State Dental Board Forum (SDBF)

Cataldo W. Leone, DMD, DMSc, FACD, FICD
Chair, JCNDE

Kanthasamy Ragunanthan, DDS, MS
Vice Chair, JCNDE

David M. Waldschmidt, Ph.D.
Director, JCNDE

June 23, 2020
Overview

• Welcome
• The purpose of the JCNDE
• The purpose of the SDBF
• JCNDE initiatives
• The JCNDE’s response to COVID-19
• Updates on the National Board Examinations
• Updates on the INBDE
• The DLOSCE
• Q & A
Welcome

• In attendance today we have:
  − Members of dental boards
  − Members of the JCNDE
  − Guests
  − Observers
  − Staff (e.g., Department of Testing Services)
The Purpose of the JCNDE

• The JCNDE provides information to dental boards to inform licensure decisions concerning dental and dental hygiene candidates.
  – Dental boards have the critical task of using this information to understand whether a candidate has the skills necessary to safely practice.
  – The actions of dental boards are vital to the oral health and general health of the public.

• The JCNDE extends its thanks to dental boards and dental board members for their work in protecting the public health.

• The JCNDE appreciates the opportunity to be of service to boards, in providing important information concerning candidate qualifications for licensure.

• The JCNDE recognizes the importance of its task and shares dental boards concern for the protection of the public.
The Purpose of SDBF

- The SDBF was created to encourage dialogue between the JCNDE and dental board members.
  - The SDBF was previously referred to as the National Dental Examiners’ Advisory Forum (NDEAF). The name was changed in June 2019.

- The JCNDE’s examinations are designed to help dental boards understand whether a candidate possesses the skills that are needed to safely practice.
  - The content outlines for National Board Examinations (NBEx) are available online in Candidate Guides and Technical Reports.
  - Dental board members can use this material to understand the nature of NBE skill evaluation, and the validity evidence that supports use of these examinations.

- The SDBF provides an opportunity for the JCNDE to interact with board members in order to understand their unique perspectives and identify any areas for improvement concerning the examinations.
Protecting public health through valid, reliable and fair assessments of knowledge, skills, and abilities to inform licensure and certification decisions that help ensure safe and effective patient care by qualified oral healthcare team members.
The JCNDE is a Commission of the ADA

• Philosophical foundation of Commissions:
  – Commissions must be:
    • Consistent
    • Free from bias and conflict of interest
    • Objective
  – No single community of interest can have undue influence in the decision-making process, including the ADA.
  – Quality assurance is necessary to protect the public and assure long-term viability of the profession.
  – Integrity, confidentiality, due process.


• Commissions maintain independent authority to carry out their program.
### Composition of the JCNDE

<table>
<thead>
<tr>
<th>Appointing Organizations</th>
<th>Number of Members</th>
<th>Term Lengths (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Voting Members</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AADB</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>ADEA</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ADA</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>ADHA</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>ASDA</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Public</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Non-voting Members</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASDA Observer</td>
<td>1</td>
<td>1*</td>
</tr>
<tr>
<td>ADA BOT Liaison</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* The ASDA Observer transitions to a Commissioner role in their second year.
# Appointing Organizations and Current Appointees

<table>
<thead>
<tr>
<th>Appointing Organizations</th>
<th>Names</th>
</tr>
</thead>
</table>
| **AADB (6)**             | Roy L. Irons, DDS  
                           | Frank A. Maggio, DDS  
                           | William F. Robinson, DDS  
                           | R. Michael “Mike” Sanders, DMD  
                           | Wesley Delaine Thomas, DMD  
                           | Mary A. Starsiak, DDS, FAGD, FACP, FICD, FADI, FPF  |
| **ADA (3)**              | Kanthasamy K. Ragunanthan, DDS, MS (Vice Chair)  
                           | Michael E. King, DDS  
                           | Patrick J. Tepe, DDS  |
| **ADEA (3)**             | Cataldo W. Leone, DMD, DMS, FICD (Chair)  
                           | John D. Da Silva, DMD, MPH, ScM  
                           | Joseph J. Zambon, DDS, PhD  |
| **ADHA (1)**             | Joanna Allaire, RDH, MDH  |
| **ASDA (1)**             | Brandon D. Rensch, BS  |
| **Public (1)**           | Douglas C. Wilson, Ph.D.  |
| **Liaisons & Observers** | Laura Jeannie Binder (ASDA Observer)  
                           | James D. Stephens, DDS (ADA Board Liaison)  
                           | Liaisons and observers do not participate in voting  |
Key Points

• The composition of the JCNDE reflects the important perspectives that must be considered in the building and implementing of JCNDE examinations, with particular emphasis given to dental boards.

