentist must submit an application fee and produce evidence showing that he or she has successfully completed a minimum of one year of advanced training in anesthesiology and related academic subjects approved by the board, or equivalent training or experience approved by the board, beyond the undergraduate school level.

(b) The application for a permit shall include documentation that equipment and drugs required by the board are on the premises.

(c) A dentist may apply for a pediatric endorsement for the general anesthesia permit by providing proof of successful completion of all of the following:

1. A Commission on Dental Accreditation (CODA)-accredited or equivalent residency training program that provides competency in the administration of deep sedation and general anesthesia on pediatric patients.

2. At least 20 cases of deep sedation or general anesthesia to patients under seven years of age in the 24-month time period directly preceding application for a pediatric endorsement to establish competency, both at the time of initial application and at renewal. The applicant or permitholder shall maintain and be able to provide proof of these cases upon request by the board for up to three permit renewal periods.
(3) Current certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) or other board-approved training in pediatric life support and airway management, pursuant to Section 1601.8, for the duration of the permit.

(d) Applicants for a pediatric endorsement who otherwise qualify for the pediatric endorsement but lack sufficient cases of pediatric sedation to patients under seven years of age may administer deep sedation and general anesthesia to patients under seven years of age under the direct supervision of a general anesthesia permitholder with a pediatric endorsement. The applicant may count these cases toward the 20 cases required to qualify for the applicant’s pediatric endorsement.

1646.3. (a) A physical evaluation and medical history shall be taken before the administration of deep sedation or general anesthesia.

(b) Any dentist holding a permit shall maintain medical history, physical evaluation, deep sedation, and general anesthesia records as required by board regulations.

1646.4. (a) Prior to the issuance or renewal of a permit for the use of deep sedation or general anesthesia, the board may, at its discretion, require an onsite inspection and evaluation of the licentiate and the facility, equipment, personnel, and procedures utilized by the licentiate. The permit of any dentist who has failed an onsite inspection and evaluation shall be automatically suspended 30 days after the date on which the board notifies the dentist of the failure, unless within that time period the dentist has retaken and passed an onsite inspection and evaluation. Every dentist issued a permit under this article shall have an onsite inspection and evaluation at least once every five years. Refusal to submit to an inspection shall result in automatic denial or revocation of the permit.

(b) The board may contract with public or private organizations or individuals expert in dental outpatient general anesthesia to perform onsite inspections and evaluations. The board may not, however, delegate its authority to issue permits or to determine the persons or facilities to be inspected.

(c) It is the intent of the Legislature that the board hire sufficient staff to administer the program and that the fees established pursuant to this section be equivalent to administration and enforcement costs incurred by the board in carrying out this article.

1646.5. A permittee shall be required to complete 24 hours of approved courses of study related to deep sedation or general anesthesia as a condition of renewal of a permit. Those courses of study shall be credited toward the total continuing education hours required by the board pursuant to Section 1645.

1646.6. (a) The application fee for a permit or renewal under this article shall not exceed the amount prescribed in Section 1724.

(b) The fee for an onsite inspection shall not exceed the amount prescribed in Section 1724.
(c) It is the intent of the Legislature that fees established pursuant to this section be equivalent to administrative and enforcement costs incurred by the board in carrying out this article.

(d) At the discretion of the board, the fee for onsite inspection may be collected and retained by a contractor engaged pursuant to subdivision (b) of Section 1646.4.

1646.7. (a) A violation of this article constitutes unprofessional conduct and is grounds for the revocation or suspension of the dentist’s permit or license, or both. The board shall issue probationary terms only for violations that do not result in bodily harm.

(b) A violation of any provision of this article or Section 1682 is grounds for suspension or revocation of the physician and surgeon’s permit issued pursuant to this article by the board. The exclusive enforcement authority against a physician and surgeon by the board shall be to suspend or revoke the permit issued pursuant to this article. The board shall refer a violation of this article by a physician and surgeon to the Medical Board of California for its consideration as unprofessional conduct and further action, if deemed necessary by the Medical Board of California, pursuant to Chapter 5 (commencing with Section 2000). A suspension or revocation of a physician and surgeon’s permit by the board pursuant to this article shall not constitute a disciplinary proceeding or action for any purpose except to permit the initiation of an investigation or disciplinary action by the Medical Board of California, as authorized by Section 2220.5.

(c) The proceedings under this section shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the board shall have all the powers granted therein.

1646.8. Nothing in this chapter shall be construed to authorize a dentist to administer or directly supervise the administration of general anesthesia or deep sedation for reasons other than dental treatment, as defined in Section 1625.

1646.9. (a) A physician and surgeon licensed pursuant to Chapter 5 (commencing with Section 2000) may administer deep sedation or general anesthesia in the office of a licensed dentist for dental patients, without regard to whether the dentist possesses a permit issued pursuant to this article, if all of the following conditions are met:

1. The physician and surgeon possesses a current license in good standing to practice medicine in this state.

2. The physician and surgeon holds a valid general anesthesia permit issued by the Dental Board of California pursuant to subdivision (b).

3. The physician and surgeon meets the requirements of subdivision (d) of Section 1646.1.

(b) A physician and surgeon who desires to administer deep sedation or general anesthesia as set forth in subdivision (a) shall apply to the board on an application form prescribed by the board and shall submit all of the following:

1. The payment of an application fee prescribed by this article.
(2) Evidence satisfactory to the Medical Board of California showing that the applicant has successfully completed a postgraduate residency training program in anesthesiology that is recognized by the American Council on Graduate Medical Education, as set forth in Section 2079.

(3) Documentation demonstrating that all equipment and drugs required by the board are on the premises for use in any dental office in which he or she administers deep sedation or general anesthesia.

(4) Information relative to the current membership of the applicant on hospital medical staffs.

(c) Prior to issuance or renewal of a permit pursuant to this section, the board may, at its discretion, require an onsite inspection and evaluation of the facility, equipment, personnel, including, but not limited to, the physician and surgeon, and procedures utilized. At least one of the persons evaluating the procedures utilized by the physician and surgeon shall be a licensed physician and surgeon expert in outpatient deep sedation or general anesthesia who has been authorized or retained under contract by the board for this purpose.

(d) The permit of a physician and surgeon who has failed an onsite inspection and evaluation shall be automatically suspended 30 days after the date on which the board notifies the physician and surgeon of the failure unless within that time period the physician and surgeon has retaken and passed an onsite inspection and evaluation. Every physician and surgeon issued a permit under this article shall have an onsite inspection and evaluation at least once every five years. Refusal to submit to an inspection shall result in automatic denial or revocation of the permit.

(e) A physician and surgeon who additionally meets the requirements of paragraphs (2) and (3) of subdivision (c) of Section 1646.2 may apply to the board for a pediatric endorsement to provide deep sedation or general anesthesia to a child under seven years of age. A physician and surgeon without sufficient cases to obtain a pediatric endorsement may qualify for the endorsement pursuant to the requirements of subdivision (d) of Section 1646.2.

1646.10. A general anesthesia permit shall expire on the date provided in Section 1715 that next occurs after its issuance, unless it is renewed as provided in this article.

1646.11. A general anesthesia permitholder who has a permit that was issued before January 1, 2022, may follow the terms of that existing permit until it expires. Any permit issued or renewed pursuant to this article on or after January 1, 2022, shall require the permitholder to follow the new requirements of this article.

1646.13. This article shall become operative on January 1, 2022.

SEC. 5. Section 1646.10 is added to Article 2.7 of Chapter 4 of Division 2 of the Business and Professions Code, immediately following Section 1646.9, to read:

1646.10. This article shall remain in effect only until January 1, 2022, and as of that date is repealed.
SEC. 6. Article 2.84 (commencing with Section 1647) is added to Chapter 4 of Division 2 of the Business and Professions Code, to read:

Article 2.84. Use of Moderate Sedation

1647. (a) The Legislature finds and declares that a commendable patient safety record has been maintained in the past by dentists and those other qualified providers of anesthesia services who, pursuant to a dentist’s authorization, administer patient sedation, and that the increasing number of pharmaceuticals and techniques used to administer them for patient sedation require additional regulation to maintain patient safety in the future.

(b) The Legislature further finds and declares all of the following:

(1) That previous laws enacted in 1980 contained separate and distinct definitions for general anesthesia and the state of consciousness.

(2) That in dental practice, there is a continuum of sedation used which cannot be adequately defined in terms of consciousness and general anesthesia.

(3) That the administration of sedation through this continuum results in different states of consciousness that may or may not be predictable in every instance.

(4) That in most instances, the level of sedation will result in a predictable level of consciousness during the entire time of sedation.

(c) The Legislature further finds and declares that the educational standards presently required for deep sedation and general anesthesia should be required when the degree of sedation in the continuum of sedation is such that there is a reasonable possibility that loss of consciousness may result, even if unintended. However, achieving the degree of moderate sedation, where a margin of safety exists wide enough to render unintended loss of consciousness unlikely, requires educational standards appropriate to the administration of the resulting predictable level of consciousness.

1647.1. (a) As used in this article, “moderate sedation” means a drug-induced depression of consciousness during which a patient responds purposefully to verbal commands, either alone or accompanied by light tactile stimulation, no interventions are required to maintain a patient’s airway, spontaneous ventilation is adequate, and cardiovascular function is usually maintained.

(b) The drugs and techniques used in moderate sedation shall have a margin of safety wide enough to render unintended loss of consciousness unlikely. Further, patients whose only response is reflex withdrawal from painful stimuli shall not be considered to be in a state of moderate sedation.

1647.2. (a) A dentist may administer or order the administration of moderate sedation on an outpatient basis for a dental patient if one of the following conditions is met:

(1) The dentist possesses a current license in good standing and either holds a valid general anesthesia permit or obtains a moderate sedation permit.
(2) The dentist possesses a current permit under Section 1638 or 1640 and either holds a valid general anesthesia permit or obtains a moderate sedation permit.

(b) A dentist shall obtain a pediatric endorsement on the moderate sedation permit prior to administering moderate sedation to a patient under 13 years of age.

(c) (1) A dentist who orders the administration of moderate sedation shall be physically present in the treatment facility while the patient is sedated.

(2) For patients under 13 years of age, there shall be at least two support personnel in addition to the operating dentist present at all times during the procedure involving moderate sedation. The operating dentist and one personnel member shall maintain current certification in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8. The personnel member with current certification in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management shall be dedicated to monitoring the patient during the procedure involving moderate sedation and may assist with interruptible patient-related tasks of short duration, such as holding an instrument.

(d) A dentist with a moderate sedation permit or a moderate sedation permit with a pediatric endorsement shall possess the training, equipment, and supplies to rescue a patient from an unintended deeper level of sedation.

(e) This article shall not apply to the administration of local anesthesia, minimal sedation, deep sedation, or general anesthesia.

1647.3. (a) A dentist who desires to administer or to order the administration of moderate sedation shall apply to the board on an application form prescribed by the board. The dentist shall submit an application fee and produce evidence showing that he or she has successfully completed training in moderate sedation that meets the requirements of subdivision (c).

(b) The application for a permit shall include documentation that equipment and drugs required by the board are on the premises.

(c) Training in the administration of moderate sedation shall be acceptable if it meets all of the following as approved by the board:

(1) Consists of at least 60 hours of instruction.

(2) Requires satisfactory completion of at least 20 cases of administration of moderate sedation for a variety of dental procedures.

(3) Complies with the requirements of the Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students of the American Dental Association, including, but not limited to, certification of competence in rescuing patients from a deeper level of sedation than intended, and managing the airway, intravascular or intraosseous access, and reversal medications.

(d) A dentist may apply for a pediatric endorsement for a moderate sedation permit by confirming all of the following:
(1) Successful completion of residency in pediatric dentistry accredited by the Commission on Dental Accreditation (CODA) or the equivalent training in pediatric moderate sedation, as determined by the board.

(2) Successful completion of at least 20 cases of moderate sedation to patients under 13 years of age to establish competency in pediatric moderate sedation, both at the time of the initial application and at renewal. The applicant or permitholder shall maintain and shall provide proof of these cases upon request by the board for up to three permit renewal periods.

(3) In order to provide moderate sedation to children under seven years of age, a dentist shall establish and maintain current competency for this pediatric population by completing 20 cases of moderate sedation for children under seven years of age in the 24-month period immediately preceding application for the pediatric endorsement and for each permit renewal period.

(4) Current certification in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8.

(e) A permitholder shall maintain current and continuous certification in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8, for the duration of the permit.

(f) Applicants for a pediatric endorsement who otherwise qualify for the pediatric endorsement but lack sufficient cases of moderate sedation to patients under 13 years of age may administer moderate sedation to patients under 13 years of age under the direct supervision of a general anesthesia or moderate sedation permitholder with a pediatric endorsement. The applicant may count these cases toward the 20 required in order to qualify for the applicant’s pediatric endorsement.

(g) Moderate sedation permit holders with a pediatric endorsement seeking to provide moderate sedation to children under seven years of age, but who lack sufficient cases of moderate sedation to patients under seven years of age pursuant to paragraph (3) of subdivision (d), may administer moderate sedation to patients under seven years of age under the direct supervision of a permitholder who meets those qualifications.

1647.4. A moderate sedation permit shall expire on the date specified in Section 1715 that next occurs after its issuance, unless it is renewed as provided in this article.

1647.5. A permittee shall be required to complete 15 hours of approved courses of study related to moderate sedation as a condition of renewal of a permit. Those courses of study shall be credited toward the total continuing education required by the board pursuant to Section 1645.

1647.6. (a) A physical evaluation and medical history shall be taken before the administration of moderate sedation.

(b) Any dentist holding a permit shall maintain records of the physical evaluation, medical history, and moderate sedation procedures used as required by board regulations.
1647.7. (a) Prior to the issuance or renewal of a permit to administer
moderate sedation, the board may, at its discretion, require an onsite
inspection and evaluation of the licensee and the facility, equipment,
personnel, and procedures utilized by the licensee. The permit of any dentist
who has failed an onsite inspection and evaluation shall be automatically
suspended 30 days after the date on which the board notifies the dentist of
the failure unless, within that time period, the dentist has retaken and passed
an onsite inspection and evaluation. Every dentist issued a permit under this
article shall have an onsite inspection and evaluation at least once in every
six years. Refusal to submit to an inspection shall result in automatic denial
or revocation of the permit.
(b) An applicant who has successfully completed the course required by
Section 1647.3 may be granted a one-year temporary permit by the board
prior to the onsite inspection and evaluation. Failure to pass the inspection
and evaluation shall result in the immediate and automatic termination of
the temporary permit.
(c) The board may contract with public or private organizations or
individuals expert in dental outpatient moderate sedation to perform onsite
inspections and evaluations. The board may not, however, delegate its
authority to issue permits or to determine the persons or facilities to be
inspected.
1647.8. (a) The application fee for a permit or renewal under this article
shall not exceed the amount prescribed in Section 1724.
(b) The fee for an onsite inspection shall not exceed the amount prescribed
in Section 1724.
(c) It is the intent of the Legislature that the board hire sufficient staff to
administer the program and that the fees established pursuant to this section
be equivalent to administration and enforcement costs incurred by the board
in carrying out this article.
1647.9. A violation of this article constitutes unprofessional conduct
and is grounds for the revocation or suspension of the dentist’s permit or
license, or both. The board shall issue probationary terms only for violations
that do not result in bodily harm. The proceedings under this section shall
be conducted in accordance with Chapter 5 (commencing with Section
11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the
board shall have all the powers granted therein.
1647.10. A conscious sedation permitholder who has a permit that was
issued before January 1, 2022, may follow the terms of that existing permit
until it expires. Any permit issued or renewed pursuant to this article on or
after January 1, 2022, shall require the permitholder to follow the
requirements of this article.
1647.12. This article shall become operative on January 1, 2022.
SEC. 7. Section 1647.9.5 is added to Article 2.8 of Chapter 4 of Division
2 of the Business and Professions Code, immediately following Section
1647.9, to read:
1647.9.5. This article shall remain in effect only until January 1, 2022,
and as of that date is repealed.
SEC. 8. Section 1647.17.5 is added to Article 2.85 of Chapter 4 of Division 2 of the Business and Professions Code, immediately following Section 1647.17, to read:
1647.17.5. This article shall remain in effect only until January 1, 2022, and as of that date is repealed.
SEC. 9. Article 2.87 (commencing with Section 1647.30) is added to Chapter 4 of Division 2 of the Business and Professions Code, to read:

Article 2.87. Use of Pediatric Minimal Sedation

1647.30. (a) As used in this article, “minimal sedation” means a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, airway reflexes, ventilatory, and cardiovascular functions are unaffected.

