# Joint Commission on National Dental **Examinations**

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The Commission's 2023–2024 liaisons include: Dr. Allen Reavis (Board of Trustees, District 12) and Ms. Tareina Rogers (American Student Dental Association).

### Areas of Responsibility as Set Forth in the Bylaws or Governance and Organizational Manual of the American Dental Association

As listed in Chapter IX, Section 30.B. of the ADA Constitution and Bylaws, the duties of the Joint Commission on National Dental Examinations (JCNDE) shall be to:

- a. Provide and conduct examinations for all purposes, including assisting state boards of dentistry and dental examiners in exercising their authority to determine qualifications of dentists and other oral health care professionals seeking certification and/or licensure to practice in any state or other jurisdiction of the United States.
- b. Make rules and regulations for the conduct of examinations and the certification of successful candidates.
- c. Serve as a resource for dentists and other oral health care professionals concerning the development of examinations.
- d. Provide a means for a candidate to appeal an adverse decision of the Commission.
- e. Submit an annual report to the House of Delegates of this Association, and interim reports, on request.
- f. Submit an annual budget to the Board of Trustees of the Association.

#### Key Accomplishments and Outcomes: Agency Programs, Projects, Results and Success Measures

The Joint Commission is an agency of the ADA that maintains independent authority to pursue activities in accordance with the duties assigned to it within the ADA Constitution and Bylaws. As such, the Joint Commission determines its own corresponding goals and objectives. The information presented below is derived from the JCNDE's strategic plan, with corresponding updates provided in italics after each statement.

Goal One: Develop and conduct highly reliable, state of the art examinations to support decisions about licensure and certification of members of the oral health care team.

- 1. Conduct the National Board Dental Hygiene Examination (NBDHE) and ensure policies for the orderly, secure, and fair administration of this examination are implemented. The NBDHE continues to be administered in an orderly, secure, and fair manner. In 2024, the JCNDE conducted a Dental Hygiene Practice Analysis, to help guide future content development efforts involving the NBDHE and help ensure this examination continues to be relevant and aligned with current dental hygiene practice. This practice analysis is also being used to inform content development for the Dental Hygiene Licensure Objective Structured Clinical Examination (DHLOSCE).
- 2. Conduct the Integrated National Board Dental Examination (INBDE) and ensure policies for the orderly, secure, and fair administration of this examination are implemented. The INBDE was launched in 2020, with over 25,000 administrations successfully occurring since that time.
- 3. Conduct the Dental Licensure Objective Structured Clinical Examination (DLOSCE) and ensure policies for the orderly, secure, and fair administration of this examination are implemented. The DLOSCE launched in 2020 amid the pandemic and provided licensure options when legacy clinical examinations were unavailable. Approximately 519 DLOSCE administrations have successfully occurred.
- 4. Further integrate best practices in testing into JCNDE examinations by introducing multi-stage adaptive testing, 3-parameter logistic (3PL) model item response theory for the NBDHE, and the development of an image bank, to support the validity of JCNDE programs. Discussions concerning the potential use of multi-stage adaptive testing for the INBDE will occur in 2025. The JCNDE has directed staff to continue pursuing implementation of multi-stage adaptive testing for the NBDHE, with a target implementation date no sooner than 2027. The 3PL model for the NBDHE is anticipated to go into effect in 2026. The INBDE already incorporates the 3PL model. The JCNDE is continuing its efforts to move forward with an image bank software platform.
- 5. Explore the potential use of other innovations in testing, such as automatic item generation, simulations ("gamification" of testing), video, partial credit scoring and the use of testing windows, and develop recommendations on whether to pursue these testing modalities. Ongoing review and investigation continues to occur in this area, based on identified needs. The JCNDE is developing new 3D models and medical illustrations for the DLOSCE and DHLOSCE.
- 6. Engage key stakeholders and communities of interest in discussions of potential new examinations and testing modalities. The JCNDE regularly presents information on the DLOSCE, DHLOSCE, and INBDE at conferences and in webinars. Additionally, in 2023 the JCNDE surveyed dental boards to better understand their need for a National Board Dental Therapy Examination (NBDTE). The survey was distributed via email to dental boards in 54 jurisdictions (i.e., the 50 states, plus the District of Columbia, Guam, Puerto Rico, and the Virgin Islands). A total of 21 boards (i.e., 37%) completed all or part of the survey. The JCNDE did not receive a response from the remaining six (6) boards from states that authorize dental therapy in some or all settings. The JCNDE is interested in better understanding the need for an NBDTE, and has directed staff to develop an NBDTE business plan that outlines the anticipated requirements to