• The JCNDE has a long track record of helping dental boards identify those who are not qualified to safely practice.

• The JCNDE monitors administrations through internal procedures and close collaboration with key vendors (Prometric and Pearson VUE).

• The JCNDE monitors examination and examinee performance closely and regularly, and reviews examination policy on an ongoing basis to address any issues that arise.

• The JCNDE updates examination content and programs to ensure clinical relevance and to help ensure consistent, accurate identification of those who do not possess the skills necessary to safely practice.
Unofficial Reports of Major Actions

The documents below provide a source of information for members and communities of interest and include other major actions approved and revisions adopted at Joint Commission meetings.

- Download Unofficial Actions from June 2019 meeting (PDF)
- Download Unofficial Actions from June 2018 meeting (PDF)
- Download Unofficial Actions from June 2017 meeting (PDF)
- Download Unofficial Actions from June 2016 meeting (PDF)
- Download Unofficial Actions from April 2015 meeting (PDF)
- Download Unofficial Actions from April 2014 meeting (PDF)

https://www.ada.org/en/jcnde/news-resources/unofficial-reports
Strategic Initiatives

- Broadening of scope and comprehensiveness of skill evaluation, consistent with the JCNDE Mission and Vision
  - Implementation of the Dental Licensure Objective Structured Clinical Examination (DLOSCE)
  - Implementation of the Integrated National Board Dental Examination (INBDE)
- Improvements to scoring precision, increasing the accuracy in understanding whether a candidate possesses the necessary level of skills to safely practice
  - Investigations into the feasibility of using advanced scoring models for use in the National Board Dental Hygiene Examination (NBDHE)
- Improvements to measurement and test security
  - Investigation into the feasibility of multi-stage adaptive testing
  - Psychometric analyses to detect irregularities
- Focus on JCNDE communications and increasing stakeholder engagement
# The Department of Testing Services (DTS)

DTS is composed of many different units:

## Examination Content, Scoring, Analysis, New Development

<table>
<thead>
<tr>
<th>Test Development</th>
<th>Research &amp; Development - Psychometrics</th>
<th>New Psychometric Development &amp; Innovations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducts Test Construction Team (TCT) meetings for seven examination programs (80+ meetings annually)</td>
<td>Oversees analysis and scoring of examinations (45,000+), professional investigations, and technical publications in support of examination programs</td>
<td>Provides psychometric support in the development of new testing programs.</td>
</tr>
</tbody>
</table>

## DTS Operations

<table>
<thead>
<tr>
<th>Test Administration</th>
<th>Test Security and Fraud Prevention</th>
<th>Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oversees application processing and test vendor administrations (40,000+)</td>
<td>Monitors test security policies, procedures, irregularities and candidate appeals; risk assessment</td>
<td>Provides communications for stakeholders and communities of interest</td>
</tr>
<tr>
<td>Responds to phone calls, live chats, emails, faxes (nearly 70,000 annually)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resolves testing day problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client Services/Special Projects</td>
<td>Volunteer and Meeting Coordination</td>
<td></td>
</tr>
<tr>
<td>Project management and services to outside clients</td>
<td>Oversees volunteer activities and meeting logistics for TCT and governance meetings.</td>
<td></td>
</tr>
</tbody>
</table>
The Standards for Educational and Psychological Testing

- The *Standards* were developed by the American Educational Research Association (AERA), American Psychological Association (APA), and the National Council on Measurement in Education (NCME).
- The *Standards* provide considerations for developing, implementing, and evaluating tests.
- The *Standards* and industry best practices help guide JCNDE and DTS activities as it designs, constructs, and implements the assessments under its care.
- The JCNDE’s primary focus is on validity, the evidence that supports the interpretation and use of NBE results.
JCNDE Response to COVID-19
JCNDE Response to COVID-19