(b) The drugs and techniques used in minimal sedation shall have a margin of safety wide enough to render unintended loss of consciousness unlikely. Further, patients who require tactile stimulation to elicit a response to verbal commands shall not be considered to be in a state of minimal sedation.

(c) For the very young or developmentally delayed individual, incapable of the usually expected verbal response, a minimally depressed level of consciousness should be maintained.

1647.31. (a) A dentist may administer or order the administration of pediatric minimal sedation on an outpatient basis for pediatric dental patients under 13 years of age, if one of the following conditions is met:

1. The dentist holds a current permit for deep sedation and general anesthesia, or holds a current permit for moderate sedation with a pediatric endorsement, or obtains a pediatric minimal sedation permit.

2. The dentist possesses a current permit under Section 1638 or 1640 and holds a valid deep sedation and general anesthesia permit, a moderate sedation permit with a pediatric endorsement, or obtains a pediatric minimal sedation permit.

(b) A dentist who administers or orders the administration of pediatric minimal sedation shall be physically present in the treatment facility while the patient is sedated.

(c) A dentist with a pediatric minimal sedation permit shall possess the training, equipment, and supplies to rescue a patient from an unintended deeper level of sedation.

(d) This article does not apply to the administration of local anesthesia, moderate sedation, deep sedation, or general anesthesia.

1647.32. (a) A dentist who desires to administer or order the administration of pediatric minimal sedation shall apply to the board on an application form prescribed by the board. The dentist shall possess a current license in good standing, submit an application fee, and produce evidence showing that he or she has successfully completed training in pediatric minimal sedation that meets the requirements of subdivision (c).
The application for a permit shall include documentation that equipment and drugs required by the board are on the premises.

(c) Training in the administration of pediatric minimal sedation shall be acceptable if it meets either of the following as approved by the board:

(1) Consists of at least 24 hours of pediatric minimal sedation instruction in addition to one clinical case. The pediatric minimal sedation instruction shall include training in pediatric monitoring, airway management, and resuscitation and patient rescue from moderate sedation.

(2) Completion of a CODA-approved residency in pediatric dentistry.

(d) A dentist shall be limited to administering a single drug whose primary purpose is sedative via the oral route, either singly or in divided doses, not to exceed the manufacturer’s maximum recommended dose, plus a mix of nitrous oxide and oxygen and adjunctive agents such that the drugs either singly or in combination are unlikely to produce a state of unintended moderate sedation. This section shall not be construed to restrict the administration of adjunctive medication intended to relieve pain, affect the onset or duration of the primary sedative agent, or to reduce the side effects of sedation, including nausea or emesis.

(e) The operating dentist and a minimum of one additional personnel who are both trained in the monitoring and resuscitation of pediatric patients, as approved by the board, shall be present during the administration of minimal sedation.

1647.33. (a) The application fee for a pediatric minimal sedation permit or renewal under this article shall not exceed the amount prescribed in Section 1724.

(b) It is the intent of the Legislature that the board hire sufficient staff to administer the program and that the fees established pursuant to this section be equivalent to administration and enforcement costs incurred by the board in carrying out this article.

1647.34. A violation of any provision of this article constitutes unprofessional conduct and is grounds for the revocation or suspension of the dentist’s permit or license, or both. The proceedings under this section shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the board shall have all the powers granted therein.

1647.35. A permitholder who has a permit that was issued before January 1, 2022, that authorized the permitholder to administer or order the administration of oral conscious sedation for minor patients under prior Article 2.85 (commencing with Section 1647.10) may follow the terms of that existing permit until it expires. Any permit issued or renewed pursuant to this article on or after January 1, 2022, shall require the permitholder to follow the requirements of this article.

1647.36. This article shall become operative on January 1, 2022.

SEC. 10. Section 1682 of the Business and Professions Code is amended to read:

1682. In addition to other acts constituting unprofessional conduct under this chapter, it is unprofessional conduct for:
(a) Any dentist performing dental procedures to have more than one patient undergoing conscious sedation or general anesthesia on an outpatient basis at any given time unless each patient is being continuously monitored on a one-to-one ratio while sedated by either the dentist or another licensed health professional authorized by law to administer conscious sedation or general anesthesia.

(b) Any dentist with patients recovering from conscious sedation or general anesthesia to fail to have the patients closely monitored by licensed health professionals experienced in the care and resuscitation of patients recovering from conscious sedation or general anesthesia. If one licensed professional is responsible for the recovery care of more than one patient at a time, all of the patients shall be physically in the same room to allow continuous visual contact with all patients and the patient to recovery staff ratio should not exceed three to one.

(c) Any dentist with patients who are undergoing conscious sedation to fail to have these patients continuously monitored during the dental procedure with a pulse oximeter or similar or superior monitoring equipment required by the board.

(d) Any dentist with patients who are undergoing conscious sedation to have dental office personnel directly involved with the care of those patients who are not certified in basic cardiac life support (CPR) and recertified biennially.

(e) (1) Any dentist to fail to obtain the written informed consent of a patient prior to administering general anesthesia or conscious sedation. In the case of a minor, the consent shall be obtained from the child’s parent or guardian.

(2) The written informed consent, in the case of a minor, shall include, but not be limited to, the following information:

“The administration and monitoring of general anesthesia may vary depending on the type of procedure, the type of practitioner, the age and health of the patient, and the setting in which anesthesia is provided. Risks may vary with each specific situation. You are encouraged to explore all the options available for your child’s anesthesia for his or her dental treatment, and consult with your dentist or pediatrician as needed.”

(3) Nothing in this subdivision shall be construed to establish the reasonable standard of care for administering or monitoring oral conscious sedation, conscious sedation, or general anesthesia.

(f) This section shall remain in effect only until January 1, 2022, and as of that date is repealed.

SEC. 11. Section 1682 is added to the Business and Professions Code, to read:

1682. In addition to other acts constituting unprofessional conduct under this chapter, it is unprofessional conduct for:

(a) Any dentist performing dental procedures to have more than one patient undergoing moderate sedation, deep sedation, or general anesthesia on an outpatient basis at any given time unless each patient is being continuously monitored on a one-to-one ratio while sedated by either the
dentist or another licensed health professional authorized by law to administer moderate sedation, deep sedation, or general anesthesia.

(b) Any dentist with patients recovering from moderate sedation, deep sedation, or general anesthesia to fail to have the patients closely monitored by licensed health professionals experienced in the care and resuscitation of patients recovering from moderate sedation, deep sedation, or general anesthesia. If one licensed professional is responsible for the recovery care of more than one patient at a time, all of the patients shall be physically in the same room to allow continuous visual contact with all patients and the patient to recovery staff ratio should not exceed three to one.

(c) Any dentist with patients who are undergoing deep sedation, general anesthesia, or moderate sedation to fail to have these patients continuously monitored during the dental procedure with a pulse oximeter or similar or superior monitoring equipment and ventilation continuously monitored using at least two of the three following methods:

1. Auscultation of breath sounds using a precordial stethoscope.
2. Monitoring for the presence of exhaled carbon dioxide with capnography.
3. Verbal communication with a patient under moderate sedation. This method shall not be used for a patient under deep sedation or general anesthesia.

(d) Any dentist with patients who are undergoing moderate sedation to have dental office personnel directly involved with the care of those patients who are not certified in basic cardiac life support (CPR) and recertified biennially.

(e) (1) Any dentist to fail to obtain the written informed consent of a patient prior to administering moderate sedation, deep sedation, or general anesthesia. In the case of a minor, the consent shall be obtained from the child’s parent or guardian.

2. The written informed consent for general anesthesia, in the case of a minor, shall include, but not be limited to, the following information:

“The administration and monitoring of deep sedation or general anesthesia may vary depending on the type of procedure, the type of practitioner, the age and health of the patient, and the setting in which anesthesia is provided. Risks may vary with each specific situation. You are encouraged to explore all the options available for your child’s anesthesia for his or her dental treatment, and consult with your dentist or pediatrician as needed.”

3. Nothing in this subdivision shall be construed to establish the reasonable standard of care for administering or monitoring oral moderate sedation, moderate sedation, deep sedation, or general anesthesia.

(f) This section shall become operative on January 1, 2022.

SEC. 12. Section 1724 of the Business and Professions Code is amended to read:

1724. The amount of charges and fees for dentists licensed pursuant to this chapter shall be established by the board as is necessary for the purpose of carrying out the responsibilities required by this chapter as it relates to dentists, subject to the following limitations:
(a) The fee for an application for licensure qualifying pursuant to paragraph (1) of subdivision (c) of Section 1632 shall not exceed one thousand five hundred dollars ($1,500). The fee for an application for licensure qualifying pursuant to paragraph (2) of subdivision (c) of Section 1632 shall not exceed one thousand dollars ($1,000).

(b) The fee for an application for licensure qualifying pursuant to Section 1634.1 shall not exceed one thousand dollars ($1,000).

(c) The fee for an application for licensure qualifying pursuant to Section 1635.5 shall not exceed one thousand dollars ($1,000).

(d) The fee for an initial license and for the renewal of a license is five hundred twenty-five dollars ($525). On and after January 1, 2016, the fee for an initial license shall not exceed six hundred fifty dollars ($650), and the fee for the renewal of a license shall not exceed six hundred fifty dollars ($650). On and after January 1, 2018, the fee for an initial license shall not exceed eight hundred dollars ($800), and the fee for the renewal of a license shall not exceed eight hundred dollars ($800).

(e) The fee for an application for a special permit shall not exceed one thousand dollars ($1,000), and the renewal fee for a special permit shall not exceed six hundred dollars ($600).

(f) The delinquency fee shall be 50 percent of the renewal fee for such a license or permit in effect on the date of the renewal of the license or permit.

(g) The penalty for late registration of change of place of practice shall not exceed seventy-five dollars ($75).

(h) The fee for an application for an additional office permit shall not exceed seven hundred fifty dollars ($750), and the fee for the renewal of an additional office permit shall not exceed three hundred seventy-five dollars ($375).

(i) The fee for issuance of a replacement pocket license, replacement wallet certificate, or replacement engraved certificate shall not exceed one hundred twenty-five dollars ($125).

(j) The fee for a provider of continuing education shall not exceed five hundred dollars ($500) per year.

(k) The fee for application for a referral service permit and for renewal of that permit shall not exceed twenty-five dollars ($25).

(l) The fee for application for an extramural facility permit and for the renewal of a permit shall not exceed twenty-five dollars ($25).

(m) The fee for an application for an elective facial cosmetic surgery permit shall not exceed four thousand dollars ($4,000), and the fee for the renewal of an elective facial cosmetic surgery permit shall not exceed eight hundred dollars ($800).

(n) The fee for an application for an oral and maxillofacial surgery permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of an oral and maxillofacial surgery permit shall not exceed one thousand two hundred dollars ($1,200).
(o) The fee for an application for a general anesthesia permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of a general anesthesia permit shall not exceed six hundred dollars ($600).

(p) The fee for an onsite inspection and evaluation related to a general anesthesia or conscious sedation permit shall not exceed four thousand five hundred dollars ($4,500).

(q) The fee for an application for a conscious sedation permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of a conscious sedation permit shall not exceed six hundred dollars ($600).

(r) The fee for an application for an oral conscious sedation permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of an oral conscious sedation permit shall not exceed six hundred dollars ($600).

(s) The fee for a certification of licensure shall not exceed one hundred twenty-five dollars ($125).

(t) The fee for an application for the law and ethics examination shall not exceed two hundred fifty dollars ($250).

The board shall report to the appropriate fiscal committees of each house of the Legislature whenever the board increases any fee pursuant to this section and shall specify the rationale and justification for that increase.

(u) This section shall remain in effect only until January 1, 2022, and as of that date is repealed.

SEC. 13. Section 1724 is added to the Business and Professions Code, to read:

1724. The amount of charges and fees for dentists licensed pursuant to this chapter shall be established by the board as is necessary for the purpose of carrying out the responsibilities required by this chapter as it relates to dentists, subject to the following limitations:

(a) The fee for an application for licensure qualifying pursuant to paragraph (1) of subdivision (c) of Section 1632 shall not exceed one thousand five hundred dollars ($1,500). The fee for an application for licensure qualifying pursuant to paragraph (2) of subdivision (c) of Section 1632 shall not exceed one thousand dollars ($1,000).

(b) The fee for an application for licensure qualifying pursuant to Section 1634.1 shall not exceed one thousand dollars ($1,000).

(c) The fee for an application for licensure qualifying pursuant to Section 1635.5 shall not exceed one thousand dollars ($1,000).

(d) The fee for an initial license and for the renewal of a license is five hundred twenty-five dollars ($525). On and after January 1, 2016, the fee for an initial license shall not exceed six hundred fifty dollars ($650), and the fee for the renewal of a license shall not exceed six hundred fifty dollars ($650). On and after January 1, 2018, the fee for an initial license shall not exceed eight hundred dollars ($800), and the fee for the renewal of a license shall not exceed eight hundred dollars ($800).

(e) The fee for an application for a special permit shall not exceed one thousand dollars ($1,000), and the renewal fee for a special permit shall not exceed six hundred dollars ($600).
The delinquency fee shall be 50 percent of the renewal fee for such a license or permit in effect on the date of the renewal of the license or permit.

The penalty for late registration of change of place of practice shall not exceed seventy-five dollars ($75).

The fee for an application for an additional office permit shall not exceed seven hundred fifty dollars ($750), and the fee for the renewal of an additional office permit shall not exceed three hundred seventy-five dollars ($375).

The fee for issuance of a replacement pocket license, replacement wall certificate, or replacement engraved certificate shall not exceed one hundred twenty-five dollars ($125).

The fee for a provider of continuing education shall not exceed five hundred dollars ($500) per year.

The fee for application for a referral service permit and for renewal of that permit shall not exceed twenty-five dollars ($25).

The fee for application for an extramural facility permit and for the renewal of a permit shall not exceed twenty-five dollars ($25).

The fee for an application for an elective facial cosmetic surgery permit shall not exceed four thousand dollars ($4,000), and the fee for the renewal of an elective facial cosmetic surgery permit shall not exceed eight hundred dollars ($800).

The fee for an application for an oral and maxillofacial surgery permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of an oral and maxillofacial surgery permit shall not exceed one thousand two hundred dollars ($1,200).

The fee for an application for a general anesthesia permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of a general anesthesia permit shall not exceed six hundred dollars ($600).

The fee for an onsite inspection and evaluation related to a general anesthesia or moderate sedation permit shall not exceed four thousand five hundred dollars ($4,500).

The fee for an application for a moderate sedation permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of a conscious sedation permit shall not exceed six hundred dollars ($600).

The fee for an application for an oral conscious sedation permit shall not exceed one thousand dollars ($1,000), and the fee for the renewal of an oral conscious sedation permit shall not exceed six hundred dollars ($600).

The fee for a certification of licensure shall not exceed one hundred twenty-five dollars ($125).

The fee for an application for the law and ethics examination shall not exceed two hundred fifty dollars ($250).

This section shall become operative on January 1, 2022.

SEC. 14. Section 1750.5 of the Business and Professions Code is amended to read:

1750.5. A person holding a dental sedation assistant permit pursuant to Section 1750.4 may perform the following duties under the direct supervision
of a licensed dentist or other licensed health care professional authorized
to administer conscious sedation or general anesthesia in the dental office:
(a) All duties that a dental assistant is allowed to perform.
(b) Monitor patients undergoing conscious sedation or general anesthesia
utilizing data from noninvasive instrumentation such as pulse oximeters,
electrocardiograms, capnography, blood pressure, pulse, and respiration
rate monitoring devices. Evaluation of the condition of a sedated patient
shall remain the responsibility of the dentist or other licensed health care
professional authorized to administer conscious sedation or general
anesthesia, who shall be at the patient’s chairside while conscious sedation
or general anesthesia is being administered.
(c) Drug identification and draw, limited to identification of appropriate
medications, ampule and vial preparation, and withdrawing drugs of correct
amount as verified by the supervising licensed dentist.
(d) Add drugs, medications, and fluids to intravenous lines using a
syringe, provided that a supervising licensed dentist is present at the patient’s
chairside, limited to determining patency of intravenous line, selection of
injection port, syringe insertion into injection port, occlusion of intravenous
line and blood aspiration, line release and injection of drugs for appropriate
time interval. The exception to this duty is that the initial dose of a drug or
medication shall be administered by the supervising licensed dentist.
(e) Removal of intravenous lines.
(f) Any additional duties that the board may prescribe by regulation.
(g) The duties listed in subdivisions (b) to (e), inclusive, may not be
performed in any setting other than a dental office or dental clinic.
(h) This section shall remain in effect only until January 1, 2022, and as
of that date is repealed.
SEC. 15. Section 1750.5 is added to the Business and Professions Code,
to read:
1750.5. (a) A person holding a dental sedation assistant permit pursuant
to Section 1750.4 may perform the following duties under the direct
supervision of a licensed dentist or other licensed health care professional
authorized to administer moderate sedation, deep sedation, or general
anesthesia in the dental office:
(1) All duties that a dental assistant is allowed to perform.
(2) Monitor patients undergoing moderate sedation, deep sedation, or
general anesthesia utilizing data from noninvasive instrumentation such as
pulse oximeters, electrocardiograms, capnography, blood pressure, pulse,
and respiration rate monitoring devices. Evaluation of the condition of a
sedated patient shall remain the responsibility of the dentist or other licensed
health care professional authorized to administer moderate sedation, deep
sedation, or general anesthesia, who shall be at the patient’s chairside while
moderate sedation, deep sedation, or general anesthesia is being administered.
(3) Drug identification and draw, limited to identification of appropriate
medications, ampule and vial preparation, and withdrawing drugs of correct
amount as verified by the supervising licensed dentist.