develop, implement, and provide ongoing support for such an examination. This business plan will be developed subsequent to the formal release of the DHLOSCE (i.e., in late 2025). The JCNDE has not made any formal decisions to pursue or not pursue an NBDTE.

Goal Two: Serve as a trusted and independent resource on assessment for the oral health care professions to state dental boards and other key stakeholders.

- 1. Develop a strategic communications plan to guide JCNDE's communications and engagement with key stakeholder groups (i.e., stakeholder mapping, understanding stakeholders' interests and needs, reframing the messaging around the "why," increasing understanding of the range of resources JCNDE can provide). JCNDE communications are an ongoing and vital activity. At each of its meetings the JCNDE considers communication activities and identifies specific areas where communication is needed. Additionally, a new staff member was hired in 2023 to help manage communication activities, and a strategic communication plan is currently in progress. Review of this plan will occur annually.
- 2. Provide high quality tools, credible information, and guidance about best practices in testing and assessment to support state boards in carrying out their role regarding the licensure and certification of oral health care professionals. This represents an ongoing activity. The JCNDE has conducted webinars and provided presentations to state dental boards, the American Association of Dental Boards (AADB), and the American Association of Dental Administrators (AADA). During these presentations staff routinely point to the Standards for Educational and Psychological Testing (AERA, APA, NCME, 2014) as a primary reference in support of valid, fair, and reliable examinations. Staff attend professional meetings and industry conferences involving testing (i.e., Association of Test Publishers) to remain fully informed on industry best practices and innovative developments.
- 3. Increase understanding of the mission and work of the JCNDE among members of the ADA House of Delegates, and the importance of JCNDE's position and reputation as a credible and independent testing agency. This goal was originally articulated to facilitate approval of desired Bylaws changes that were submitted to the ADA HOD in 2019. The desired changes were approved by the HOD at that time, and since then the JCNDE has expanded this goal to include additional communities of interest. Consistent with its Vision, through communication with communities of interest the JCNDE continues to assert its position and reputation as the leading resource for the valid, reliable, and fair assessment of oral health professionals.
- 4. Reduce incidents of cheating and sharing of exam questions among test takers by increasing understanding of the impact on the exam's cost and validity, stressing professionalism, and raising awareness of the potential consequences of such actions. The JCNDE continues to pursue activity in support of this goal. Plans are in development to roll out informational materials (i.e., posters, articles, and videos), educating students and examination candidates on the impact and consequences of rule violations. Additionally, the JCNDE approved a resolution indicating that rule violations and/or irregularities occurring in separate examination programs implemented by the Department of Testing Services (e.g., the Advanced Dental Admission Test) may result in penalties that impact a candidate's ability to test in a National Board Examination program.
- 5. Utilize Commissioners as peer ambassadors to increase understanding of the JCNDE and build stronger relationships with state dental boards. In promoting the DLOSCE with dental boards, the JCNDE has utilized a combination of Commissioners, former DLOSCE Steering Committee members, and staff to deliver the message. This has helped in promoting the DLOSCE and will continue to be utilized going forward in promoting the DLOSCE and DHLOSCE.

Goal Three: Maintain the responsiveness, credibility, and independence of the JCNDE.