- Impact of COVID-19 on Licensure and Admission Testing
  - Prometric and Pearson VUE close test administration centers throughout US
  - Candidate testing appointment displacements
    - In 60 days Prometric experienced over 450,000 candidate displacements, the number they typically experience in 7 years
  - Clinical testing agencies (WREB, CDCA, SRTA, CITA, CRDTS) unable to administer their clinical patient licensure exams
  - Testing industry implications
    - A growing list of colleges and universities have temporarily suspended use of the SAT and ACT (University of California, Cornell, Wellesley, Northwestern, etc.)
    - College Board Advanced Placement (AP) tests remotely administered (with issues)
    - American Board of Radiology cancels most of its exams for 2020
JCNDE Response to COVID-19

• JCNDE response
  – DLOSCE implementation fast-tracked
  – Introduction of short-form-NBDHE anticipated in mid-July 2020, with accompanying rollout to thousands of Pearson VUE test centers
  – Delayed discontinuation of NBDE Part I (now Oct 31, 2020), and expanded eligibility periods for candidates (through Dec 31, 2020)
  – 6,000 live chats to assist candidates (in 3 months handled typical chat volume for 4 years)
  – All test construction team meetings held remotely in 2020
  – Integrated National Board Dental Examination (INBDE) launch remains Aug. 1, 2020
  – The JCNDE and DTS are pursuing solutions that address pressing needs while maintaining high psychometric standards (validity, reliability), in recognition of the importance of these testing programs
NBDHE Program Modifications

• Many students graduating from dental hygiene education programs in 2020 encountered significant challenges in scheduling a time to take the NBDHE, due to circumstances involving COVID-19

• The JCNDE is currently working to implement the following strategies to address the significant needs present at this time:
  – The length and testing time of the NBDHE has been reduced
  – NBDHE administrations will be permitted at thousands of Pearson VUE Authorized Test Centers located throughout the US, in addition to the 280+ Pearson Professional Centers that are owned and operated by Pearson VUE, and that currently administer the NBDHE.

• Members of the JCNDE technical advisor panel have often commented over the years that the examinations of the JCNDE are quite long.

• The JCNDE believes that—by making these changes—the current backlog of NBDHE candidates waiting to test will be addressed by the end of summer.

• Shortened versions of the NBDHE have been subject to thorough psychometric investigation; there is strong validity and reliability evidence to support usage of these reduced-length examination forms.
Update on the National Board Examinations

NBDE Part I
NBDE Part II
NBDHE
NBE Purpose and Interpretation

• The purpose of the National Board Examinations (NBE) is to assist state boards in determining the qualifications of individuals seeking licensure to practice.

• The NBE are used to determine whether a candidate possesses the minimally acceptable level of knowledge, cognitive skills, and ability that is necessary for safe, entry-level practice:
  – Dentistry (NBDE)
    • Part I: Anatomic sciences, biochemistry-physiology, microbiology-pathology, and dental anatomy & occlusion.
    • Part II: Dental and clinical dental sciences.
  – Dental Hygiene (NBDHE)
    • Scientific basis for dental hygiene practice, provision of dental hygiene services, community health and research principles.
Standard Setting

• Part I, Part II, and the NBDHE are criterion-referenced examinations (not norm-referenced).
• Panels of expert educators and practitioners identify standards (pass/fail points or “cut scores”) following established procedures and criteria, not by the process sometimes known as “grading on a curve.”
• Standards are maintained across examination forms through equating procedures that control for any subtle differences in difficulty across examination forms.
• Recent standard setting activities implemented in 2016 and 2017 for all NBE programs were facilitated by Dr. Gregory Cizek, a nationally recognized expert in standard setting who has authored several books on the subject (Cizek 2001, 2012; Cizek & Bunch, 2007).
• Communication regarding upcoming changes to standards began in 2015.
• At the conclusion of all activities, participants’ evaluations of all aspects of the process were uniformly strong and supportive, with each panelist supporting the final group-recommended performance standard.
* A new standard was introduced this year, based on updated standard setting activities.
* A new standard was introduced this year, based on updated standard setting activities.
NBDHE Failure Rates (%)

* A new standard was introduced this year, based on updated standard setting activities.
Update on the Integrated National Dental Board Examination (INBDE)
The INBDE

