On June 14, 2019, the Advisory Committee on Dental Anesthesia (ACDA) met for the first time to review de-identified data provided by the staff of the Texas State Board of Dental Examiners (TSBDE). The ACDA consists of members of the dental and medical community appointed pursuant to 22 Tex. Admin. Code § 100.12. One member of the ACDA was unable to attend or participate in the preparation of the report. The five members present and participating in the preparation of this report were:

- Dr. Lisa Masters, DDS (Chairperson) - Periodontist
- Dr. Frank Ford, DDS - Dental Anesthesiologist
- Dr. Scott Ludlow, DDS - Pediatric Dentist
- Dr. Robert Peak, DDS - Oral and Maxillofacial Surgeon
- Dr. Wayne Radwanski, DDS - General Dentist

The ACDA was provided a data set pulled from available cases in the TSBDE's complaint files. The criteria to identify these cases came from the statutory authorization for the ACDA in Chapter 258, Subchapter E of the Texas Occupations Code and Board rule 22 Tex. Admin. Code § 100.12.

The criteria applied to select the fourteen cases for review were as follows. The TSBDE staff determined all jurisdictional cases where an official investigation was initiated on or after September 1, 2016 (Fiscal Year 2017) which involved an anesthesia-related death or incident. Determination of a death or incident was made by applying the criteria present in 22 Tex. Admin. Code § 100.12(c)(1),

[a] death shall be considered anesthesia-related if the dental treatment involved the administration of an anesthetic or sedative agent in the dental office, including local anesthesia, and a death occurred. An incident shall be considered anesthesia-related if the dental treatment involved the administration of an anesthetic or sedative agent in a dental office, including local anesthesia, and the Dental Review Panel identified a complication associated with the administration of the anesthetic or sedative agent.
After compiling the full body of responsive cases, staff determined which cases were resolved by the TSBDE during the prior fiscal years. Because the ACDA did not meet in 2018, the body of cases considered for this report were resolved by the TSBDE on or before August 31, 2018, representing the cases closed in Fiscal Years 2017 and 2018.

For purposes of the cases identified, "resolved" means closed by the TSBDE through any type of case resolution. This means that the group of cases provided to the ACDA may contain closed investigations that did not result in a public disciplinary action against the licensee in question. The ACDA does not review the disposition status of the resolved cases, and is not provided any identifying information related to the licensee. The resolution date for purposes of identifying data comes from the official date of disposition in the TSBDE’s records, not the date when a licensee or complainant was notified of the outcome of a case.

The data provided to the ACDA by TSBDE staff was de-identified and remained confidential throughout the review process. For purposes of the ACDA’s review, "de-identified" means that the data did not include identifying information of a patient or health care provider; the name, address, or date of birth of the patient or a member of the patient’s family; or the name or specific location of a health care provider who treated the patient. These de-identification and confidentiality provisions were applied by statutory direction pursuant to Tex. Occ. Code § 258.206. However, the ACDA was provided with summary information on each complaint and provider, including the Dental Review Panel review for each case (redacted as necessary), along with the full information identified in Board rule 22 Tex. Admin. Code § 100.12(c)(2).
I. Review of Data Provided to Committee

The ACDA reviewed de-identified data provided by the TSBDE's staff pursuant to the methodology discussed in the summary supra. The data set for the inaugural meeting of the ACDA included fourteen de-identified cases, with patient ages ranging from 6 months to 70 years in age. Below are selected data points for the cases included in the ACDA's review.

**Level of Anesthesia Administered**

- Local Anesthesia Cases: 4
- Nitrous Oxide Cases: 3
- Level 1 Cases: 1
- Level 2 Cases: 1
- Level 3 Cases: 3
- Level 4 Cases: 2

**Source of Complaint**

- Self-Reported: 7
- Public: 6
- Agency: 1
The ACDA conducted a review of the data associated with each of the fourteen complaints during their meeting on June 14, 2019. After a thorough review of the available data, the ACDA provides the following trends, recommendations and guidance to the TSBDE for consideration.

II. Trends

During discussion of the currently-available data, the ACDA identified the following trends present in the cases reviewed. Although the data set available to the ACDA is small and is unlikely to represent statistically significant findings at this time, the trends present below will be monitored by the ACDA for future findings and further recommendations as data becomes available.

- **Local Anesthesia Presents a Risk of Complications** - Four of the cases reviewed by the ACDA contained complications arising from the administration of local anesthetic alone. This trend indicates that the administration of local anesthetic presents a possible risk to patients, and should be administered cautiously by dentists in Texas. When combined with other levels of sedation, the risk is likely to increase.

- **Polypharmacy** - In several instances during the cases reviewed, the patient or person answering medical history questions on behalf of the patient appeared to omit or misreport medications taken by the patients at issue. The result is dangerous polypharmacy outcomes that are unintended side-effects of sedation/anesthesia.
• ASA Status Misidentification - Similar to the polypharmacy issue, it appears several patients in the data set were misidentified or failed to disclose serious health conditions on their health history information, leading to misidentification of the appropriate ASA status prior to the administration of sedation/anesthesia. It is unclear from the data set if this is primarily due to patient compliance and responsiveness or if the issue is failure to review medical history with the patient by the dentist and dental staff.

• Length of Procedures and Possible Complications - In the data reviewed, cases which were extensive or highly complex and spanned several hours appeared to present a much higher risk to patients. As a result, patients who are relatively healthy may still present a risk for complications. The data set was unclear on when the length of the procedure began to significantly increase the danger to patients.

III. Recommendations

As the ACDA does not have an extensive data set to review at this time, the recommendations below are limited to the fourteen cases reviewed at the June 14, 2019, meeting. However, the ACDA anticipates that as several years of data accumulate, more extensive and detailed recommendations will be possible. Based upon the discussion of cases currently available to the ACDA, the committee makes the following recommendations to the TSBDE for consideration and possible action.

• Providers Should Review the PMP to Minimize Polypharmacy Risks - As noted in the trend above, patients tend to report incomplete or inaccurate medical history and current medications when interacting with dental staff. The ACDA recommends that providers consider consulting the Texas Prescription Monitoring Program (PMP) to determine if patients have current controlled substance prescriptions, and to review this information with patients to reduce possible polypharmacy risks.

• TSBDE Should Consider Refining the Scope of "Hospitalization" - When reviewing the self-reports submitted as a portion of the data set, the ACDA determined that confusion seems to be common among providers and staff members as to when a patient is "hospitalized" for purposes of 22 Tex. Admin. Code § 108.6(2). The ACDA encourages the TSBDE to review the current definition and provide guidance to providers as to the appropriate circumstances when a patient has been "hospitalized" for purposes of reporting. In particular, the ACDA recommends considering a period of hospitalization in excess of 23 hours, i.e., a full day or longer, to be "hospitalization" for purposes of the Board’s rule. This definition would provide greater clarity than the existing definition of "an examination at a hospital or emergency medical facility that results in an inpatient admission for the purpose(s) of treatment and/or monitoring," as admission status and treatment and/or monitoring are vague terms, and terminology may vary among medical facilities.
• Providers Should Consider Medical Consultations for Lengthy Procedures -
Based upon the cases present in the data set, and as discussed in the trends
above, longer procedures appear to represent a higher risk of complications for
patients, even patients who present as relatively healthy. The ACDA does not
have a specific recommendation regarding length of procedure at this time.
However, the ACDA recommends that providers consider utilizing medical
consults for lengthy procedures, with particular emphasis to the physician
providing the consultation that the procedure will be several hours in length.
Patients with higher ASA classifications may also necessitate medical
consultation from treating specialists if the conditions present a risk during
lengthy sedation.