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(4) Add drugs, medications, and fluids to intravenous lines using a syringe, provided that a supervising licensed dentist is present at the patient’s chairside, limited to determining patency of intravenous line, selection of injection port, syringe insertion into injection port, occlusion of intravenous line and blood aspiration, line release, and injection of drugs for appropriate time interval. The exception to this duty is that the initial dose of a drug or medication shall be administered by the supervising licensed dentist.

(5) Removal of intravenous lines.

(6) Any additional duties that the board may prescribe by regulation.

(7) The duties listed in paragraphs (2) to (5), inclusive, may not be performed in any setting other than a dental office or dental clinic.

(b) This section shall become operative on January 1, 2022.

SEC. 16. Section 2827 of the Business and Professions Code is amended to read:

2827. The utilization of a nurse anesthetist to provide anesthesia services in an acute care facility shall be approved by the acute care facility administration and the appropriate committee, and at the discretion of the physician, dentist or podiatrist. If a general anesthetic agent is administered in a dental office, the dentist shall hold a permit authorized by Article 2.7 (commencing with Section 1646) of Chapter 4 or, commencing January 1, 2022, Article 2.75 (commencing with Section 1646) of Chapter 4.

SEC. 17. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.
IDB Sedation Analysis

Based on the public comment letter from the Iowa Society of Anesthesiologists, we conducted a review of the new sedation rules in California. Per our review, the Iowa Dental Board’s current and proposed sedation rules maintain and, in some cases, exceed what California is proposing to put into effect in 2022.

Additional Assessment:
- There is no other state in the country which requires an anesthesiologist or CRNA to be present when deep/general anesthesia is being administered.
- There are 78 licensees in Iowa who have a deep/general anesthesia permit. They are all oral surgeons, with a one exception, a periodontist at the University of Iowa who otherwise met the training requirements established in rule.
- There are 59 licensees in Iowa who have a moderate sedation permit. They are broken down as follows:
  - 1 Endodontist
  - 2 Oral Surgeons
  - 12 Pedodontists
  - 13 Periodontists
  - 30 GPs
- Based on a review of the ASA literature submitted by the Iowa Society of Anesthesiologists, current studies are “insufficient to evaluate whether the presence of an individual dedicated to patient monitoring will reduce adverse outcomes related to moderate sedation analgesia”.
- Iowa’s moderate sedation rules require specific training in order for a dentist to administer moderate sedation to pediatric or ASA 3 or 4 patients.

Comparison to New California Law:
Iowa’s current and proposed sedation rules already have what California is putting into effect in 2022. The only exception is a pediatric endorsement that is required to administer deep/general anesthesia to patients under the age of 7. While we do not require a separate pediatric endorsement our rules for obtaining a deep/general anesthesia permit already, largely, require what they put into place for endorsement including:
- Completion of a CODA approved residency training program (CA allows for an equivalent residency training program as well – we do not)
- Current certification in pediatric life support (we require ACLS for all dentist permit holders, unless you are providing moderate to pediatric patients, then we allow PALS an alternative)

In Iowa: To utilize moderate sedation on pediatric or ASA category 3 of 4 patients the dentist is required to have completed an accredited residency program that includes formal training in anesthesia and clinical experience in managing pediatric or ASA category 3 of 4 patients. A dentist who does not meet this requirement is prohibited from utilizing moderate sedation on pediatric or ASA category 3 or 4 patients.
The pediatric endorsement in California requires completion of 20 cases of deep sedation or general anesthesia for patients under 7. If you don’t meet the 20-case requirement, you can have someone else who has the endorsement personally supervise you. We don't require this specifically. Completing cases is already a required as part of an oral surgery residency so by default our deep/general anesthesia permit holders already have this component. We are researching the extent to which this includes patients under the age of 7.

California’s new law requires that 2 additional people be in the room with the oral surgeon when deep/general is being administered, for patients under 13. Iowa already requires that 2 additional people be present for all patients receiving deep/general anesthesia. Our new rules will require that both of these individuals be PALS, ACLS or DAANCE certified, which is in line with what California is proposing.

The letter from the Iowa Society of Anesthesiologists states that an independent anesthesia provider is required to provide separate and dedicated services for children less than 7 years of age undergoing deep or general anesthesia. In reviewing the California rules, they do require 2 additional personnel (again something we already require) but it doesn't require that any one of those personnel be a CRNA or anesthesiologist. That was something which was proposed in California, but not what ultimately was signed into law.

Further, the California law permits a dentist to delegate deep/general anesthesia without having any sedation training. Our proposed rule requires a dentist who is delegating, to have a moderate sedation permit. This threshold is higher than what California is moving towards.

**California Language Below:**

This bill, beginning January 1, 2022, would establish new provisions governing the use of deep sedation and general anesthesia for dental patients. Among other requirements, the bill would require a dentist to possess either a current license in good standing and a general anesthesia permit, or other specified credentials in order to administer or order the administration of deep sedation or general anesthesia on an outpatient basis. The bill would require dentists to possess a pediatric endorsement of their general anesthesia permit to administer or order the administration of deep sedation or general anesthesia to patients under 7 years of age and would require dentists to be present within the dental office during the ordering and administration of general anesthesia or deep sedation. The bill would also require the presence of the operating dentist and at least 2 additional personnel for patients under 13 years of age for procedures involving deep sedation or general anesthesia and would require that certain personnel be present throughout the procedure and to maintain current certification in pediatric life support and airway management, as specified. The bill would require a dentist applying for a pediatric endorsement for the general anesthesia permit to provide proof of successful completion of an accredited or equivalent residency training program, and a certain number of cases of deep sedation or general anesthesia for patients under 7 years of age, along with current certification in specific life support training. Additionally, the bill would permit the board to require onsite inspections and evaluations of licensees and to contract with organizations or individuals to perform onsite inspections and evaluations. The bill would make a violation of these provisions unprofessional conduct and grounds for revocation or suspension of a dentist’s permit or license, or both. The bill would also
authorize a licensed physician and surgeon to administer deep sedation or general anesthesia if that physician and surgeon meets certain requirements, including holding a valid general anesthesia permit.

**1646.1.**

(a) A **dentist shall possess either a current license in good standing and a general anesthesia permit issued by the board or a permit under Section 1638 or 1640 and a general anesthesia permit issued by the board in order to administer or order the administration of deep sedation or general anesthesia on an outpatient basis for dental patients.**

(b) A dentist shall possess a pediatric endorsement of their general anesthesia permit to administer or order the administration of deep sedation or general anesthesia to patients under seven years of age.

(c) A dentist shall be physically within the dental office at the time of ordering, and during the administration of, general anesthesia or deep sedation.

(d) For patients under 13 years of age, all of the following shall apply:

(1) The operating dentist and at least two additional personnel shall be present throughout the procedure involving deep sedation or general anesthesia.

(2) If the operating dentist is the permitted anesthesia provider, then both of the following shall apply:

(A) The operating dentist and at least one of the additional personnel shall maintain current certification in Pediatric Advanced Life Support (PALS) or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8. The additional personnel who is certified in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management shall be solely dedicated to monitoring the patient and shall be trained to read and respond to monitoring equipment including, but not limited to, pulse oximeter, cardiac monitor, blood pressure, pulse, capnograph, and respiration monitoring devices.

(B) The operating dentist shall be responsible for initiating and administering any necessary emergency response.

(3) If a dedicated permitted anesthesia provider is monitoring the patient and administering deep sedation or general anesthesia, both of the following shall apply:

(A) The anesthesia provider and the operating dentist, or one other trained personnel, shall be present throughout the procedure and shall maintain current certification in Pediatric Advanced Life Support (PALS) and airway management or other board-approved training in pediatric life support and airway management, adopted pursuant to Section 1601.8.

(B) The anesthesia provider shall be responsible for initiating and administering any necessary emergency response and the operating dentist, or other trained and designated personnel, shall assist the anesthesia provider in emergency response.

(e) This article does not apply to the administration of local anesthesia, minimal sedation, or moderate sedation.
1646.2.
(a) A dentist who desires to administer or order the administration of deep sedation or general anesthesia shall apply to the board on an application form prescribed by the board. The dentist must submit an application fee and produce evidence showing that he or she has successfully completed a minimum of one year of advanced training in anesthesiology and related academic subjects approved by the board, or equivalent training or experience approved by the board, beyond the undergraduate school level.

(b) The application for a permit shall include documentation that equipment and drugs required by the board are on the premises.

(c) A dentist may apply for a pediatric endorsement for the general anesthesia permit by providing proof of successful completion of all of the following:

1. A Commission on Dental Accreditation (CODA)-accredited or equivalent residency training program that provides competency in the administration of deep sedation and general anesthesia on pediatric patients.

2. At least 20 cases of deep sedation or general anesthesia to patients under seven years of age in the 24-month time period directly preceding application for a pediatric endorsement to establish competency, both at the time of initial application and at renewal. The applicant or permit holder shall maintain and be able to provide proof of these cases upon request by the board for up to three permit renewal periods.

3. Current certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) or other board-approved training in pediatric life support and airway management, pursuant to Section 1601.8, for the duration of the permit.

(d) Applicants for a pediatric endorsement who otherwise qualify for the pediatric endorsement but lack sufficient cases of pediatric sedation to patients under seven years of age may administer deep sedation and general anesthesia to patients under seven years of age under the direct supervision of a general anesthesia permit holder with a pediatric endorsement. The applicant may count these cases toward the 20 cases required to qualify for the applicant’s pediatric endorsement.
Notice of Intended Action

The Dental Board hereby proposes to amend Chapter 52, “Military Service and Veteran Reciprocity,” Iowa Administrative Code.

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


Purpose and Summary

During the 2019 legislative session, a change was made to the Iowa Code to require agencies to establish procedures to expedite the licensing of an individual who is licensed in a similar profession or occupation in another state and who is the spouse of an active duty member of the military forces of the United States. This rule making implements this change.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.

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 rule making. Written comments in response to this rule making must be received by the Board no later than 4:30 p.m. on ___________________ 2019. Comments should be directed to:

Steve Garrison
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

No public hearing is scheduled at this time. As provided in Iowa Code section 17A.4(1)“b,” an oral presentation regarding this rule making 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 within 20 days after the published Notice of Intended Action.
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:

ITEM 1. Adopt the following new definition of “Spouse” in rule 650—52.1(85GA,ch111):

“Spouse” means a spouse of an active duty member of the military forces of the United States.

ITEM 2. Amend rule 650—52.3(85GA,ch1116) as follows:

650—52.3(85GA,ch1116) Veteran or spouse reciprocity.

52.3(1) A veteran or spouse with an unrestricted professional license in another jurisdiction may apply for licensure in Iowa through reciprocity. A veteran or spouse must pass any examinations required for licensure to be eligible for licensure through reciprocity. A fully completed application for licensure submitted by a veteran or spouse under this subrule shall be given priority and shall be expedited.

52.3(2) An application for licensure by reciprocity shall contain all of the information required of all applicants for licensure who hold unrestricted licenses in other jurisdictions and who are applying for licensure by reciprocity including, but not limited to, completion of all required forms, payment of applicable fees, disclosure of criminal or disciplinary history, and, if applicable, a criminal history background check. The applicant shall use the same forms as any other applicant for licensure by reciprocity and shall additionally provide such documentation as is reasonably needed to verify the applicant’s status as a veteran under Iowa Code section 35.1(2) or as a spouse.

52.3(3) Upon receipt of a fully completed licensure application, the board shall promptly determine if the professional or occupational licensing requirements of the jurisdiction where the veteran or spouse is licensed are substantially equivalent to the licensing requirements in Iowa. The board shall make this determination based on information supplied by the applicant and such additional information as the board may acquire from the applicable jurisdiction. The board may consider the following factors in determining substantial equivalence: scope of practice, education and coursework, degree requirements, postgraduate experience, and examinations required for licensure.

52.3(4) The board shall promptly grant a license to the veteran or spouse if the veteran or spouse is licensed in the same or similar profession in another jurisdiction whose licensure requirements are substantially equivalent to those required in Iowa, unless the applicant is ineligible for licensure based on other grounds, for example, the applicant’s disciplinary or criminal background.

52.3(5) If the board determines that the licensure requirements in the jurisdiction in which the veteran or spouse is licensed are not substantially equivalent to those required in Iowa, the board shall promptly inform the veteran or spouse of the additional experience, education, or examinations required for licensure in Iowa. Unless the applicant is ineligible for licensure based on other grounds, such as disciplinary or criminal background, the following shall apply:

a. If a veteran or spouse has not passed the required examination(s) for licensure, the veteran or spouse may not be issued a provisional license, but may request that the licensure application be placed in pending status for up to one year or as mutually agreed to provide the veteran or spouse with the opportunity to satisfy the examination requirements.

b. If additional experience or education is required in order for the applicant’s qualifications to be considered substantially equivalent, the applicant may request that the board issue a provisional license for a specified period of time during which the applicant will successfully
complete the necessary experience or education. The board shall issue a provisional license for a specified period of time upon such conditions as the board deems reasonably necessary to protect the health, welfare or safety of the public unless the board determines that the deficiency is of a character that the public health, welfare or safety will be adversely affected if a provisional license is granted.

c. If a request for a provisional license is denied, the board shall issue an order fully explaining the decision and shall inform the applicant of the steps the applicant may take in order to receive a provisional license.

d. If a provisional license is issued, the application for full licensure shall be placed in pending status until the necessary experience or education has been successfully completed or the provisional license expires, whichever occurs first. The board may extend a provisional license on a case-by-case basis for good cause.

52.3(6) A veteran or spouse who is aggrieved by the board’s decision to deny an application for a reciprocal license or a provisional license or is aggrieved by the terms under which a provisional license will be granted may request a contested case (administrative hearing) and may participate in a contested case by telephone. A request for a contested case shall be made within 30 days of issuance of the board’s decision. No fees or costs shall be assessed against the veteran or spouse in connection with a contested case conducted pursuant to this subrule.
March 22, 2019

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

Dear Mr. Secretary,

I hereby transmit:

    House File 288, an Act relating to military and veterans benefits.

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
AN ACT
RELATING TO MILITARY AND VETERANS BENEFITS.

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

Section 1. Section 35A.14, subsection 4, Code 2019, is amended to read as follows:

4. Moneys appropriated to or received by the department for providing injured veterans grants under this section may be expended for grants of up to ten thousand dollars to a veteran who is seriously injured or very seriously injured, as defined in the most recently published United States department of defense joint publication 1-02, to provide financial assistance to the veteran so that family members of the veteran may be with the veteran during the veteran’s recovery from an injury received in the line of duty in a combat zone or in a zone where the veteran was receiving hazardous duty pay after September 11, 2001.

Sec. 2. Section 35A.14, subsection 5, paragraph b, Code 2019, is amended to read as follows:

b. Proof of continued medical care or rehabilitation services may include any reasonably reliable documentation showing that the veteran is receiving continued medical or
rehabilitative care as a result of qualifying injuries. Proof that the injury occurred in the line of duty shall be made based upon the circumstances of the injury known at the time of evacuation from the combat zone or zone in which the veteran was receiving hazardous duty pay place where the veteran was injured.

Sec. 3. Section 35A.14, Code 2019, is amended by adding the following new subsection:

NEW SUBSECTION. 7. The department, the commission, and the national guard shall collaborate on a report regarding the sustainability of future funding for the injured veterans grant program and shall submit their findings and recommendations in a written report to the governor and the general assembly by December 31, 2019.