• The INBDE will replace the NBDE Parts I and II
• The INBDE is designed to better protect the public through a clinically relevant, summative cognitive assessment that integrates biomedical and clinical skills measurement
• The INBDE is the product of many years of hard work by dedicated JCNDE subject matter experts and volunteers. Most notably, the Committee for an Integrated Examination (CIE) and teams of test constructors. DTS has provided support for these activities. The work includes, for example:
  – Focused efforts to develop and support the INBDE content domain – the Domain of Dentistry
  – Practice analyses involving thousands of entry-level dentists
  – Numerous subject matter expert panels (test specifications, standard setting, etc.)
Stakeholders and communities of interest

- The Public
- Dental boards (states, territories)
- The JCNDE
- The CIE
- INBDE working committees
  - INBDE Science Panels
  - Test Specification Review Panels
- Test Construction Teams
- Department of Testing Services
- Dental programs
- Dental students
- Associations (ADA, AADB, ADEA, ASDA, ATP, etc.)
- Vendors (test administration, item bank)
Guiding Principles in INBDE development

- Examination purpose drives all development decisions.
  - *Does the candidate possess the level of knowledge and cognitive skills required to safely practice?*
- Focus rests on clinical relevance. Integration provides a means of achieving clinical relevance.
- Promote the clinical relevance of the biomedical sciences by placing foundation knowledge areas within the context of clinical content areas.
- Increased focus on the general dentist in item writing.
- Standardized presentation format and conventions for presenting information.
- Direct and concise wording that focuses examinees on the concept tested as opposed to language/item wording.
- Increased accuracy, validity, and fairness/sensitivity through a thorough, multi-faceted item development and review process that capitalizes on the unique expertise of the individuals involved.
## INBDE Test Specifications

<table>
<thead>
<tr>
<th>#</th>
<th>Foundation Knowledge Area</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Molecular, biochemical, cellular, and systems-level development, structure and function</td>
<td>12.2%</td>
</tr>
<tr>
<td>2</td>
<td>Physics and chemistry to explain normal biology and pathobiology</td>
<td>6.8%</td>
</tr>
<tr>
<td>3</td>
<td>Physics and chemistry to explain the characteristics and use of technologies and materials</td>
<td>8.0%</td>
</tr>
<tr>
<td>4</td>
<td>Principles of genetic, congenital and developmental diseases and conditions and their clinical features to understand patient risk</td>
<td>10.6%</td>
</tr>
<tr>
<td>5</td>
<td>Cellular and molecular bases of immune and non-immune host defense mechanisms</td>
<td>9.0%</td>
</tr>
<tr>
<td>6</td>
<td>General and disease-specific pathology to assess patient risk</td>
<td>11.8%</td>
</tr>
<tr>
<td>7</td>
<td>Biology of microorganisms in physiology and pathology</td>
<td>10.6%</td>
</tr>
<tr>
<td>8</td>
<td>Pharmacology</td>
<td>10.6%</td>
</tr>
<tr>
<td>9</td>
<td>Sociology, psychology, ethics and other behavioral sciences</td>
<td>10.6%</td>
</tr>
<tr>
<td>10</td>
<td>Research methodology and analysis, and informatics tools</td>
<td>9.8%</td>
</tr>
</tbody>
</table>
INBDE Implementation Plan

Extended to October 31, 2020 due to COVID-19
INBDE Quick Facts

• **Administration:** The INBDE will contain 500 questions and require 1½ days to administer
  – Administrations will occur at Prometric professional testing centers located throughout the US and Canada
  – Irregularity handling and appeal procedures remain the same
  – 2020 NBDE fees are as follows: INBDE — $680; NBDE Part I — $445; NBDE Part II — $490

• **Candidate Results:** INBDE results will be reported as Pass/Fail
  – For remediation purposes, candidates who fail the examination will be provided with information concerning their performance in the major INBDE topic areas

• **State Board Results.** Candidates’ pass/fail status will be reported to state boards through the DTS Hub
  – The DTS Hub will indicate whether a candidate has met or not met the National Board Dental Examination cognitive skills requirements for dentistry. A complete history of NBDE results will be reported for each candidate.

