The Integrated National Board Dental Examination (INBDE)

Dr. David M. Waldschmidt
Secretary, JCNDE

Council on Dental Education and Licensure
April 21, 2016
Overview and Agenda

- The JCNDE and its mission.
- Development of the Integrated National Board Dental Examination (INBDE)
- INBDE Field Testing
- INBDE Implementation Plan
- Questions
An Important Note

The INBDE is currently under development. As such, the specific details associated with this examination program are evolving and will change over time.

Information shared in this presentation is based on preliminary program requirements and represents the best available information as of the date of this presentation.
Mission Statement of the JCNDE

“The JCNDE develops and conducts highly reliable, state of the art cognitive examinations that assist regulatory agencies in making valid decisions regarding licensure of oral health care professionals, develops and implements policy for the orderly, secure, and fair administration of its examinations, and is a leader and resource in assessment for the oral health care profession.”
## Appointing Organizations and Current JCNDE Appointees

<table>
<thead>
<tr>
<th>Organization</th>
<th>Appointees</th>
</tr>
</thead>
</table>
| **AADB (6)** | Luis J Fujimoto, DMD, JCNDE Chair  
Dale R Chamberlain, DDS  
Patricia Ann Parker, DMD  
David W Perkins, DMD  
William F Robinson, DDS  
Leonard P Weiss, DDS |
| **ADA (3)**  | Cheryl Haley, DDS  
Lisa Heinrich-Null, DDS  
Rhett L Murray, DDS |
| **ADEA (3)** | Marc E Levitan, DDS, JCNDE Vice Chair  
Frank W Licari, DDS, MPH, MBA  
Nader Nadershahi, DDS, MBA, EdD |
| **ADHA (1)** | Melissa Gail Efurd, RDH, Ed.D |
| **ASDA (1)** | Greg P. Shank, BS |
| **Public (1)** | Issie L. Shelton-Jenkins, JD, LLM |
| **Liaisons & Observers** | Alvin W. Stevens, DMD (ADA Board Liaison)  
Jordan J Telin, BS (ASDA Observer)  
Liaisons and observers do not participate in voting |
What is the INBDE and the CIE?

• In 2009, the JCNDE appointed a Committee for an Integrated Examination (CIE) to develop and validate a new examination instrument for dentistry that integrates the biomedical, behavioral, and clinical sciences to assess entry level competency in dental practice, to supplant NBDE Part I and Part II.

• The integrated examination retains the same fundamental purpose as NBDE Part I and Part II – to assist state boards of dentistry in determining qualifications of dentists who seek licensure to practice in the U.S.
How did the INBDE come about?

- A convergence of factors led to the INBDE, which was designed to better serve communities of interest by:
  - Improving test content to make it more appropriate and relevant to contemporary dental education (e.g., emphasizing the biomedical sciences throughout the curriculum)
  - Improving processes and candidates’ experiences in taking the examination
  - Better assisting regulatory agencies

- Examination content trends and the movement toward integrated content and clinical relevance were also considered.
Committee for an Integrated Examination (ad hoc)

The members of the ad hoc CIE are well acquainted with the Joint Commission’s mission and workings.

Mark Christensen, DDS (Chair)
(AADB 2006-2009)
Vice-Chair – JCNDE (2009)
Chair – Administration (2008)
Chair – Dental Hygiene (2006 & 2007)

Bruce D. Horn, DDS
(AADB 2007-2010)
Chair – JCNDE (2010)
Chair – Administration (2009)
Chair – Dental Hygiene (2008)

B. Ellen Byrne, DDS, Ph.D.
(ADEA 2009-2012)
Chair – Research & Development (2012)
Chair – Administration (2011)

Andrew Spielman, DMD, MS, Ph.D.
(ADEA 2008-2011)
Chair – JCNDE (2011)
Chair – Examination Development (2009)

Ron J. Seeley, DDS
(ADA 2007-2010)
Chair – JCNDE (2009)
Chair – Examination Development (2008)

Stephen T. Radack, III, DMD
(ADA 2008-2011)
Chair – Research & Development (2010 & 2011)
Vice-Chair – JCNDE (2010)
The Joint Commission Chair and NBDE Standing Committee Chairs serve as ex-officio members of the CIE.