Sec. 4. Section 272C.4, Code 2019, is amended by adding the following new subsection:

NEW SUBSECTION. 12A. a. Establish procedures by January 1, 2020, to expedite the licensing of an individual who is licensed in a similar profession or occupation in another state and who is the spouse of an active duty member of the military forces of the United States.

b. If the board determines that the professional or occupational licensing requirements of the state where the spouse is licensed are substantially equivalent to the licensing requirements of this state, the procedures shall require the expedited licensing of the spouse in this state.

c. If the board determines that the professional or occupational licensing requirements of the state where the spouse is licensed are not substantially equivalent to the professional or occupational licensing requirements of this state, the procedures shall allow the provisional licensing of the spouse for a period of time deemed necessary by the board to obtain a substantial equivalent to the licensing requirements of this state. The board shall advise the spouse of required education or training necessary to obtain a substantial equivalent to the professional or occupational licensing requirements of this state, and the procedures shall provide for licensing of an individual who has, pursuant to
this paragraph, obtained a substantial equivalent to the licensing requirements of this state.

LINDA UPMeyer
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 288, Eighty-eighth General Assembly.

CARMINE BOAL
Chief Clerk of the House

Approved March 22nd, 2019

KIM REYNOLDS
Governor
DENTAL BOARD[650]

Notice of Intended Action

The Dental Board hereby proposes to rescind Chapter 34 “Student Loan Default/Noncompliance with Agreement for Payment of Obligation,” amend Chapter 30, “Discipline,” Iowa Administrative Code.

Legal Authority for Rule Making

This rule making is proposed under the authority provided in Iowa Code section 272C.4, as amended by 2019 Iowa Acts, Senate File 304.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code section 272C.4, Code 2019, as amended by 2019 Iowa Acts, Senate File 304.

Purpose and Summary

During the 2019 legislative session, a change was made to the Iowa Code that result in the repeal of Iowa Code sections 261.121 through 261.127, Code 2019, on July 1, 2019, and prohibit the suspension or revocation of a license issued by a board to a person who is in default or is delinquent on repayment or a service obligation under federal or state postsecondary educational loans or private services-conditional postsecondary tuition assistance solely on the basis of such default or delinquency. The proposed rule making implements this change.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.

Waivers

A waiver of the proposed new rule would not be available as the rule prohibits the Board from taking disciplinary action in accordance with Iowa Code.

Public Comment

Any interested person may submit written comments concerning this proposed rule making. Written comments in response to this rule making must be received by the Board no later than 4:30 p.m. on ______________ 2019. Comments should be directed to:

Steve Garrison
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
No public hearing is scheduled at this time. As provided in Iowa Code section 17A.4(1)“b,” an oral presentation regarding this rule making 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 within 20 days after the published Notice of Intended Action.

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:

ITEM 1. Rescind and reserve 650—Chapter 34.

ITEM 2. Adopt the following new rule 650—30.6(88GA,SF304):

650—30.6(88GA,SF304) Prohibited grounds for discipline. The board shall not suspend or revoke the license of a person who is in default or is delinquent on repayment or a service obligation under federal or state postsecondary educational loans or public or private services-conditional postsecondary tuition assistance solely on the basis of such default or delinquency.
April 8, 2019

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

Dear Mr. Secretary,

I hereby transmit:

Senate File 304, an Act relating to licensing sanctions against individuals who default or are delinquent on student loan debt or on a related service obligation.

The above Senate File is hereby approved on this date.

Sincerely,

Kim Reynolds
Governor of Iowa

cc: Secretary of the Senate
    Clerk of the House
AN ACT

RELATING TO LICENSING SANCTIONS AGAINST INDIVIDUALS WHO DEFAULT OR ARE DELINQUENT ON STUDENT LOAN DEBT OR ON A RELATED SERVICE OBLIGATION.

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

Section 1. Section 272.2, Code 2019, is amended by adding the following new subsection:

NEW SUBSECTION. 21. Adopt rules under chapter 17A to prohibit the suspension or revocation of a license issued by the board to a person who is in default or is delinquent on repayment or a service obligation under federal or state postsecondary educational loans or public or private services-conditional postsecondary tuition assistance solely on the basis of such default or delinquency.

Sec. 2. Section 272C.4, subsection 10, Code 2019, is amended by striking the subsection and inserting in lieu thereof the following:

10. Adopt rules under chapter 17A to prohibit the suspension or revocation of a license issued by the board to a person who is in default or is delinquent on repayment or a service obligation under federal or state postsecondary educational loans or public or private services-conditional postsecondary tuition assistance solely on the basis of such default or delinquency.
Sec. 3. REPEAL. Sections 261.121, 261.122, 261.123, 261.124, 261.125, 261.126, and 261.127, Code 2019, are repealed.

CHARLES SCHNEIDER  LINDA UPMeyer
President of the Senate  Speaker of the House

I hereby certify that this bill originated in the Senate and is known as Senate File 304, Eighty-eighth General Assembly.

W. Charles Smithson
Secretary of the Senate

Approved April 8th, 2019

Kim Reynolds
Governor
(5) Name, quantity, and strength of all drugs dispensed, administered, or prescribed; and
(6) Name of dentist, dental hygienist, or any other auxiliary, who performs any treatment or service or who may have contact with a patient regarding the patient’s dental health.

e. Informed consent. Dental records shall include, at a minimum, documentation of informed consent that includes discussion of procedure(s), treatment options, potential complications and known risks, and patient’s consent to proceed with treatment.

27.11(2) Retention of records. A dentist shall maintain a patient’s dental record for a minimum of six years after the date of last examination, prescription, or treatment. Records for minors shall be maintained for a minimum of either (a) one year after the patient reaches the age of majority (18), or (b) six years, whichever is longer. Study models and casts, or digital impression scans shall be maintained for six years after the date of completion of treatment. Alternatively, one year after completion of treatment, study models and casts may be provided to the patient for retention. Crown and bridge models of fewer than four units do not need to be retained. Proper safeguards shall be maintained to ensure safety of records from destructive elements.

27.11(3) Electronic record keeping. The requirements of this rule apply to electronic records as well as to records kept by any other means. When electronic records are kept, a dentist shall keep either a duplicate hard copy record or use an unalterable electronic record.

27.11(4) Correction of records. Notations shall be legible, written in ink, and contain no erasures or white-outs. If incorrect information is placed in the record, it must be crossed out with a single nondeleting line and be initialed by a dental health care worker.

27.11(5) Confidentiality and transfer of records. Dentists shall preserve the confidentiality of patient records in a manner consistent with the protection of the welfare of the patient. Upon request of the patient or patient’s legal guardian, the dentist shall furnish the dental records or copies or summaries of the records, including dental radiographs or copies of the radiographs that are of diagnostic quality, as will be beneficial for the future treatment of that patient. The dentist may charge a nominal fee for duplication of records, but may not refuse to transfer records for nonpayment of any fees.

[ARC 8369B, IAB 12/16/09, effective 1/20/10; ARC 1995C, IAB 5/27/15, effective 7/1/15]

650—27.12(17A,147,153,272C) Waiver prohibited. Rules in this chapter are not subject to waiver pursuant to 650—Chapter 7 or any other provision of law.

These rules are intended to implement Iowa Code sections 153.34(7), 153.34(9), 272C.3, 272C.4(11) and 272C.4(6).

[Filed 9/1/88, Notice 7/27/88—published 9/21/88, effective 10/26/88]
[Filed 2/1/91, Notice 12/12/90—published 2/20/91, effective 3/27/91]
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[Filed 7/30/93, Notice 6/9/93—published 8/18/93, effective 9/22/93]
[Filed 1/27/95, Notice 12/7/94—published 2/15/95, effective 3/22/95]
[Filed 1/22/99, Notice 11/18/98—published 2/10/99, effective 3/17/99]
[Filed 7/21/00, Notice 5/17/00—published 8/9/00, effective 9/13/00]
[Filed 10/23/00, Notice 8/9/00—published 11/15/00, effective 1/1/01]
[Filed 1/19/01, Notice 11/15/00—published 2/7/01, effective 3/14/01]
[Filed 1/18/02, Notice 11/14/01—published 2/6/02, effective 3/13/02]
[Filed 4/25/03, Notice 12/11/02—published 5/14/03, effective 6/18/03]
[Filed 7/11/04, Notice 5/12/04—published 7/21/04, effective 8/25/04]
[Filed 2/5/07, Notice 11/22/06—published 2/28/07, effective 4/4/07]
[Filed ARC 8369B (Notice ARC 8044B, IAB 8/12/09), IAB 12/16/09, effective 1/20/10]
[Filed ARC 9218B (Notice ARC 8846B, IAB 6/16/10), IAB 11/3/10, effective 12/8/10]
DENTAL BOARD[650]

Notice of Intended Action

Proposing rule making related to expanded functions for dental assistants and dental hygienists and providing an opportunity for public comment


Legal Authority for Rule Making

This rule making is proposed under the authority provided in Iowa Code sections 147.76, 153.33 and 272C.3.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 153.15, 153.38 and 153.39.

Purpose and Summary

The primary purpose of these proposed amendments is to update the requirements for expanded functions. The proposed amendments move some procedures into the standard scope of practice for dental assistants and dental hygienists, and also allow additional procedures to be performed by dental assistants and dental hygienists as new expanded functions. The amendments also include updated terminology to make the rules clearer.

These proposed amendments create a new Chapter 23 for all expanded function requirements. The proposed amendments remove the expanded function requirements currently established in Chapters 10 and 20 and relocate the content into proposed Chapter 23. The intent is to make it easier for dental hygienists and dental assistants to locate the requirements for expanded functions by placing all of the requirements in a single chapter.

These proposed amendments establish clearer requirements for training in expanded functions to ensure that a minimum standard of competency is met at the completion of all expanded function training courses. A review of expanded function training courses to date has shown that there is not a clear minimum training standard. These amendments would resolve this concern.

These proposed amendments also create a process whereby expanded function dental assistants and dental hygienists may obtain a from the Dental Board recognizing the ability of those dental assistants or dental hygienists to perform Level 1 and Level 2 expanded functions. A process has been requested by dentists who have delegated these services and by dental hygienists and dental assistants who have performed expanded function procedures. as an expanded function dental assistant or dental hygienist would be required only for those who wish to complete training in Level 2 expanded functions. The would be optional for those who complete training in all Level 1 expanded functions and who opt not to train in Level 2 expanded functions.

These proposed amendments also establish fees related to the of expanded function licensees and registrants, for a hard copy of a duplicate or proof of renewal, and for educational services provided by the Board.

Fiscal Impact

This rule making has no impact to the State of Iowa.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.
**Waivers**

Any person who believes that the 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—Chapter 7.

**Public Comment**

Any interested person may submit written or oral comments concerning this proposed rule making. Written or oral comments in response to this rule making must be received by the Board no later than 4:30 p.m. on July 1, 2019. Comments should be directed to:

Steve Garrison  
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**

No public hearing is scheduled at this time. As provided in Iowa Code section 17A.4(1)“b,” an oral presentation regarding this rule making 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:

**ITEM 1.** Amend subrule 10.3(1) as follows:

10.3(1) “Practice of dental hygiene” as defined in Iowa code section 153.15 as amended by 2017 Iowa Acts, Senate File 479, means the performance of the following educational, therapeutic, preventive and diagnostic dental hygiene services. Such services, except educational services, shall be delegated by and performed under the supervision of a dentist licensed pursuant to Iowa Code chapter 153.

a. Educational. Assessing the need for, planning, implementing, and evaluating oral health education programs for individual patients and community groups; 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.

b. Therapeutic. Identifying and evaluating factors which indicate the need for and performing (1) oral prophylaxis, which includes supragingival and subgingival debridement of plaque, and detection and removal of calculus with instruments or any other devices; (2) periodontal scaling and root planing; (3) removing and polishing hardened excess restorative material; (4) administering local anesthesia with the proper permit; (5) administering nitrous oxide inhalation analgesia in accordance with 650—subrules 29.6(4) and 29.6(5); (6) applying or administering medicaments prescribed by a dentist, including chemotherapeutic agents and medicaments or therapies for the treatment of periodontal disease and caries; (7) removal of adhesives.
c. Preventive. Applying pit and fissure sealants and other medications or methods for caries and periodontal disease control; organizing and administering rinse or sealant programs.

d. Diagnostic. Reviewing medical and dental health histories; performing oral inspection; indexing dental and periodontal disease; preliminary charting of existing dental restorations and teeth; making occlusal registrations for mounting study casts; testing pulp vitality; testing glucose levels; analyzing dietary surveys.

e. The following services may only be delegated by a dentist to a dental hygienist: administration of local anesthesia, placement of sealants, and the removal of any plaque, stain, calculus, or hard natural or synthetic material except by toothbrush, or rubber cup coronal polish.

f. Expanded function procedures in accordance with 650—Chapter 23.

g. Phlebotomy.

ITEM 2. Rescind subrules 10.3(8) and 10.3(9).

ITEM 3. Amend rule 650—15.4(153) as follows:

650—15.4(153) Application fees. All fees are nonrefundable. In addition to the fees in this rule, an applicant will pay a service charge for online.

15.4(1) to 15.4(15) No change.

15.4(16) Level 1 expanded function certification. The fee for application to be as a Level 1 expanded function dental hygienist or dental assistant is $100.

15.4(17) Level 2 expanded function certification. The fee for application to be as a Level 2 expanded function dental hygienist or dental assistant is $150.

15.4(16) 15.4(18) Temporary permit—urgent need or educational services. The fee for an application for a temporary permit to serve an urgent need or provide educational services is $100 if an application is submitted online or $150 if submitted via paper application.


ITEM 4. Amend subrule 15.8(1) as follows:

15.8(1) Duplicates. The fee for issuance of a hard copy duplicate license, permit or registration or current renewal is $25.

ITEM 5. Amend rule 650—20.4(153) as follows:

650—20.4(153) Scope of practice.

20.4(1) In all instances, a dentist assumes responsibility for determining, on the basis of diagnosis, the treatment patients will receive and which aspects of treatment may be delegated to personnel as authorized in these rules.

20.4(2) A licensed dentist may delegate to a dental assistant those procedures for which the dental assistant has received training. This delegation shall be based on the best interests of the patient. Such services shall be delegated by and performed under the supervision of a licensed dentist and may include:

a. Placement and removal of dry socket medication;

b. Placement of periodontal dressings;

c. Testing pulp vitality;

d. Preliminary charting of existing dental restorations and teeth;

e. Phlebotomy;

f. Glucose testing; and

g. Expanded functions in accordance with 650—Chapter 23.

20.4(2) 20.4(3) The dentist shall exercise supervision and shall be fully responsible for all acts performed by a dental assistant. A dentist may not delegate to a dental assistant any of the following, unless allowed pursuant to 650—Chapter 23:

a. Diagnosis, examination, treatment planning, or prescription, including prescription for drugs and medicaments or authorization for restorative, prosthodontic or orthodontic appliances.
b. Surgical procedures on hard and soft tissues within the oral cavity and any other intraoral procedure that contributes to or results in an irreversible alteration to the oral anatomy.

c. Administration of local anesthesia.

d. Placement of sealants.

e. Removal of any plaque, stain, or hard natural or synthetic material except by toothbrush, or rubber cup coronal polish, or removal of any calculus.

f. Dental radiography, unless the assistant is pursuant to 650—Chapter 22.

g. Those procedures that require the professional judgment and skill of a dentist.

20.4(3) 20.4(4) A dental assistant may perform duties consistent with these rules under the supervision of a licensed dentist. The duties dental assistants may perform are based upon:

a. The education of the dental assistant.

b. The experience of the dental assistant.


ITEM 7. Renumber rules 650—20.5(153) and 650—20.7(153) as 650—20.5(153) and 650—20.6(153).

ITEM 8. Amend renumbered rules 650—20.5(153) and 650—20.6(153) as follows:

650—20.5(153) Categories of dental assistants: dental assistant trainee, registered dental assistant. There are two categories of dental assistants. Both the supervising dentist and the registered dental assistant or dental assistant trainee are responsible for maintaining documentation of training. Such documentation must be maintained in the of practice and shall be provided to the board upon request.

20.5(1) Registered dental assistant. Registered dental assistants are individuals who have met the requirements for registration and have been issued a of registration. A registered dental assistant may, under general supervision, perform dental radiography, intraoral suctioning, use of a curing light and intraoral camera, and all extraoral duties that are assigned by the dentist and are consistent with these rules. During intraoral procedures, the registered dental assistant may, under direct supervision, assist the dentist in performing duties assigned by the dentist that are consistent with these rules. The registered dental assistant may take radiographs if pursuant to 650—Chapter 22.