• **Additional Resources**
  – Additional information about the INBDE is available at [ada.org/inbde](http://ada.org/inbde)
The Dental Licensure Objective Structured Clinical Examination (DLOSCE)
Why develop the DLOSCE?

• Gives dental boards the ability to identify those who lack the skills necessary for safe practice, using a professionally developed examination backed by strong validity evidence.

• Eliminates undesirable situations and complications that can arise from the use of patients in the examination process (e.g., patient’s more pressing needs not treated in lieu of pursuing the “perfect lesion”).

• Allows for more objective and comprehensive measurement of candidate skills.

• Helps dental boards in their mission to protect the public.
As of January 2020, the DLOSCE is governed by the Joint Commission on National Dental Examinations (JCNDE). The **DLOSCE Steering Committee** is the Committee of the JCNDE that is charged with the task of developing and validating the DLOSCE. Membership in this committee is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Commission on National Dental Examinations (JCNDE) members</td>
<td>Dr. Cataldo Leone, JCNDE Chair (MA)</td>
</tr>
<tr>
<td></td>
<td>Dr. William Robinson (FL)</td>
</tr>
<tr>
<td>General dentist members (ADA Board of Trustees)</td>
<td>Dr. Roy Thompson, Committee Chair (TN)</td>
</tr>
<tr>
<td></td>
<td>Dr. Craig Armstrong (TX)</td>
</tr>
<tr>
<td>General dentist members (formerly on CDEL)</td>
<td>Dr. Edward J. Hebert (LA)</td>
</tr>
<tr>
<td></td>
<td>Dr. Prabu Raman (MO)</td>
</tr>
<tr>
<td>Educators with experience teaching comprehensive clinical dentistry</td>
<td>Dr. Michael Kanellis (IA)</td>
</tr>
<tr>
<td></td>
<td>Dr. Frank Licari (UT)</td>
</tr>
<tr>
<td>State dental board members</td>
<td>Dr. David Carsten (WA)</td>
</tr>
<tr>
<td></td>
<td>Dr. Mark R. Stetzel (IN)</td>
</tr>
</tbody>
</table>
The DLOSCE approach

• The DLOSCE measures clinical judgment

• Disciplinary actions by dental boards are largely focused on errors in clinical judgment.

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

• Questions require candidates to display depth and breadth of clinical judgment.

  “Does the candidate think like a doctor?”

• The focus rests on what the candidate can do, emphasizing cognitive skills involving application/synthesis as opposed to simple recall.

• DLOSCE content is built by teams of highly qualified subject matter experts (e.g., 150+ test constructors)
What is an Objective Structured Clinical Examination (OSCE)?

- A method of measurement
- Candidates rotate through short, standardized stations
- Assesses clinical competence, patient communication skills, knowledge of clinical procedures, prescription writing, etc.
- Widely used in the health sciences
- Success requires critical thinking
- OSCEs are evolving
Why conduct an OSCE?

• Benefits include:
  • Assesses broad range of skills, including clinical and theoretical knowledge
  • Standardized (stations, competencies, tasks)
  • Strong validity evidence
  • Reliable
  • Fair
Can OSCEs currently be found in dental licensure?

- The OSCE developed by the National Dental Examining Board (NDEB) of Canada provides an example of one possible approach.
  - Development is a recurring, critical activity undertaken by experts, with questions selected by general practitioners to ensure clinical relevance.
  - The OSCE is administered three (3) times per year (March, May, and November) in fixed testing windows.
  - Administrations include 50 physical stations with two questions each, plus rest stations. Stations are focused and short (5-minutes).
  - NDEB Canada anticipates transitioning to a “Virtual OSCE” in March 2022.
- In a study involving 2,317 students at nine Canadian dental schools, Gerrow et al. (2003) found positive correlations between students’ examination scores and final year results.
  - Written examination and final year results: \( r=0.43, p<.001 \)
  - OSCE and final year results: \( r=0.46, p<.001 \)

DLOSCE Quick Facts

- Offered for a lower fee in 2020, to help students.
  - In 2020: $ 800
  - In 2021: $1,650
- Administered in testing windows at select Prometric test centers in US:
  - June 15 - July 17, 2020
  - November 9 - 27, 2020
- Results reported within 4 weeks of the closing of each window.
- The JCNDE is monitoring the situation and will make adjustments as appropriate.
- The DLOSCE contains 150 questions and is administered in 6 hours and 45 minutes.