- 1. Undertake a comprehensive review of the JCNDE's governing documents (e.g., bylaws, standing rules, exam regulations, composition, and structure) and make recommendations to strengthen the governance systems and structures as appropriate. JCNDE governance documents were comprehensively reviewed and revised in 2019, with corresponding changes approved by the JCNDE as appropriate, or moved forward to the ADA Board of Trustees and HOD as applicable. The ADA HOD accepted the changes recommended by the JCNDE. The JCNDE has appreciated the support of the ADA BOT and HOD, and the confidence that has been placed in the JCNDE. In December of 2023, the JCNDE also approved significant changes to its approach to committees and meetings. These changes better leverage the insights and contributions of all Commissioners, while also improving the JCNDE's operational efficiency.
- 2. Identify opportunities to increase the agility and nimbleness of the JCNDE's governance and decision-making processes. The JCNDE reviews its policies and governance documents on an annual basis, providing agility and nimbleness. Additionally, the JCNDE has conferred additional powers to its Chair in times of crisis, to expedite and facilitate decision-making when time is of the essence. The aforementioned changes to the JCNDE's approach to committees and meetings were also targeted at increasing the JCNDE's agility and nimbleness.

#### **Emerging Issues and Trends**

The following communicates the actions of the JCNDE since its prior Annual Report to the HOD:

- 1. Pursued efforts in support of the strategic direction of the JCNDE as it pursues its mission and vision.
  - a. Monitored progress and efforts to design, construct, and implement the JCNDE's Dental Hygiene Licensure Objective Structured Clinical Examination (DHLOSCE), including approval of updates to the test content outline and test specifications for the DHLOSCE. The DHLOSCE is proceeding on schedule.
  - b. Directed staff to propose revisions to JCNDE governance documents and meeting schedules, to facilitate the nimbleness and agility of the JCNDE, providing timely consideration of important issues pertaining to the construction, implementation, and administration of National Board Examinations. Staff provided proposed revisions in December 2023, which were approved by the JCNDE at that time. The JCNDE has been operating in accordance with these changes since this approval.
  - Established a new INBDE performance standard. This standard was identified through a structured and rigorous process involving a standard setting review panel composed of a diverse and representative group of subject matter experts who thoroughly scrutinized INBDE content to identify the performance level required for safe practice.
  - Reviewed findings from a JCNDE survey of dental boards, to better understand the potential need for a National Board Dental Therapy Examination (NBDTE). Based on survey findings the JCNDE directed staff to develop a business plan for an NBDTE, to further investigate the possibility of NBDTE development by outlining the anticipated requirements to design, construct, implement, and provide ongoing support for such an examination. This plan will be developed subsequent to the release of the DHLOSCE. The JCNDE has not made any formal decisions to pursue or not pursue an NBDTE.
  - Reviewed a presentation from the Council of State Governments (CSG) concerning their potential dental and dental hygiene licensure compact under consideration throughout the U.S. As of June 6, 2024, it is the JCNDE's understanding that nine states have enacted legislation involving this compact, while three states have legislation pending.
- 2. Approved actions in support of the continued fairness of administrations of Joint Commission National Board Examinations.
  - a. Conducted a successful pilot and subsequently adopted a new Fairness and Sensitivity Review process that involves convening a separate group of Fairness and Sensitivity