20.5(2) Dental assistant trainee. Dental assistant trainees are all individuals who are engaging in on-the-job training to meet the requirements for registration and who are learning the necessary skills under the personal supervision of a licensed dentist. Trainees may also engage in on-the-job training in dental radiography pursuant to 650—22.3(136C,153).

a. No change.

b. Trainee restart.

(1) Reapplying for trainee status. A trainee may “start over” as a dental assistant trainee provided the trainee submits an application in compliance with subrule 20.7(4) 20.6(1).

(2) to (4) No change.

c. No change.

650—20.6(153) Registration requirements after July 1, 2001. Effective July 2, 2001, dental assistants must meet the following requirements for registration:

20.6(1) Dental assistant trainee.

a. to c. No change.

d. Prior to the trainee status expiration date, the dental assistant trainee’s supervising dentist must ensure that the trainee has received a of registration or has been issued start-over trainee status in accordance with rule 650—20.6(153) 650—20.5(153) before performing any further dental assisting duties.

20.6(2) Registered dental assistant.

a. No change.
Applications for registration as a registered dental assistant must be on of board forms and include the following:
(1) No change.
(2) Evidence of meeting the requirements in 20.7(2) “a.” 20.6(2) “a.”
(3) to (9) No change.
20.6(3) Rescinded IAB 9/17/03, effective 10/22/03.
20.6(4) All applications must be signed and by the applicant as to the truth of the documents and statements contained therein.
20.6(5) Review of applications. The board shall follow the procedures in 650—11.8(147,153) in reviewing applications for registration and

ITEM 9. Adopt the following new rule 650—20.7(153):

650—20.7(153) Review of applications. The board shall follow the procedures in rule 650—11.8(147,153) in reviewing applications for registration and

ITEM 10. Adopt the following new 650—Chapter 23:

CHAPTER 23
EXPANDED FUNCTIONS

650—23.1(153) As used in this chapter:
“Accredited school” means a dental, dental hygiene, or dental assisting education program accredited by the Commission on Dental Accreditation (CODA).
“Clinical training” means training which includes patient experiences.
“Didactic training” means educational instruction.
“Direct supervision” means that the dentist is present in the treatment facility, but it is not required that the dentist be physically present in the treatment room.
“Fabrication” means the construction or creation of an impression, occlusal registration or provisional restoration, as in this chapter.
“General supervision of a dental assistant” means that a dentist has examined the patient and has delegated the services to be provided by a registered dental assistant, which are limited to all extraoral duties, dental radiography, intraoral suctioning, use of a curing light, intraoral camera, and recementation of a provisional restoration. The dentist need not be present in the facility while these services are being provided.
“General supervision of a dental hygienist” means that a dentist has examined the patient and has prescribed authorized services to be provided by a dental hygienist. The dentist need not be present in the facility while these services are being provided. If a dentist will not be present, the following requirements shall be met:
1. Patients or their legal guardians must be informed prior to the appointment that no dentist will be present and therefore no examination will be conducted at that appointment.
2. The hygienist must consent to the arrangement.
3. Basic emergency procedures must be established and in place, and the hygienist must be capable of implementing these procedures.
4. The treatment to be provided must be prior prescribed by a licensed dentist and must be entered in writing in the patient record.
“Intermediate restorative material” means any restorative material intended to remain in place for up to one year.
“Laboratory training” means training that is hands-on, that may include simulation, and that prepares a dental hygienist or dental assistant for patient experiences. Laboratory training can be done as part of an approved course, or obtained through a supervising dentist.
“Observational supervision,” for expanded functions, means the dentist is physically present in the treatment room to oversee and direct all services being provided as part of clinical training.
“Patient experiences” are procedures that are performed on a patient, during the course of clinical training, under the observational supervision of a dentist.

“Prosthetic” means any provisional or permanent restoration intended to replace a tooth or teeth.

“Provisional restoration” means a crown or bridge placed with the intention that the crown or bridge will be replaced with a permanent crown or bridge at a later date.

650—23.2(153) Expanded function requirements and eligibility.

23.2(1) A dental hygienist or dental assistant may only perform expanded function procedures upon successful completion of a board-approved course of training and en by the board. All expanded functions must be delegated by and performed under the direct supervision of a dentist licensed pursuant to Iowa Code chapter 153, with two exceptions: the taking of occlusal registrations by a dental hygienist for purposes other than mounting study casts (Level 1) and the recementation of provisional restorations (Level 1). These exceptions may be performed under general supervision. Dental assistant trainees are not eligible to perform or receive training in expanded function procedures.

23.2(2) A dental hygienist or dental assistant shall not perform any expanded function procedures listed in this chapter unless the education and training requirements have been met and en by the board. This shall not preclude a dental hygienist or dental assistant from practicing expanded functions for training purposes while enrolled in a board-approved course of training.

23.2(3) To be eligible to train in Level 1 expanded functions, a dental hygienist or dental assistant must comply with one of the following:

a. Hold an active dental hygiene license in Iowa; or
b. Hold an active dental assistant registration, and comply with at least one of the following:
   (1) Be a graduate of an accredited school; or
   (2) Be currently by the Dental Assisting National Board (DANB); or
   (3) Have at least one year of clinical practice as a registered dental assistant; or
   (4) Have at least one year of clinical practice as a dental assistant in a state that does not require registration.

23.2(4) A dentist who delegates Level 1 or Level 2 expanded functions to a dental hygienist or dental assistant under direct supervision must examine the patient to review the quality of work prior to the conclusion of the dental appointment. The following expanded functions are exempt from this requirement and may be performed under general supervision:

   a. Recementation of a provisional crown by Level 1 dental hygienists and dental assistants.
   b. Recementation of a bridge restoration by Level 1 dental hygienists and dental assistants.
   c. Taking occlusal registrations for purposes other than mounting study casts by Level 1 dental hygienists only.

650—23.3(153) Expanded function categories.

23.3(1) Basic Level 1. Dental hygienists or dental assistants who train in some, but not all, Level 1 expanded functions are deemed to be basic expanded function dental hygienists or dental assistants. A dentist may delegate to a dental hygienist or dental assistant only those Level 1 expanded function procedures for which training has been successfully completed.

23.3(2) Certified Level 1. Expanded function dental hygienists or dental assistants who have successfully completed training for all Level 1 expanded function procedures are deemed to be Level 1 dental hygienists or dental assistants.

23.3(3) Certified Level 2. Before beginning training to become Level 2, expanded function dental hygienists or dental assistants must have a minimum of one year of clinical practice as a Level 1 dental hygienist or dental assistant following issuance of Level 1 by the board and must successfully pass a board-approved entrance examination with a score of at least 75 percent.

   a. A dental hygienist or dental assistant must successfully complete training for all Level 2 expanded function procedures before becoming Level 2.
b. A dentist may delegate any Level 1 or Level 2 expanded function procedures to a dental hygienist or dental assistant who is in Level 2.

650—23.4(153) Level 1 expanded function procedures for dental assistants. Level 1 expanded function procedures for dental assistants include:

23.4(1) Taking occlusal registrations for the fabrication of dental appliances except for complete denture fabrication;
23.4(2) Placement and removal of gingival retraction cord;
23.4(3) Fabrication, temporary cementation, temporary recementation, and removal of provisional crowns or bridges placed with the intention that they will be replaced with a permanent crown or bridge at a later date;
23.4(4) Applying cavity liners and bases; desensitizing agents; and bonding systems, to include the placement of orthodontic brackets, following the determination of location by the supervising dentist;
23.4(5) Monitoring of patients receiving nitrous oxide inhalation analgesia, which may include increasing oxygen levels as needed, pursuant to the following:
   a. A licensed dentist shall induce a patient and establish the maintenance level;
   b. A dental assistant may make adjustments that decrease the nitrous oxide concentration during the administration of nitrous oxide;
   c. A dental assistant may turn off the oxygen delivery at the completion of the dental procedure;
23.4(6) Taking impressions, except for complete upper and lower dentures;
23.4(7) Removal of any adhesives (nonmotorized hand instrumentation only);
23.4(8) Placement of Class 1 intermediate restorative material, including lingual endodontic access, following preparation of a tooth by a dentist; and
23.4(9) Recementation of provisional restorations. The recementation of a provisional crown or bridge restoration is the only Level 1 function that shall be allowed under general supervision.

650—23.5(153) Level 1 expanded function procedures for dental hygienists. Level 1 expanded function procedures for dental hygienists include:

23.5(1) Taking occlusal registrations for the fabrication of dental appliances, except for complete denture fabrication, and for purposes other than mounting study casts;
23.5(2) Placement and removal of gingival retraction cord;
23.5(3) Fabrication, temporary cementation, temporary recementation, and removal of provisional crowns or bridges placed with the intention that they will be replaced with a permanent crown or bridge at a later date;
23.5(4) Applying cavity liners and bases; and bonding systems for restorative purposes, including the placement of orthodontic brackets, following the determination of location by the supervising dentist;
23.5(5) Taking impressions, except for complete upper and lower dentures;
23.5(6) Placement of Class 1 intermediate restorative material, including lingual endodontic access, following preparation of a tooth by a dentist; and
23.5(7) Recementation of provisional restorations. The recementation of a provisional crown or bridge restoration is the only Level 1 expanded function that shall be allowed under general supervision.

650—23.6(153) Level 2 expanded function procedures for dental hygienists and dental assistants.

23.6(1) Level 2 expanded function procedures for dental hygienists and dental assistants include:
   a. Placement and shaping of amalgam following preparation of a tooth by a dentist;
   b. Placement and shaping of adhesive restorative materials following preparation of a tooth by a dentist;
   c. Polishing of adhesive restorative material using a slow-speed handpiece;
   d. Fitting of stainless steel crowns on primary posterior teeth, and cementation after by the dentist;
   e. Making impressions and occlusal registrations for the fabrication of dentures and partial dentures;
f. Tissue conditioning (soft reline only);

g. Extraoral adjustment to acrylic dentures without making any adjustments to the prosthetic teeth; and

h. Placement of intracoronal temporary following preparation of a tooth by a dentist.

23.6(2) These Level 2 expanded function procedures refer to both primary and permanent teeth except as otherwise noted.

650—23.7(153) Expanded function training.

23.7(1) Level 1 expanded function training. Expanded function training for Level 1 procedures must be board-approved. Clinical training in expanded functions must be completed under observational supervision. Level 1 expanded function training must consist of the following:

a. An initial assessment to determine the base entry level of all participants in the program;

b. Completion of a training program that meets the following minimum standards for each function:

   (1) Taking occlusal registrations for the fabrication of dental appliances, except for removable prosthetics:

   Goal: To reproduce the patient’s jaw relationship accurately.

   Standard: Demonstrate an accurate occlusal registration by a supervising dentist.

   Minimum training requirement: One hour of didactic training, and clinical training that includes a minimum of patient experiences under observational supervision.

   (2) Placement and removal of gingival retraction cord:

   Goal: To expose the margins of a crown by displacing tissue from the tooth.

   Standard: Perform the procedural steps to place and remove retraction material and recognize oral conditions and techniques that may compromise tissue displacement or patient health.

   Minimum training requirement: Two hours of didactic training, the equivalent of one hour of laboratory training that includes a minimum of three experiences, and clinical training that includes a minimum of patient experiences under observational supervision.

   (3) Fabrication, temporary cementation and removal of provisional crown and bridge restorations:

   Goal: To replicate the anatomy and function of the natural tooth, prior to the restoration.

   Standard: Use various methods to fabricate and temporarily cement single-unit and multiunit provisional restorations.

   Minimum training requirement: Four hours of didactic training, the equivalent of four hours of laboratory training that includes a minimum of experiences, and clinical training that includes a minimum of ten patient experiences under observational supervision.

   (4) Applying cavity liners and bases; desensitizing agents; and bonding systems, including the placement of orthodontic brackets following the determination of location by the supervising dentist:

   Goal: To apply appropriate material that protects existing tooth structure and adheres existing tooth structure to restorative materials.

   Standard: Manipulate and apply appropriate material to meet clinical competency.

   Minimum training requirement: Two hours of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of patient experiences in each one of these areas (for a total of 15 patient experiences under observational supervision).

   (5) Monitoring of nitrous oxide inhalation analgesia:

   Goal: Understand the equipment, recognize the signs of patient distress or adverse reaction, and know when to call for help.

   Standard: Exercise the ability to maintain patient safety while nitrous oxide is used.

   Minimum training requirement: Two hours of didactic training, one hour of laboratory training in the of where the dental hygienist or dental assistant is employed, and patient experiences under observational supervision.

   (6) Taking impressions for the fabrication of crown and bridge restorations:

   Goal: Reproduce soft and hard oral tissues, digitally or with impression materials.
Standard: Complete the procedural steps to obtain a clinically acceptable impression.

Minimum training requirement: Three hours of didactic training, and the equivalent of clinical training that includes a minimum of six patient experiences under observational supervision.

(7) Removal of adhesives and restorative materials (nonmotorized hand instrumentation only):
Goal: Remove excess adhesives and bonding materials to eliminate soft tissue irritation.
Standard: Identify how, when and where to remove excessive bonding or adhesive material.
Minimum training requirement: One hour of didactic training, and clinical training that includes a minimum of six patient experiences under observational supervision.

(8) Placement of Class 1 intermediate restorative material:
Goal: Place Class 1 intermediate restorative material following preparation of a tooth by a dentist.
Standard: Identify how, when and where to place Class 1 intermediate restorative material.
Minimum training requirement: One hour of didactic training, and clinical training that includes a minimum of six patient experiences under observational supervision.

(9) Recementation of provisional restorations:
Goal: Secure the provisional restoration to a previously prepared tooth after the provisional restoration has become loose or dislodged.
Standard: Use various methods to fabricate and temporarily cement single-unit and multiunit provisional restorations.
Minimum training requirement: If this training is completed in conjunction with training in fabrication, temporary cementation and removal of provisional crown and bridge restorations, the training requirements may be combined since the procedures are related. If this training is being completed separately, the same training requirements for fabrication, temporary cementation and removal of provisional restorations applies.

c. A postcourse written examination at the conclusion of the training program, with a minimum of ten questions per function, must be administered. Participants must obtain a score of 75 percent or higher on each examination administered.

23.7(2) Level 2 expanded function training. Expanded function training for Level 2 procedures shall be eligible for board approval if the training is offered through the University of Iowa College of Dentistry or another program accredited by the Commission on Dental Accreditation of the American Dental Association.

650—23.8(153) Expanded function

23.8(1) Dental hygienists and dental assistants who successfully complete board-approved training in all Level 1 expanded functions may apply for expanded functions with the board. Dental hygienists and dental assistants who intend to train in Level 2 expanded functions must become certified in Level 1 expanded functions.

23.8(2) Applications for Level 1 expanded function certification must be on board forms and include the following:

a. The fee as specified in 650—Chapter 15;

b. Evidence of successful completion of all Level 1 expanded function training through a board-approved course of training; and

c. Evidence of successful completion of a postcourse written examination for all Level 1 expanded functions.

23.8(3) Expanded function certificates, when issued by the board, must be prominently displayed with the registration or license in each dental facility where expanded function services are provided.

650—23.9(153) Expanded function

23.9(1) Dental hygienists and dental assistants who successfully complete a board-approved Level 2 expanded function course of training must be certified by the board prior to performing those functions.

23.9(2) Applications for Level 2 expanded function certification must be on board forms and include the following:

a. The fee as specified in 650—Chapter 15;
b. Evidence of Level 1 expanded function
   c. Evidence of successful completion of Level 2 expanded function training through a board-approved course of training; and
   d. Evidence of successful completion of a postcourse written examination.

**23.9(3)** Level 2 expanded function must be prominently displayed with the registration or license in each dental facility where expanded function services are provided.

These rules are intended to implement Iowa Code chapter 153.

**ITEM 11.** Amend paragraph **25.10(2)“f”** as follows:

f. For dental assistants registered pursuant to rule 650—20.7(153) 650—20.6(153), the current biennium renewal period, or portion thereof, following original issuance of the registration.
BEFORE THE IOWA DENTAL BOARD

Petition by Sergio Palacios for the waiver of 650 IAC subrule 11.4(153) relating to obtaining an Iowa Dental License

\{ PETITION FOR WAIVER \}

1. Petitioner's name, address, and telephone number. All communications concerning the petition can be directed to the address, phone, and e-mail address listed below.