<table>
<thead>
<tr>
<th>Examination Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Tutorial (optional)</td>
</tr>
<tr>
<td>Section 1 (37 Questions)</td>
</tr>
<tr>
<td>Break (optional)</td>
</tr>
<tr>
<td>Section 2 (37 Questions)</td>
</tr>
<tr>
<td>Section 3 (2 Prescription Questions)</td>
</tr>
<tr>
<td>Break (optional)</td>
</tr>
<tr>
<td>Section 4 (37 Questions)</td>
</tr>
<tr>
<td>Break (optional)</td>
</tr>
<tr>
<td>Section 5 (37 Questions)</td>
</tr>
<tr>
<td>Survey</td>
</tr>
<tr>
<td><strong>Total Time</strong></td>
</tr>
</tbody>
</table>
Validity and test security

- Release of the DLOSCE in 2020 is based on content validity evidence; National Board Examinations are ALL supported by content validity evidence.
  - Establishment of content domain through practice analysis; reliance on subject matter experts and their judgment to determine item allocations, structure test development activities, build and review content, establish standards, etc.
- Data will be collected at the time of administration, followed by scoring, standard setting, reporting, and then follow-up documentation (technical report) to provide information on obtained psychometric properties, etc.
- The practice of employing window testing and delayed reporting of scores is an accepted and valid means of test development, and was in fact pursued by the Joint Commission for decades, prior to the Joint Commission’s transition to computer based test administration.
- The JCNDE is following established psychometric and test development procedures, and proceeding with appropriate deference shown to the guidelines provided in the *Standards for Educational and Psychological Testing*.
- The DLOSCE will be administered in a secure testing environment.
- Our modified approach is psychometrically defensible while also being sensitive to the great need currently present at a difficult time.
What does the US DLOSCE cover?

- Focal topic areas:
  - Restorative Dentistry (24%)
  - Prosthodontics (19%)
  - Oral Pathology, Pain Management, and TMD (13%)
  - Periodontics (10%)
  - Oral Surgery (9%)
  - Endodontics (8%)
  - Orthodontics (6%)
  - Medical Emergencies and Prescriptions (11%)

- Diagnosis and Treatment Planning—as well as Occlusion—are covered across the topics listed above.

- The DLOSCE includes questions involving patients of various types and backgrounds, including pediatric, geriatric, special needs, and medically complex patients.

- DLOSCE questions are modeled on dental clinical situations.
What does the US DLOSCE cover?

- Focused exclusively on the clinical tasks a dentist performs while providing direct, chair-side treatment to patients.
- A “virtual OSCE” that assesses clinical judgment.
- Use of a “traditional manikin” hand skill assessment is not included.
- The DLOSCE is designed to reliably and accurately reflect the practice of clinical dentistry within the United States.
- The DLOSCE Working Committee has been engaged in content development activities since 2018.
DLOSCE 3-dimensional models
DLOSCE 3-dimensional models
<table>
<thead>
<tr>
<th>Patient</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female, 56 years old</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chief Complaint</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>“I have a bump on my gums”</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Background and/or Patient History</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>See next slide.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Findings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Swelling in the lower right premolar area</td>
<td></td>
</tr>
</tbody>
</table>
Select ONE OR MORE correct answers. Any INCORRECT selections will result in your earning NO CREDIT for this question.

Which should be included in a differential diagnosis?

A. Normal anatomical variant  
B. Radiographic artifact  
C. Cyst or benign tumor  
D. Malignant tumor  
E. Odontogenic inflammatory condition  
F. Non-odontogenic inflammatory condition  
G. Reactive lesion (simple bone cyst, giant cell lesions)  
H. Fibro-osseous lesion  
I. Traumatic lesion/fracture  
J. Developmental condition  
K. Manifestation of systemic disease

Correct: C (partial credit, 0.5 points) and E (partial credit, 0.5 points)  
Unscored/Neutral: G, H, and K  
Clinical Judgment Error/Incorrect: Selecting any response other than a “Correct” or “Unscored/Neutral” response causes the candidate to receive no credit (0 points) for this question, even if a Correct response was also selected.  
Content Classification: Oral Pathology, Pain Management, and Temporomandibular Dysfunction
How do the DLOSCE and INBDE differ?