- Reviewers to review examination content specifically from a fairness perspective. This is in addition to efforts test constructors already take to help ensure the fairness of National Board Examination content.
- b. Reviewed applications and approved subject matter experts to serve as Fairness and Sensitivity Reviewers.
- 3. Strengthened and aligned the JCNDE's efforts to fairly and accurately assess the knowledge, skills, and abilities of aspiring oral healthcare professionals, to provide comprehensive and precise evaluation for licensure purposes. This occurs through adoption of strategic goals and roadmaps to help set the strategic direction for the examination programs of the JCNDE, as well as external psychometric review where appropriate.
  - a. Dental Examination Programs Strategic Roadmap
    - i. A dental practice analysis is scheduled to occur (2025), to inform future updates to the examination content domains for the INBDE and DLOSCE.
    - ii. The JCNDE will convene subject matter expert panels to consider the results of the dental practice analysis and recommend corresponding updates to the INBDE and DLOSCE test specifications (2026), as well as new performance standards for the INBDE and DLOSCE (2027), in light of the preceding updates.
    - iii. The JCNDE will consider potential implementation of multi-stage adaptive testing for the INBDE as a means of shortening the INBDE and increasing test security, while still maintaining strong psychometric properties.
  - b. Dental Hygiene Examination Programs Strategic Roadmap
    - i. The JCNDE will convene a subject matter expert panel (2024) to consider the results of the JCNDE's 2024 dental hygiene practice analysis and recommend corresponding updates to the NBDHE test specifications.
    - ii. The JCNDE will launch the DHLOSCE (March 2025) and convene a subject matter expert panel to recommend a performance standard for the examination.
    - iii. The JCNDE will convene a subject matter expert panel (2025) to recommend a new performance standard for the NBDHE, in light of updated test specifications.
    - The JCNDE anticipates implementing multi-stage adaptive testing for the NBDHE no sooner than 2027.
  - c. The JCNDE has approved a set of external psychometric consultants to help provide guidance to the JCNDE, as needed. These technical consultants were selected based on their advanced expertise in areas pertaining to the initiatives indicated above.
- 4. Advanced the security of National Board Examination (NBE) administrations, to further increase confidence that results of NBEs provide an accurate representation of candidate skills and abilities.
- 5. Reviewed JCNDE communication activities and identified specific areas where additional communication is needed, including the need to further promote the DLOSCE and DHLOSCE and enhance awareness concerning the JCNDE's Image Portal.
- 6. The Joint Commission continues to take action to ensure it has sufficient, highly capable, and knowledgeable test constructors to build rigorous examination content. This occurred through the appointment and reappointment of DLOSCE, INBDE, DHLOSCE and NBDHE test constructors to serve in DLOSCE, INBDE, DHLOSCE, and NBDHE Test Constructor Pools.
- 7. At its annual Governance, Policies, and Administration meeting in June the JCNDE will review and approve its 2024 and 2025 budget proposal, and recommend examination fees for 2025.
- 8. The Joint Commission monitors its examinations closely and regularly to ensure they are psychometrically valid and performing as intended.
- 9. The next public meetings of the JCNDE are scheduled for June 26, 2024, April 25, 2025, and June 25, 2025. State Dental Board Forums will occur August 19, 2024 and August 18, 2025.

10. The following provides performance information for each of the examinations of the JCNDE.

**INBDE:** Table 1 presents performance trends for the INBDE in the past four years. As shown, the number of candidates completing the INBDE has increased significantly in virtually all categories, due to the discontinuation of the NBDE Part II on December 31, 2022. Failure rates for the INBDE have been low for first-time candidates educated by accredited programs, across the initial years of the INBDE's implementation. Conversely, failure rates for first-time candidates educated by nonaccredited programs are significantly higher, ranging from 38.8% in 2020 to 16% in 2023. The preceding indicates that candidates educated by CODA-accredited dental programs are wellprepared to challenge the INBDE, as compared to those educated by non-accredited programs.

Table 1 Numbers and Failure Rates for First-time and Repeating Candidates

							NDDE							
	Accredited <sup>†</sup>						Non-Accredited <sup>‡</sup>					Total		
	First Attempt a		Mixed Attempt <sup>b</sup>		Retake °		First Attempt <sup>a</sup>		Mixed Attempt <sup>b</sup>		Retake <sup>c</sup>		All Attempts	
	N	% Fail	N	% Fail	N	% Fail	N	% Fail	N	% Fail	N	% Fail	N	% Fail
2020	204	1.0	1	0.0	69	7.3	147	38.8	0	-	117	58.1	538	24.5
2021	2,018	1.3	3	0.0	245	16.0	1,340	33.1	1	0.0	971	55.8	4,578	22.3
2022	5,837	0.8	15	0.0	234	13.2	2,144	25.3	10	20.0	1,145	44.7	9,385	12.1
2023	6,648	0.4	11	0.0	136	14.0	3,277	16.0	24	8.3	1,212	33.8	11,308	8.7

<sup>&</sup>lt;sup>a</sup> Indicates candidates who had never previously attempted the INBDE, NBDE Part I, or NBDE Part II.

**NBDHE:** Table 2 presents performance trends for the NBDHE over the past 10 years. As shown, administration volume has generally been quite consistent, with **first-time** candidates educated by accredited programs testing at much higher volumes than candidates educated by non-accredited programs. Decreases and increases in test administration volume and failure rates occurring between 2020 and 2022 are largely a function of the impact of the COVID-19 pandemic; fewer administrations occurred in 2020 due to pandemic restrictions. Correspondingly, candidates were further removed from their studies and clinical experiences at the time of their (delayed) test administrations, and consequently performed less well on the examination. This pattern is illustrated through corresponding increases in failure rates (13.4% and 14.3% in 2021 and 2022, respectively) and more retake administrations in those years. Failure rates for candidates educated by accredited and nonaccredited programs were lower in 2023, as compared to 2022.

b Indicates candidates who passed NBDE Part I on their first attempt and subsequently elected to attempt the INBDE instead of NBDE Part II.

c Indicates candidates who had previously attempted and failed the INBDE, NBDE Part I, or NBDE Part II.