Sergio, Palacios
8075 NW 39th Avenue, Apartment 100
Gainesville, Florida, 32606

Cell Phone: 786-260-8934
Email: sergio.palacios1177@gmail.com

2. I am requesting a waiver of 650 Iowa Administrative Code subrule 11.4(1), which requires satisfactory completion of a full-time dental education program at an accredited dental college.

In lieu of a post-graduate general practice residency program of at least one academic year, I would like the board to accept the following: my two years and six months of a postgraduate residency program in Oral and Maxillofacial Radiology at University of Florida, Gainesville, Florida.

My duties at the University of Florida included:

- Use diagnostic tools, such as conventional and digital intraoral and extraoral radiographs, CBCT (cone beam computed tomography), MDCT (multi-detector computed tomography), MRIs (magnetic resonance imaging) of the head, neck, and jaw areas, to make a radiologic interpretation and written report to diagnose and treat patients at the University of Florida College of Dentistry and Shands Hospital.
- Conduct a clinical head and neck examination, take and evaluate medical and dental histories to determine appropriate imaging investigations.
- Prescribe, make, or supervise the making of radiographs and utilize other imaging techniques relevant to dentistry.
- Advise on radiation protection and safety at the University of Florida College of Dentistry.
- Communicate effectively with colleagues and critically evaluate the scientific literature in order to contribute to maintaining competency.
- Develop a clinical and educational multi-disciplinary environment between the College of Dentistry and the College of Medicine (Oncology, Neuroradiology, Otorhinolaryngology, and Nuclear Medicine).
• Attending Tumor Board, a multi-disciplinary meeting where complex patient cases are discussed in significant detail for treatment planning.
• Participate in and conduct Grand Rounds, a methodology of medical/dental education and inpatient care, consisting of presenting the dental problems and treatment of a particular patient to an audience consisting of doctors, residents, and dental students.
• Teach radiologic interpretation in digital dental radiography and cone beam computed tomography scanning for third and fourth year dental students.
• Teach projection techniques and clinical assessment of panoramic and intraoral periapical radiographs for second year dental students.
• Conduct the Clinical Radiology Conference at the Oral and Maxillofacial Diagnostic Sciences department.
• Perform clinical and educational research.
• Annual participation at the American Association of Oral and Maxillofacial Radiology (AAOMR) Conference.

I also participated in the We-Care Program with the Florida Department of Health during my education, which the duties included:

• Providing dental care and dental emergency service to low income patients, assigned by the Florida Department of Health.
• Patient screening, assessment of oral health conditions, review of the health history, oral cancer screening, head and neck inspection, dental charting, and taking blood pressure and pulse.
• Diagnosing oral diseases.
• Promoting oral health and disease prevention, including but not limited to oral hygiene instruction, fluoride treatment, sealants, enameloplasty, etc.
• Creating treatment plans to maintain or restore the oral health of the patients.
• Interpreting x-rays and diagnostic tests.
• Ensuring the safe administration of anesthetics.
• Monitoring growth and development of the teeth and jaws.
• Restoring natural teeth with amalgam and composite materials.
• Replacing missing teeth through fixed or removable prosthodontic rehabilitation.
• Performing dental and surgical procedures on the teeth, bone and soft tissues of the oral cavity, including but not limited to endodontics, periodontics, and oral surgery.
• Educating, supervising, instructing dental students when performing dental procedures for the patients.
In addition to my postgraduate education and volunteer work, I currently have a dental license in the state of Vermont, and I have also completed the following:

- The TOEFL
- National Board Examinations (Part I and Part II)
- Regional Clinical Examination ADEX/CDCA
- Dental Hygiene License
- Local Anesthesia License
- Dental assistant and dental radiography license.

3. Iowa is not one of the states in the United States that allow foreign dentists with a dental specialty education from an accredited dental program to obtain a dental license. I am permanently moving to Iowa and I would like to receive my license to work in my profession as an Oral and Maxillofacial Radiologist.

4. Explain the relevant facts and reasons that the petitioner believes justify a waiver. Include in your answer all the following:

   a. Undue Hardship: I have 16 years of professional dental experience in the academic, private/corporate, clinical and hospital settings. I have been exposed to an extensive number of complex and challenging patients, with a broad range of diverse dental treatments that made me a highly-trained dentist.

      In 2001, I began with forensic dentistry in Caracas-Venezuela, followed by ten years practicing general dentistry at the Metropolitan Hospital North in Carabobo-Venezuela. In 2012, I worked as a Dental Hygienist for Heartland Dental Care in Longwood, Florida. Here, I was annually awarded for my outstanding patient care performance.

   b. Why Waiving the Rule Would Not Prejudice the Substantial Legal Rights of Any Person. Waiver of the rule would not prejudice the substantial legal rights of any person because I have an impeccable 16-year dental career and record in Venezuela and the United States. I have been successfully treating patients in the United States, as a Dental Hygienist (providing local anesthesia and periodontal treatment) and as a General Dentist (during volunteer work with the Florida Department of Health through the University of Florida). I also successfully passed, on my first try, the ADEX Dental regional examinations (CDCA/NERB) which consists of five examinations: Restorative, Periodontal, Prosthodontic, Endodontic and the Diagnostic Skills Exam OSCE (DSE OSCE); which are designated to test the clinical skills of eligible candidates for dental license in more than 40 states of United States.
c. The Provisions of the Rule Subject to the Waiver are NOT Specifically Mandated by Statute or Another Provision of Law. Iowa Code Chapter 153 does not mandate the requirements of rule 650 - 11.4(153)

d. Substantially Equal Protection of the Public Health, Safety, and Welfare has been Afforded by a means other than that prescribed in the particular rule for which the waiver is requested.

The subrule that I am requesting a waiver from helps to ensure that the waiver from the requirements of the rule in this specific case would not prejudice the Board and any person under its jurisdiction.

I have over 16 years of professional dental experience. My career began in forensic dentistry in 2001, following a dental practice at the Metropolitan Hospital in Carabobo-Venezuela for ten years.

In 2004, I was given the opportunity to work temporally in United States, time where I earned my dental assistant and dental hygienist license. In 2012, I permanently relocated to the United States, where I worked for three years at Heartland Dental Care. Here, I was annually awarded for my outstanding patient care performance.

In July 2016, I joined the residency program of Oral and Maxillofacial Radiology at the University of Florida College of Dentistry. During this period, I volunteered to work at the Florida Department of Health, providing dental care to low income patients. I also successfully completed all the academic requirements for U.S. dental licensure eligibility. I currently have a dental license in Vermont, but my ideal state to practice is Iowa, where most of my relatives live.

Oral and Maxillofacial Radiology (teleradiology) is what I want to do for work and I know that I am a very competent dentist, capable to do an outstanding job as an Oral and Maxillofacial Radiologist in the state of Iowa.

5. A history of prior contacts between the board and petitioner related to the regulated activity is as follows.

I have had no previous activity with the board.

6. Information related to the board's action in similar cases:

7. There is no other public agency or political subdivision that regulates dentistry in Iowa.

8. I am not aware of any person or entity that would be adversely affected by the granting of a waiver in this case.
9. Provide the name, address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.

<table>
<thead>
<tr>
<th>Name</th>
<th>Dr. Axel Ruprecht</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Title</td>
<td>Professor Emeritus of Oral and Maxillofacial Radiology</td>
</tr>
<tr>
<td>Phone Number</td>
<td>319-621-5577</td>
</tr>
<tr>
<td>Email Address</td>
<td><a href="mailto:ARuprecht@dental.ufl.edu">ARuprecht@dental.ufl.edu</a></td>
</tr>
<tr>
<td>Reference Type</td>
<td>Professional</td>
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<tr>
<th>Name</th>
<th>Dr. Deeba Kashtwari</th>
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<tbody>
<tr>
<td>Employer</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Title</td>
<td>Clinical Assistant Professor, Director, Oral and Maxillofacial Radiology</td>
</tr>
<tr>
<td>Phone Number</td>
<td>352-273-6692</td>
</tr>
<tr>
<td>Email Address</td>
<td><a href="mailto:DKashtwari@dental.ufl.edu">DKashtwari@dental.ufl.edu</a></td>
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<td>Reference Type</td>
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<thead>
<tr>
<th>Name</th>
<th>Dr. Sevin Barghan</th>
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<tr>
<td>Employer</td>
<td>BeamReader</td>
</tr>
<tr>
<td>Title</td>
<td>Oral and Maxillofacial Radiologist.</td>
</tr>
<tr>
<td>Phone Number</td>
<td>909-544-0844</td>
</tr>
<tr>
<td>Email Address</td>
<td><a href="mailto:sevinbarghan@yahoo.com">sevinbarghan@yahoo.com</a></td>
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<tr>
<td>Reference Type</td>
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<thead>
<tr>
<th>Name</th>
<th>Dr. Mathew Hansen</th>
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<tbody>
<tr>
<td>Employer</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Title</td>
<td>Assistant Professor of Oral and Maxillofacial Radiology</td>
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<td>Phone Number</td>
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<td>Email Address</td>
<td><a href="mailto:dmathansendds@gmail.com">dmathansendds@gmail.com</a></td>
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<tr>
<th>Name</th>
<th>Dr. Alvin Denis</th>
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<tr>
<td>Employer</td>
<td>Heartland Dental Care</td>
</tr>
<tr>
<td>Title</td>
<td>General Dentist</td>
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<tr>
<td>Phone Number</td>
<td>786-214-0886</td>
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</tr>
<tr>
<td>Reference Type</td>
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<thead>
<tr>
<th>Name</th>
<th>Dr. Irene Marron-Tarrazzi</th>
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<tbody>
<tr>
<td>Employer</td>
<td>ADA and Brickell Periodontics</td>
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<tr>
<td>Title</td>
<td>Vice-president of the ADA and Periodontist</td>
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<tr>
<td>Phone Number</td>
<td>305-510-7078</td>
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<tr>
<td>Email Address</td>
<td><a href="mailto:irene.marron@gmail.com">irene.marron@gmail.com</a> <a href="mailto:info@brickellperio.com">info@brickellperio.com</a></td>
</tr>
<tr>
<td>Reference Type</td>
<td>Professional and personal</td>
</tr>
</tbody>
</table>
10. I hereby authorize the Board to obtain any information relating to this waiver request from the individuals named herein. I will provide signed releases of information if necessary.

I hereby attest to the accuracy and truthfulness of the above information.

[Signature]
[Date]
<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Rule/Subrule</th>
<th>Topic</th>
<th>Decision</th>
<th>Date of Ruling</th>
<th>Background Information</th>
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<tr>
<td>Chowdhury</td>
<td>Jyoti</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>6/17/2004</td>
<td>MS in dental public health from University of Iowa College of Dentistry; Advanced clinical training in general practice residency program (1 year); pediatric residency program (2 years); also references education completed in India.</td>
</tr>
<tr>
<td>Karunagaran</td>
<td>Saravana</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>10/24/2006</td>
<td>Training in dental materials, MS in biomaterials - State University of New York at Buffalo, School of Dental Medicine Sept 2005; 2 years advanced clinical training in general dentistry, LSU Health Sciences Center School of Dentistry, Medical Center of Louisiana, New Orleans; Training in conscious sedation, LSU Health Sciences Center School of Dentistry, Medical Center of Louisiana, New Orleans; Compulsory Rotatory Internship 2001 - India; 2000 Bachelor of Dental Surgery, India.</td>
</tr>
<tr>
<td>Vargas</td>
<td>Kaaren</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>10/24/2006</td>
<td>Board determined that a waiver could be granted following completion of a 1-year general practice residency (GPR), in addition to the previously-completed postgraduate training in pediatrics and PhD in oral sciences</td>
</tr>
<tr>
<td>Mahajan</td>
<td>Shrirang</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>DENIED</td>
<td>1/18/2007</td>
<td>Graduated from dental school in India; 1 year general practice residency (GPR) in India, 1 year private practice in India; 2 year research-oriented masters program at the State University of New York, Buffalo, School of Dentistry - focus of studies was TMJ and materials science; completed national board examination in 2002, and WREB in 2004; ongoing CE.</td>
</tr>
<tr>
<td>Vargas</td>
<td>Marco</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>9/4/2007</td>
<td>2 years of Advanced Education in General Dentistry (AEGD) at Eastman Dental Center, Rochester, NY; completed 2 year master's program in operative dentistry at University of Iowa College of Dentistry; full time faculty in operative dentistry 1994-2006; full time faculty in dept. of family dentistry &quot;from 2006-present.&quot;</td>
</tr>
<tr>
<td>Uribe</td>
<td>Juan M.</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>1/10/2008</td>
<td>2 years of Advanced Education in General Dentistry (AEGD) at the Univ. of Missouri - KC, served as chief resident; 1 year general practice residency (GPR) in Egypt; 30 months Oral/Maxillo surgery residency in Egypt; Diploma of the faculty of dental surgery of the Royal College of Surgeons of Edinburgh; 2 academic years geriatric dentistry residency training at Univ. of Minnesota School of Dentistry; Master of Science in dentistry degree in progress at the Univ. of MN School of Dentistry; 5 months oral pathology director for RDH students at MN State University – Mankato.</td>
</tr>
<tr>
<td>Rouman</td>
<td>Marco</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>DENIED</td>
<td>11/20/2008</td>
<td>Certificate in endodontics from University of Iowa College of Dentistry (2003-2005); full time assistant professor, University of Iowa College of Dentistry (&quot;2005-present&quot;); visiting professor University of Iowa College of Dentistry (2000-2001); also referenced education and practice completed in Bogota, Columbia.</td>
</tr>
<tr>
<td>Gomez</td>
<td>Manual</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>DENIED</td>
<td>7/24/2009</td>
<td>2005 - entered master's program in public health at the University of Texas Health Science Center at Houston; during program, completed internship with Baylor College of Dentistry in the dept. of Oral Diagnosis (April 2005-Oct 2005); graduated with Master of Public Health degree in December 2006; enrolled in a dental public health residency at Baylor College of Dentistry (Jan 2007- May 2008); accepted faculty position, Baylor College of Dentistry, November 2007; private practice (general practice) since December 2008.</td>
</tr>
<tr>
<td>Bansal</td>
<td>Ritu</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>10/15/2010</td>
<td>Certificate in endodontics from University of Iowa College of Dentistry (2003-2005); full time assistant professor, University of Iowa College of Dentistry (&quot;2005-present&quot;); visiting professor University of Iowa College of Dentistry (2000-2001); also referenced education and practice completed in Bogota, Columbia.</td>
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<td>First Name</td>
<td>Rule/Subrule</td>
<td>Topic</td>
<td>Decision</td>
<td>Date of Ruling</td>
<td>Background Information</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
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<td>------------------------</td>
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<td>----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Fatah</td>
<td>Walid</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>3/2/2012</td>
<td>1 year externship at the Quality Surgery Center in Clinton, IA (2006-2007); 6 months preceptorship training program in Advanced Education in General Dentistry (AEGD) at UCLA (2007); 1 year AEGD at Nova Southeastern University (2008-2009); 2nd year AEGD at the University of Texas Dental Branch in Houston (2008-2009); 400 credit hours of CE in general dentistry within previous 5 years.</td>
</tr>
<tr>
<td>Oestervemb</td>
<td>Niels</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>7/12/2012</td>
<td>Completed 5 months in his senior year as part of an exchange program in family dentistry at University of Iowa College of Dentistry; General practice residency (GPR) from 2010-2011 at UIA Hospitals/Clinics - certificate granted; Fellowship 2011-2012 at UIA COD - certificate granted.</td>
</tr>
<tr>
<td>Khan</td>
<td>Shiza</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>10/25/2012</td>
<td>1 year general practice residency (GPR) at St. Mary’s Hospital, Waterbury, CT; Second year of GPR from Caroline Medical Center, Charlotte, NC, chief resident; 3 years of advanced specialty training in periodontology from Univ. of CT; Masters degree in dental science from Univ. of CT, Storrs, CT.</td>
</tr>
<tr>
<td>Habib</td>
<td>Amr</td>
<td>11.4(1)</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>5/9/2014</td>
<td>2 years of Advanced Education in General Dentistry (AEGD) at Eastman Dental Center, Rochester, NY (December 2008-March 2011; Completed the national boards, and WREB; also references education and experience in Egypt.</td>
</tr>
<tr>
<td>Zitouni</td>
<td>Sima</td>
<td>11.4(1), 11.4(3)e</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>7/21/2016</td>
<td>Dr. Zitouni completed dental school in Syria. States that Course-by-Course Evaluation Report from the Educational Credential Evaluators compare how the curriculum compares to ADA-accredited programs. 2009-2010: completed one year of study in general dentistry along with a restorative fellowship at Case Western University. 2010-2014 completed a 3-year program in periodontics at Case Western University. Also completed a post-doctoral training course in sedation while at Case Western University. Has completed the National Board, WREB, TOEFL and Iowa juris exams. Political climate in Syria makes it difficult for Dr. Zitouni to obtain documentation regarding her education and licensing there.</td>
</tr>
<tr>
<td>Kunnel</td>
<td>Joseph</td>
<td>11.4</td>
<td>Foreign Graduate</td>
<td>Approved</td>
<td>10/13/2017</td>
<td>Dr. Kunnel is an orthodontist licensed in the state of Illinois, who is requesting a waiver of the foreign graduate requirements. Dr. Kunnel completed an AGD residency in Illinois. Dr. Kunnel has taken over the treatment of Dr. Hollen’s orthodontic patients after Dr. Hollen passed away. The practice has had some difficulty transferring the patients to other providers or otherwise continuing treatment.</td>
</tr>
</tbody>
</table>
May 8, 2019

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

Dear Mr. Secretary,

I hereby transmit:

House File 731, an Act relating to mandatory child abuse and dependent adult abuse reporter training requirements.