- The DLOSCE and Integrated National Board Dental Examination (INBDE) both assess clinical skills (e.g., diagnosis and treatment planning, oral health management). However, key differences also exist:
  - The DLOSCE is focused exclusively on the clinical tasks a dentist performs while providing direct, chair-side treatment to patients.
    - Micro-judgments, errors and knowledge of success criteria, narrow focus
  - The INBDE focuses on cognitive skills.
    - The biomedical underpinnings of clinical decisions, broader focus that includes the “why”
    - Practice and profession considerations, evidence based dentistry, being good consumers of research, patient oral health care education
How do the DLOSCE and INBDE differ?

Examples of how the INBDE and DLOSCE conceptually differ:

<table>
<thead>
<tr>
<th>INBDE Example</th>
<th>Corresponding DLOSCE Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand basic principles of pharmacokinetics and pharmacodynamics for major classes of drugs and over-the-counter products to guide safe and effective treatment.</td>
<td>Review patient information and write an appropriate prescription.</td>
</tr>
<tr>
<td>Understand local and central mechanisms of pain modulation.</td>
<td>Identify the final needle position (point of insertion, angulation, and depth) immediately prior to injection that will best accomplish complete local anesthesia for a given procedure.</td>
</tr>
<tr>
<td>Understand dental material properties, biocompatibility, and performance, and the interaction among these in working with oral structures in health and disease.</td>
<td>Identify one or more flaws present in a metal-ceramic restoration.</td>
</tr>
<tr>
<td>Understand the principles and logic of epidemiology and the analysis of statistical data in the evaluation of oral disease risk, etiology, and prognosis.</td>
<td><em>No corresponding DLOSCE example. Epidemiology and statistics are not covered on the DLOSCE.</em></td>
</tr>
</tbody>
</table>
Feedback from candidates completing the DLOSCE in its first week of implementation:

“I think this was very well done and the future of dental licensure. It is a much more accurate assessment of clinical preparedness than a single encounter patient experience.”

“Thank you for making this test available for the Class of 2020 - truly I appreciate the efforts to make this test happen despite the uncertain changes the COVID pandemic brought to the healthcare profession. This was a fun exam and I believe the members involved in making this test happen have made a milestone for dentistry to move toward a more ethically sound path to licensure. Thank you and stay safe!”

• General comments (paraphrased):
  – Would like to remove teeth in 3-D models to see better; with regard to interproximal contacts, would be nice to be able to use floss; exam was very difficult (if you choose an incorrect response option, the whole question is marked wrong)
Why should dental boards use the DLOSCE?

- The DLOSCE helps dental boards in their mission to protect the public.
- The DLOSCE measures clinical judgment
  - Disciplinary actions by dental boards focus on errors in clinical judgment.
- The DLOSCE is supported by strong content validity evidence.
  - Extensive reliance on 150+ highly qualified subject matter experts who build examination content
  - Clinically relevant content that mirrors the dental practice
  - Supported by a team of measurement professionals with advanced degrees (psychometrics, etc.)
- The DLOSCE gives dental boards the ability to identify those who lack the skills necessary for safe practice, using a professionally developed examination backed by strong validity evidence.
- The DLOSCE provides objective and comprehensive measurement of candidate skills.
- The Joint Commission on National Dental Examinations (JCNDE) has a long and successful track record of delivering high quality, high stakes licensure examinations that are used by boards to help protect the public.
Exam Preparation and Resources

• Practice Questions
• 3D Model Tutorial
• DLOSCE Candidate Guide
• DLOSCE Quick Facts
• Summary of Validity Evidence
• Recorded Webinars
  – Dental Boards
  – Dental Students
  – Dental Educators
• Key links for additional information (ada.org/dlosce)
Acceptance by dental boards

- As of June 16, 2020, dental boards in four states have decided to accept the DLOSCE as either partially or completely fulfilling their clinical examination requirement:
  - Alaska
  - Iowa
  - Oregon
  - Washington

- Dental boards in a number of additional states have expressed interest in learning more about the examination.
Questions?
Thank You!