<sup>&</sup>lt;sup>†</sup> Indicates candidates trained by dental education programs accredited by CODA.

<sup>&</sup>lt;sup>‡</sup> Indicates candidates trained by dental education programs not accredited by CODA.

NBDHE NBDHE											
		Accr	edited			Non-Acc	Total				
Year	Year First-time			eating	Firs	t-time	Rep	eating	First-time and Repeating		
	Number	% Failing	Number	% Failing	Number	% Failing	Number	% Failing	Number	% Failing	
2014	7,357	4.8	527	47.4	204	23.0	68	63.2	8,156	8.5	
2015	7,227	4.4	499	46.3	179	22.9	40	55.0	7,945	7.7	
2016	7,397	5.1	506	41.7	214	27.6	45	35.6	8,162	8.1	
2017*	7,262	6.2	677	49.8	253	33.2	81	46.9	8,273	11.0	
2018	7,360	5.8	654	46.2	328	34.8	88	44.3	8,430	10.4	
2019	7,316	7.9	852	49.1	377	35.5	119	51.3	8,664	13.8	
2020	6,938	9.7	764	51.3	302	44.0	135	60.7	8,139	15.7	
2021	7,478	13.4	1,571	50.5	534	51.3	271	59.4	9,854	22.7	
2022	6,933	14.3	1,721	54.5	235	55.7	168	66.1	9,057	24.0	
2023	7,456	12.1	1,682	53.9	295	46.4	172	61.1	9,605	21.4	
* A new standard was introduced this year, based on updated standard setting activities.											

Table 2 Numbers and Failure Rates for First-time and Repeating Candidates

**DLOSCE:** Table 3 presents performance trends for the DLOSCE in the past four years. Table 3 shows a decrease in administration volume in 2021 and 2022 relative to the first year of this examination program, but an increase in failure rates attributable to the rigorous nature of this valid, reliable, and fair examination program. In 2023 the total administration volume increased and the overall failure rate decreased, as compared to 2022.

Table 3

	Numbers and Failure Rates for First-time and Repeating Candidates  DLOSCE										
		Accre	edited*			Non-Acc	Total  First Attempts and Retakes				
	First /	Attempt	Retake		First Attempt					Re	take
Year	Number	% Failing	Number	% Failing	Number	% Failing	Number	% Failing	Number	% Failing	
2020	231	9.5	2	0.0	14	57.1	1	100.0	248	12.5	
2021	97	5.2	10	30.0	9	11.1	6	66.7	122	10.7	
2022	52	21.2	5	40.0	6	0.0	2	50.0	65	21.5	
2023	71	9.9	2	0.0	11	45.5	0	0.0	84	14.3	

<sup>\*</sup> Indicates candidates educated by dental education programs accredited by CODA.

#### **Responses to House of Delegates Resolutions**

The Joint Commission did not receive any assignments from the ADA House of Delegates in 2023.

#### **Self-Assessment**

The Joint Commission is next scheduled to conduct a self-assessment in 2027.

## **Policy Review**

While the Joint Commission is an agency of the ADA, it maintains independent authority to provide and administer licensure exams in accordance with its assigned Bylaws duties. The Joint Commission maintains its policies and procedures in the following documents: 1) Rules of the Joint Commission on National Dental Examinations, and 2) Operational and Policy Manual of the Joint Commission on National Dental Examinations. Any noteworthy policy changes are indicated in prior areas of this annual report.

<sup>\*\*</sup> Indicates candidates educated by dental education programs not accredited by CODA. Failure rates for this group should be interpreted with caution due to the small sample size present.

## **Commission Minutes**

For more information on recent activities, see the Commission's Unofficial Actions Report on ADA.org.