The above House File is hereby approved on this date.

Sincerely,

Kim Reynolds
Governor of Iowa
AN ACT
RELATING TO MANDATORY CHILD ABUSE AND DEPENDENT ADULT ABUSE REPORTER TRAINING REQUIREMENTS.

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

Section 1. Section 135.11, subsection 24, Code 2019, is amended by striking the subsection.

Sec. 2. Section 232.69, subsection 3, paragraph b, Code 2019, is amended to read as follows:

b. A person required to make a report under subsection 1, other than a physician whose professional practice does not regularly involve providing primary health care to children, shall complete two hours of training relating to the identification and reporting of child abuse within six months of initial employment or self-employment involving the examination, attending, counseling, or treatment of children on a regular basis. Within one month of initial employment or self-employment, the person shall obtain a statement of the abuse reporting requirements from the person’s employer or, if self-employed, from the department. The person shall complete at least two hours of additional child abuse identification and reporting training every five three years. If the person completes at least one hour of additional child abuse identification and reporting training prior to the three-year expiration period, the person shall be deemed in
compliance with the training requirements of this section for an additional three years.

Sec. 3. Section 232.69, subsection 3, paragraphs c and d, Code 2019, are amended by striking the paragraphs and inserting in lieu thereof the following:

c. The core training curriculum relating to the identification and reporting of child abuse, as provided in paragraph "b", shall be developed and provided by the department.

d. An employer of a person required to make a report under subsection 1 may provide supplemental training, specific to identification and reporting of child abuse as it relates to the person's professional practice, in addition to the core training provided by the department.

Sec. 4. Section 235B.16, subsection 5, paragraph b, Code 2019, is amended to read as follows:

b. A person required to report cases of dependent adult abuse pursuant to sections 235B.3 and 235E.2, other than a physician whose professional practice does not regularly involve providing primary health care to adults, shall complete two hours of training relating to the identification and reporting of dependent adult abuse within six months of initial employment or self-employment which involves the examination, attending, counseling, or treatment of adults on a regular basis. Within one month of initial employment or self-employment, the person shall obtain a statement of the abuse reporting requirements from the person's employer or, if self-employed, from the department. The person shall complete at least two hours of additional dependent adult abuse identification and reporting training every five three years. If the person completes at least one hour of additional dependent adult abuse identification and reporting training prior to the three-year expiration period, the person shall be deemed in compliance with the training requirements of this section for an additional three years.

Sec. 5. Section 235B.16, subsection 5, paragraphs c and d, Code 2019, are amended by striking the paragraphs and inserting in lieu thereof the following:
c. The core training curriculum relating to the identification and reporting of dependent adult abuse, as provided in paragraph "b", shall be developed by the department pursuant to subsection 2 and provided by the department.

d. An employer of a person required to report cases of dependent adult abuse pursuant to sections 235B.3 and 235E.2 may provide supplemental training, specific to the identification and reporting of dependent adult abuse as it relates to the person's professional practice, in addition to the core training provided by the department.

Sec. 6. Section 235B.16, subsection 5, paragraph e, Code 2019, is amended by striking the paragraph.

Sec. 7. TRANSITION PROVISIONS. A child abuse or dependent adult abuse training certificate relating to the identification and reporting of child abuse or dependent adult abuse issued prior to July 1, 2019, remains effective and continues in effect as issued for the five-year period following its issuance.

LINDA UPMeyer CHARLES SCHNEIDER
Speaker of the House President of the Senate

I hereby certify that this bill originated in the House and is known as House File 731, Eighty-eighth General Assembly.

CARMINE BOAL
Chief Clerk of the House

Approved May 8th, 2019

KIM REYNOLDS
Governor
# Dental Hygiene Committee (DHC)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Kelly, R.D.H., Chair</td>
<td>2011</td>
</tr>
<tr>
<td>Nancy Slach, R.D.H.</td>
<td>2012</td>
</tr>
<tr>
<td>Michael Davidson, D.D.S.</td>
<td>2018</td>
</tr>
</tbody>
</table>

*mandated by statute

# 18/19 Board Officers

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair: Steve Bradley, D.D.S.</td>
<td>2017</td>
</tr>
<tr>
<td>Vice Chair: Will McBride, D.D.S.</td>
<td>2018</td>
</tr>
<tr>
<td>Secretary: Monica Foley, D.D.S</td>
<td>2018</td>
</tr>
</tbody>
</table>

*mandated by rule

# 18/19 Executive Committee (EC)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair: Michael Davidson, D.D.S.</td>
<td>2017</td>
</tr>
<tr>
<td>John Frank, D.D.S.</td>
<td>2013</td>
</tr>
<tr>
<td>Steven Clark, D.D.S.</td>
<td>prior to 2012</td>
</tr>
<tr>
<td>Kurt Westlund, D.D.S.</td>
<td>prior to 2004</td>
</tr>
<tr>
<td>Douglas Horton, D.D.S.</td>
<td>prior to 2004</td>
</tr>
<tr>
<td>Gary Roth, D.D.S.</td>
<td>prior to 2004</td>
</tr>
<tr>
<td>Kaaren Vargas, D.D.S., Alternate</td>
<td>2012</td>
</tr>
</tbody>
</table>

*Allowed for in rule

# Anesthesia Credentials Committee (ACC)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair: Michael Davidson, D.D.S.</td>
<td>2017</td>
</tr>
<tr>
<td>John Frank, D.D.S.</td>
<td>2013</td>
</tr>
<tr>
<td>Steven Clark, D.D.S.</td>
<td>prior to 2012</td>
</tr>
<tr>
<td>Kurt Westlund, D.D.S.</td>
<td>prior to 2004</td>
</tr>
<tr>
<td>Douglas Horton, D.D.S.</td>
<td>prior to 2004</td>
</tr>
<tr>
<td>Gary Roth, D.D.S.</td>
<td>prior to 2004</td>
</tr>
<tr>
<td>Kaaren Vargas, D.D.S., Alternate</td>
<td>2012</td>
</tr>
</tbody>
</table>

*mandated by rule

# Continuing Education Advisory Committee (CEAC)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lori Elmitt, Chair (Board Member)</td>
<td>2012</td>
</tr>
<tr>
<td>Monica Foley, D.D.S. (Board Member)</td>
<td>2016</td>
</tr>
<tr>
<td>Marijo Beasler, R.D.H.</td>
<td>2009</td>
</tr>
<tr>
<td>Sarah Stream, R.D.A.</td>
<td>2015</td>
</tr>
<tr>
<td>Kristee Malmberg, R.D.A.</td>
<td>prior to 2006</td>
</tr>
<tr>
<td>Vacant Due to Retirement</td>
<td></td>
</tr>
</tbody>
</table>

*mandated by rule

# Licensure/Registration Committee (L&RC)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>William McBride, D.D.S., Chair</td>
<td>2016</td>
</tr>
<tr>
<td>Monica Foley, D.D.S.</td>
<td>2017</td>
</tr>
<tr>
<td>Lori Elmitt, Public Member</td>
<td>2019</td>
</tr>
</tbody>
</table>

*mandated by rule

# CRDTS Committees

<table>
<thead>
<tr>
<th>Committee</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant, Steering Committee</td>
<td></td>
</tr>
<tr>
<td>William McBride, D.D.S., Exam Review Committee</td>
<td>2016</td>
</tr>
<tr>
<td>Nancy Slach, R.D.H., Exam Review Committee</td>
<td>2017</td>
</tr>
</tbody>
</table>

*Committee of the CRDTS Organization

---

**Updated 5/15/19**

IOWA DENTAL BOARD: OFFICERS AND COMMITTEES
**Dental Hygiene Committee Purpose Statement**

The Dental Hygiene Committee is established in Iowa Code Section 153.33. The committee shall have the authority to adopt recommendations regarding the practice, discipline, education, examination, and licensure of dental hygienists and shall carry out duties as assigned by the board. The committee shall have no regulatory or disciplinary authority with regard to dentists, dental assistants, dental lab technicians, or any other auxiliary dental personnel (subsection 2).

*The board shall ratify recommendations of the committee at the first meeting of the board following adoption of the recommendations by the committee, or at a meeting of the board specifically called for the purpose of board review and ratification of committee recommendations. The board shall decline to ratify committee recommendations only if the board makes a specific finding that a recommendation exceeds the jurisdiction or expands the scope of the committee beyond the authority granted in subsection 2, creates an undue financial impact on the board, or is not supported by the record (subsection 3).*

<table>
<thead>
<tr>
<th>Current Members</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Kelly, R.D.H., Chair</td>
<td>2011</td>
</tr>
<tr>
<td>Nancy Slach, R.D.H.</td>
<td>2012</td>
</tr>
<tr>
<td>Michael Davidson, D.D.S.</td>
<td>2018</td>
</tr>
</tbody>
</table>

**Additional Information**

**Number of Members:** 3, established in Iowa Code  
**Frequency of Meetings:** Meets in conjunction with the Board, or as needed  
**Number of Vacancies:** None  
**Method of Appointment:** The 2 dental hygiene members of the board are automatically members. The dentist member shall be elected to the committee annually by a majority vote of board members. The dentist member must have supervised and worked in collaboration with a dental hygienist for a period of at least 3 years immediately preceding election to the committee.  
**Term Limits:** None  
**Mode of Meeting:** Typically in person; teleconferences on occasion  
**Staff Coordinator:** Christel Braness  

*mandated by statute*
Anesthesia Credentials Committee Purpose Statement

The Anesthesia Credentials Committee is established in Iowa Administrative Code 650--Chapter 29. The committee is tasked with reviewing requests related to the issuance and renewal of moderate sedation and general anesthesia permits. The committee makes policy recommendations to the Board as needed.

Current Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
<th>Permit Holder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Davidson, D.D.S.</td>
<td>2018</td>
<td>Moderate Sedation Permit</td>
</tr>
<tr>
<td>John Frank, D.D.S. D.O.</td>
<td>2013</td>
<td>General Anesthesia Permit</td>
</tr>
<tr>
<td>Jonathan DeJong, D.D.S.</td>
<td>2015</td>
<td>General Anesthesia Permit</td>
</tr>
<tr>
<td>Steven Clark, D.D.S. D.O.</td>
<td>prior to 2012</td>
<td>General Anesthesia Permit</td>
</tr>
<tr>
<td>Kurt Westlund, D.D.S. D.O.</td>
<td>prior to 2004</td>
<td>General Anesthesia Permit</td>
</tr>
<tr>
<td>Douglass Horton, D.D.S.</td>
<td>prior to 2004</td>
<td>Moderate Sedation Permit</td>
</tr>
<tr>
<td>Gary Roth, D.D.S.</td>
<td>prior to 2004</td>
<td>Moderate Sedation Permit</td>
</tr>
<tr>
<td>Kaaren Vargas, D.D.S.</td>
<td>2012</td>
<td>None</td>
</tr>
</tbody>
</table>

Additional Information

Number of Members: No fewer than 7. According to IAC 650--29.10 this committee shall be chaired by a member of the board and shall include at least 6 additional members who are licensed dentists. At least 4 committee members shall hold deep sedation/general anesthesia or moderate sedation permits.

Frequency of Meetings: Once per quarter, or more frequently as needed

Number of vacancies: 0

Method of Appointment: All members are appointed by the full board. The board chairperson shall select the committee chair.

Term Limits: None

Mode of Meeting: Typically by teleconference; occasionally in-person

Staff Coordinator: Christel Braness

*mandated by rule
**Continuing Education Advisory Committee Purpose Statement**

The Continuing Education Advisory Committee is a committee established in IAC 650--25.1 to review and make recommendations on requests for continuing education courses, or other continuing education-related issues, as requested.

**Current Members**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lori Elmitt, Chair (Board Member)</td>
<td>2012</td>
</tr>
<tr>
<td>Monica Foley, D.D.S. (Board Member)</td>
<td>2016</td>
</tr>
<tr>
<td>Marijo Beasler, R.D.H.</td>
<td>2009</td>
</tr>
<tr>
<td>Sarah Stream, R.D.A.</td>
<td>2015</td>
</tr>
<tr>
<td>Kristee Malmberg, R.D.A.</td>
<td>prior to 2006</td>
</tr>
<tr>
<td>Vacant due to Retirement</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Information**

**Number of Members**: 7. The committee is established in IAC 650--25.1. Must consist of 1 member of the board, 2 licensed dentists with expertise in the area of professional continuing education, 2 licensed dental hygienists with expertise in the area of professional continuing education, and 2 registered dental assistants with expertise in the area of professional continuing education.

**Frequency of Meetings**: Once every 6-8 weeks, or as needed

**Number of Vacancies**: 1

**Method of Appointment**: All members are appointed by the full board. The board chairperson shall select the committee chair.

**Term Limits**: None

**Mode of Meeting**: Typically by teleconference; occasionally in-person

**Staff Coordinator**: Christel Braness, Angela Davidson

*mandated by rule

[Click Here to Return to Overview Page]
**Iowa Practitioner Review Committee Purpose Statement**

The Iowa Practitioner Review Committee (IPRC) is established in Iowa Administrative Code 650–Chapter 35 to evaluate, assist, and monitor the recovery, rehabilitation, or maintenance of dentists, hygienists, or assistants who self-report impairments. The IPRC is both an advocate for the health of a practitioner and a means to protect the health and safety of the public.

<table>
<thead>
<tr>
<th>Current Members</th>
<th>Date of Initial Appointment</th>
<th>Date Reappointed</th>
<th>Term Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard Rips, D.D.S., Chair (practitioner member who has remained free of addiction for &gt;2 years)</td>
<td>2011</td>
<td>2017</td>
<td>4/30/2020</td>
</tr>
<tr>
<td>Gordon Anderson, International Alcohol and Drug Counselor, Vice Chair (counselor member with expertise in addiction)</td>
<td>2010</td>
<td>2019</td>
<td>4/30/2022</td>
</tr>
<tr>
<td>Jill Stuecker, Executive Director of the Board</td>
<td>2014</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>James Gallagher, M.D., Fellow of the American Psychiatric Association (psychiatrist member)</td>
<td>2015</td>
<td>2018</td>
<td>4/30/2021</td>
</tr>
<tr>
<td>Fred Marsh, M.D., (public member)</td>
<td>2016</td>
<td>2019</td>
<td>4/30/2022</td>
</tr>
</tbody>
</table>

**Additional Information**

- **Number of Members**: Not specified in rule
- **Frequency of Meetings**: Once per quarter
- **Number of Vacancies**: 1, the committee wishes to have a psychiatrist or psychologist
- **Method of Appointment**: The chairperson of the board shall appoint the members of the IPRC. Membership may include but is not limited to: executive director of the board, 1 practitioner who has remained free of addiction for no less than 2 years following successful completion of a board-approved recovery program, 1 physician/counselor with expertise in substance abuse/addiction treatment program, 1 psychiatrist or psychologist, and 1 public member. Members of the IPRC shall elect a chairperson and vice chairperson annually at the last meeting closest to April 30. They will both serve 1 year terms beginning on May 1.

- **Term Limits**: All committee members, except the executive director, shall be appointed for 3 year terms which begin on May 1 and terminate on April 30
- **Mode of Meeting**: In-person
- **Staff coordinator**: Steve Garrison
- *mandated by rule

[Click Here to Return to Overview Page]
**Licensure/Registration Committee Purpose Statement**

The licensure/registration committee is responsible for reviewing and recommending appropriate action concerning applications for: Permanent licensure as a dentist in cases where former disciplinary action or criminal history has been reported and meets the criteria for review; Resident dental licenses or faculty permits in cases where the applicants are foreign trained; Reinstatement in cases where the practitioner has been out of practice for 5 or more years, to determine if additional examination(s) are required prior to reinstatement; Dental assistant registrations, radiography qualifications, reinstatements who have a criminal history; Dental assistant reinstatements for examination recommendations over five years, not covered in existing rules.

<table>
<thead>
<tr>
<th>Current Members</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>William McBride, D.D.S., Chair</td>
<td>2016</td>
</tr>
<tr>
<td>Monica Foley, D.D.S.</td>
<td>2017</td>
</tr>
<tr>
<td>Lori Elmitt</td>
<td>2019</td>
</tr>
</tbody>
</table>

**Additional Information**

**Number of Members:** 3. This committee requires appointments of board members due the confidential nature of the material reviewed (4 members could result in a tie, and 5 or more would establish a quorum of the board so it must be 3).

**Frequency of Meetings:** By email or as needed

**Number of Vacancies:** 1

**Method of Appointment:** All members are appointed by the board chairperson. The board chairperson shall select the committee chair.

**Term Limits:** None

**Mode of Meeting:** By email or in person

**Staff Coordinator:** Christel Braness

*mandated by rule

[Click Here to Return to Overview Page]
**Current Members**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Initial Date of Appointment</th>
<th>Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Steven Bradley, D.D.S</td>
<td>2012</td>
<td>Review/Approve Agendas and Run Board Meetings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assist in Absence of the Chair</td>
</tr>
<tr>
<td>Vice Chair</td>
<td>Will McBride, D.D.S.</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Assist in Absence of Chair and Vice Chair</td>
</tr>
<tr>
<td>Secretary</td>
<td>Monica Foley, D.D.S.</td>
<td>2018</td>
<td></td>
</tr>
</tbody>
</table>

**Rule Reference:** 1.6. The board shall hold an annual meeting each year in Des Moines to elect officers and conduct other business. Officers of the board shall consist of a chairperson, vice chairperson and secretary.

**Method of Appointment:** All positions are elected by the Board annually.

**Term Limits:** None

*Note: Officers of the Board have historically served as the Executive Committee.*

**mandated by Rule**

[Click Here to Return to Overview Page](#)
**Executive Committee Purpose Statement**

The Executive Committee is a subset of the board available to the executive director for support and guidance.

### Current Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Date Appointed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven Bradley, D.D.S., Chair</td>
<td>2012</td>
</tr>
<tr>
<td>Vice Chair: Will McBride, D.D.S.</td>
<td>2017</td>
</tr>
<tr>
<td>Secretary: Monica Foley, D.D.S</td>
<td>2018</td>
</tr>
<tr>
<td>Lori Elmitt, Public Member</td>
<td>2017</td>
</tr>
</tbody>
</table>

### Additional Information

**Number of Members:** At board chairperson's discretion, but must be under quorum. The Board has historically

**Rule Reference:** 1.3(5) Committees of the board may be appointed by the board chairperson and shall not constitute a quorum of the board. The board chairperson shall appoint committee chairpersons. Committees of the board may include the executive committee, licensure committee, grievance committee, continuing education advisory committee, and dental assistant committee.

**Frequency of Meetings:** Once per quarter

**Number of vacancies:** 0

**Method of Appointment:** Appointed by board chairperson. Board chairperson serves as committee chair.

**Term Limits:** None

**Mode of Meeting:** In person or by phone as needed

**Staff Coordinator:** Jill Stuecker

*created by Board

[Click Here to Return to Overview Page]
*These are external committees of the CRDTS, WREB, CDCA organizations

<table>
<thead>
<tr>
<th>CRDTS Steering Committee</th>
<th>Appointed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven Bradley, D.D.S.</td>
<td>2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CRDTS Examination Review Committees</th>
<th>Date Appointed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nancy Slach, R.D.H. - Hygiene Examinations</td>
<td>2017</td>
</tr>
</tbody>
</table>

*2 year terms, with a maximum of 3 terms total

<table>
<thead>
<tr>
<th>WREB Steering Committee</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>WREB Examination Review Committees</th>
<th>Date Appointed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monica Foley, D.D.S. - Dental Examinations</td>
<td>2017</td>
</tr>
<tr>
<td>Mary Kelly, R.D.H. - Hygiene Examinations</td>
<td>2018</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>CDCA Examiner</th>
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<table>
<thead>
<tr>
<th>CDCA Examiner</th>
<th>Date Appointed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monica Foley, D.D.S. - Dental Examinations</td>
<td>2017</td>
</tr>
</tbody>
</table>
The I-Smile™ dental home initiative began in December 2006. Its premise is simple—help Iowa children have good oral health from an early age to achieve optimal health for a lifetime. This allows children the ability to eat well, to grow and thrive, to concentrate on learning, and to feel positive about their appearance, improving social interactions. Good oral health also contributes to overall well-being and reduces future dental and medical costs. The I-Smile™ program helps Iowa families address challenges that may impact their ability to keep children’s mouths healthy and to access dental care.

BACKGROUND

In partnership with the Iowa Department of Human Services, the Iowa Department of Public Health (IDPH) administers I-Smile™ through contracts with regional public and private non-profit organizations. These contractors implement I-Smile™ statewide; all 99 counties are included. Each of the contractors employ a dental hygienist, who serves as the local I-Smile™ coordinator. As licensed dental hygienists, the coordinators focus on preventing dental disease, identifying ways to help families receive care from dentists, and promoting the importance of oral health within the communities they serve.

The I-Smile™ coordinators work to:
• Develop relationships with dentists and dental office staff, encouraging them to accept referrals of underserved children for preventive and restorative dental care;
• Build partnerships within the communities they serve, with businesses, civic organizations, health care providers, and schools—increasing awareness about the importance of oral health;
• Help families make dental appointments, link with community services, and connect to dental insurance, such as Medicaid and hawk-i;
• Participate in community events and meetings, promoting oral health and its role in overall health;
• Help local boards of health address oral health issues of county residents;
• Partner with medical offices to provide training and encourage screenings and fluoride applications for children at well-child appointments;
• Educate parents and children about preventing cavities; and
• Assure that underserved children have access to screenings, fluoride, and sealant applications in public health locations to prevent disease and reduce health care costs.

1 I-Smile™ is a part of Iowa’s statewide Title V maternal, adolescent, and child health program.
RESULTS

To evaluate program impact and the ability of at-risk Iowa children to access dental care, IDPH reviews Medicaid paid claims data from the Iowa Department of Human Services each year. The following information has been determined using Medicaid data for state fiscal year 2018\(^2\). Baseline data is from state fiscal year 2005, the year before I-Smile™ began.

As demonstrated in Figure 1, in 2018 for Medicaid-enrolled children ages 0-12 years of age:

- The number of children receiving care from dentists was nearly double the number in 2005. More than 124,700 children saw a dentist in 2018.
- More than 30,650 children received preventive care (fluoride applications, screenings, dental sealants) from dental hygienists and/or nurses with I-Smile™ in public health locations such as WIC\(^3\) clinics, Head Start centers, and schools—nearly four times as many as in 2005.

Fifty percent of Medicaid-enrolled children saw a dentist in 2018, an improvement from 43.5 percent in 2005. Just over seven percent (18,382) of Medicaid-enrolled children received care from Iowa’s Federally Qualified Health Center (FQHC) dental clinics in 2018; 1,354 more children than in 2017.

Although nearly double the number of Medicaid-enrolled children received care from dentists in 2018 than in the year before I-Smile™ began, the number of dentists providing care has started to decline. In 2018, 89 more dentists billed Medicaid for care provided to a child than in 2005, but there were 38 fewer dentists who billed Medicaid than one year ago (2017).

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\(^2\) Iowa’s state fiscal year is July 1 through June 30.

\(^3\) WIC (Women, Infants and Children) is a supplemental nutrition program for babies, children under the age of 5, pregnant women, breastfeeding women, and women who have had a baby in the last 6 months.
In addition, being enrolled as a Medicaid provider was not indicative of providing care in 2018 (Table 1). Forty-four percent of dentists enrolled as providers billed Medicaid for care provided to a child, less than the rate in 2005 (63%) and 2017 (47%). The number of dentists billing Medicaid for $10,000 or more in services for children more than doubled from 2005 (from 243 to 537), yet this also declined by 11 compared to 2017 (from 548 to 537).

<table>
<thead>
<tr>
<th></th>
<th>Dentists Enrolled as Medicaid Providers</th>
<th>Dentists Enrolled That Billed Medicaid for Services</th>
<th>Dentists Enrolled That Did Not Bill Medicaid for Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>2005</td>
<td>1,613</td>
<td>1,018</td>
<td>63%</td>
</tr>
<tr>
<td>2018</td>
<td>2,492</td>
<td>1,107</td>
<td>44%</td>
</tr>
<tr>
<td><strong>CHANGE</strong></td>
<td><strong>+879</strong></td>
<td><strong>+89</strong></td>
<td><strong>-30%</strong></td>
</tr>
</tbody>
</table>

Table 1: Despite More Medicaid-Enrolled Dentists, Rate of Dentists Billing Medicaid Down 30% in 2018

In Iowa, costs to Medicaid for children’s dental services are stable (Table 2). When adjusting for inflation⁴ and the 1 percent increase in reimbursement rates that occurred in 2014, the average cost to Medicaid per enrolled child in Iowa per year has increased by $4.79 since 2005. Yet, the number of children receiving care from dentists and/or prevention from I-Smile™ has increased significantly—53,537 more children saw a dentist in 2018 than in 2005, and 22,790 more children received preventive care from I-Smile™ in public health locations.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2005</th>
<th>2018</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 Years</td>
<td>$28.88</td>
<td>$43.37</td>
<td></td>
</tr>
<tr>
<td>3-5 Years</td>
<td>$168.46</td>
<td>$174.87</td>
<td></td>
</tr>
<tr>
<td>6-9 Years</td>
<td>$187.47</td>
<td>$192.62</td>
<td></td>
</tr>
<tr>
<td>10-12 Years</td>
<td>$239.83</td>
<td>$226.77</td>
<td></td>
</tr>
<tr>
<td>0-12 Years</td>
<td>$151.39</td>
<td>$156.18</td>
<td></td>
</tr>
</tbody>
</table>

*2005 values adjusted for inflation and 1% Medicaid reimbursement increase in 2014

Table 2: Similar Average Annual Cost per Medicaid Beneficiary with Over 50,000 More Children Served by Dentists in 2018 than 2005

Two out of every 3 Medicaid-enrolled children ages 3-12 years saw a dentist in 2018. Nevertheless, early dental visits are not yet routine for Medicaid-enrolled children in Iowa younger than 3 years of age. In 2018, just 1 in 5 Medicaid-enrolled children age 2 and younger saw a dentist, although the first dental visit is recommended within six months of the first tooth erupting or by a child’s first birthday. Figure 2 illustrates the percent of Medicaid-enrolled children who saw a dentist in 2018 by age group.

One strategy used to help ensure at-risk children receive early cavity-preventing care before turning 3 years-old is for medical providers to apply fluoride varnish during well-child examinations. Until the past year, this strategy had seen limited success in Iowa. However, in 2018, 562 Medicaid-enrolled children ages 0-2 years were provided with a fluoride varnish application from a medical provider, an increase of 326 from 2017 and an increase of 547 from 2005. The sizeable increase in 2018 is likely the result of the Cavity Free Iowa project, which began in central Iowa. Through Cavity Free Iowa, medical providers are trained by I-Smile™ coordinators and encouraged to incorporate fluoride varnish applications as part of well-child visits, as recommended by Iowa’s Early and Periodic Screening, Diagnosis, and Treatment periodicity schedule.

**DISCUSSION**

The I-Smile™ network, a partnership between state and local public health programs and organizations, dentists, and other community members, is helping more Iowa children access dental services. Led by 23 regional coordinators, I-Smile™ uses a multi-pronged approach, which focuses on oral health promotion and education; community partnership-building; gap-filling preventive services; and care coordination and referrals for dental treatment and regular visits. With a 75 percent increase in Medicaid-enrolled children seeing a dentist in 2018 compared to 2005, the program and the many partnerships are demonstrating success.
The rate of Medicaid-enrolled children ages 3-12 years who saw a dentist in 2018 (61%) is especially remarkable because it is nearly the rate of privately insured Iowa children ages 1-20 who receive dental care. Data from the American Dental Association’s Health Policy Institute shows that in 2016, 63 percent of privately insured Iowa children received dental services.

Yet challenges remain, particularly for children younger than 3 years old. To address access for very young children, I-Smile™ will continue to use dental hygienists and nurses to provide preventive services at public health sites such as WIC clinics, Head Start centers, preschools, and child care centers. Through this approach, tooth decay may be prevented and, in turn, result in less need for costly restorative treatment and reduced health care costs.

Another way I-Smile™ is working to improve access to preventive services for young children is through increased outreach to medical providers. Because children younger than 3 years of age are more apt to routinely see physicians than dentists, medical providers are an ideal fit for the I-Smile™ safety net. Incorporating cavity-preventing fluoride varnish applications into well-child visits can be adopted as a standard practice for young patients. I-Smile™ coordinators will continue to provide oral health training for medical office staff and serve as a resource for the offices, providing patient educational materials and referral assistance for families without a dentist.

Iowa benefits from having a large number of dentists enrolled as Medicaid providers. Over the past two years, however, the number who are providing care has gone down, causing a smaller number of dental offices to take on a larger number of Medicaid-enrolled patients. Dentists often cite low reimbursement and administrative burden as the primary reasons they do not provide services for Medicaid-enrolled families. I-Smile™ coordinators will continue regular visits with dentists and office staff to help identify strategies that can increase engagement of dentists with I-Smile™, which may include participating in Give Kids a Smile Day, volunteering for screenings at community events, and accepting direct referrals from I-Smile™ coordinators.

One more strategy being incorporated within I-Smile™ is the use of silver diamine fluoride (SDF). Following the Iowa Dental Board’s adoption of rules in October that allow use of SDF by dental hygienists in public health locations, I-Smile™ is beginning to use it for children at WIC clinics. SDF is a product that when applied to teeth, not only prevents tooth decay, but can also stop the decay process in some existing cavities. In addition to stopping the pain caused by cavities, arresting tooth decay can sometimes eliminate the need for a restoration from a dentist and/or reduce the immediate need for a dental appointment to restore a cavity. This is particularly beneficial for families who have difficulties accessing dental appointments due to distance to dental offices, inability to pay for care, or other barriers they may face.

The future of I-Smile™ includes opportunities to strengthen progress as well as to improve upon challenges. Optimal health for a lifetime includes oral health and good oral health must be a priority beginning at birth.
### Table 3: Number of Medicaid-Enrolled Children Ages 0-12 Receiving a Dental Service From Dentists

<table>
<thead>
<tr>
<th>Ages 0-2</th>
<th>Ages 3-5</th>
<th>Ages 6-9</th>
<th>Ages 10-12</th>
<th>Ages 0-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Current</td>
<td>Baseline</td>
<td>Current</td>
<td>Baseline</td>
</tr>
<tr>
<td>Number of Children Receiving a Service</td>
<td>4,901</td>
<td>13,845</td>
<td>21,832</td>
<td>33,444</td>
</tr>
<tr>
<td>Total Enrolled</td>
<td>48,573</td>
<td>65,845</td>
<td>40,396</td>
<td>57,583</td>
</tr>
<tr>
<td>Increase in Number</td>
<td>8,944</td>
<td>11,612</td>
<td>18,914</td>
<td>14,067</td>
</tr>
</tbody>
</table>

### Table 4: Number of Medicaid-Enrolled Children Ages 0-12 Receiving a Dental Service From I-Smile™ (Title V) Dental Hygienists and Nurses in Public Health Settings

<table>
<thead>
<tr>
<th>Ages 0-2</th>
<th>Ages 3-5</th>
<th>Ages 6-9</th>
<th>Ages 10-12</th>
<th>Ages 0-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Current</td>
<td>Baseline</td>
<td>Current</td>
<td>Baseline</td>
</tr>
<tr>
<td>Number of Children Receiving a Service</td>
<td>3,104</td>
<td>11,192</td>
<td>3,246</td>
<td>12,049</td>
</tr>
<tr>
<td>Total Enrolled</td>
<td>48,573</td>
<td>65,845</td>
<td>40,396</td>
<td>57,583</td>
</tr>
<tr>
<td>Increase in Number</td>
<td>8,088</td>
<td>8,803</td>
<td>4,929</td>
<td>970</td>
</tr>
</tbody>
</table>