Luis J. Fujimoto, DMD
Chair – JCNDE (2016)
Chair – Research & Development (2015)

Lisa Heinrich-Null, DDS
Chair – Administration (2016)

Patricia A. Parker, DMD
Chair – Examination Development (2016)

Frank W. Licari, DDS, MPH, MBA
Chair – Research & Development (2016)
Chair – Examination Development (2015)
# Twelve Steps for Test Development* (Downing, 2006)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Planning</td>
<td>7. Test Administration</td>
</tr>
<tr>
<td>2. Content Definition</td>
<td>8. Test Scoring</td>
</tr>
<tr>
<td>4. Item Development</td>
<td>10. Reporting Test Results</td>
</tr>
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<td>5. Test Design and Assembly</td>
<td>11. Item Banking</td>
</tr>
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<td>6. Test Production</td>
<td>12. Technical Reports and Validation</td>
</tr>
</tbody>
</table>

*Bold text indicates area of current focus for the CIE.
<table>
<thead>
<tr>
<th>Year</th>
<th>Key Tasks and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>ADEA Commission on Change and Innovation (CCI) recommended changes to dental education and assessment.</td>
</tr>
<tr>
<td>2006-2007</td>
<td>JCNDE monitored and considered CCI progress and recommendations.</td>
</tr>
<tr>
<td>2008</td>
<td>JCNDE created ad hoc Committee on Strategic Planning, conducted environmental scans, and considered the future.</td>
</tr>
<tr>
<td>2009</td>
<td>JCNDE resolved to create an integrated examination, and appointed members to the ad hoc Committee for an Integrated Examination (CIE).</td>
</tr>
<tr>
<td>2010</td>
<td>CIE worked to lay the content foundation for the exam.</td>
</tr>
<tr>
<td>2011</td>
<td>Practice analysis and science panels conducted using content foundation.</td>
</tr>
<tr>
<td>2012</td>
<td>General test specifications developed.</td>
</tr>
<tr>
<td>2013</td>
<td>Details about item development and approach were solidified. Resolutions were created to enhance communication and alignment between the Joint Commission and the CIE.</td>
</tr>
<tr>
<td>2014</td>
<td>Approach was refined, and first INBDE Test Construction Committees were formed. Item writing began.</td>
</tr>
</tbody>
</table>
The Domain of Dentistry

• The Domain of Dentistry represents the clinical content and Foundation Knowledge areas required for the safe, independent, general practice of dentistry by entry level practitioners.

• 65 clinical content areas grouped into three component sections:
  1) Diagnosis and Treatment Planning
  2) Oral Health Management
  3) Practice and Profession

• 10 Foundation Knowledge Areas adapted from medicine

* Note: As of 2016, the JCNDE is currently working to further refine these clinical content areas.
### Diagnosis and Treatment Planning

| CC 1 | Obtain and interpret patient/medical data, including a thorough intra/extra oral examination, and use these findings to accurately assess and manage all patients. |
| CC 2 | Identify patient's chief complaints. |
| CC 3 | Obtain medical, dental, psychosocial, and behavioral histories. |
| CC 4 | Perform head and neck and intraoral examinations. |
| CC 5 | Obtain medical and dental consultations when appropriate. |
| CC 6 | Use clinical and epidemiological data to diagnose and establish a prognosis for dental abnormalities and pathology. |
| CC 7 | Recognize the normal range of clinical findings and significant deviations that require monitoring, treatment, or management. |
| CC 8 | Select, obtain and interpret diagnostic images for the individual patient. |
| CC 9 | Recognize the manifestations of systemic disease and how the disease and its management may affect the delivery of dental care. |
| CC 10 | Formulate a comprehensive diagnosis, treatment and/or referral plan for the management of patients. |
| CC 11 | Discuss etiologies, treatment alternatives, and prognoses with patients and educate them so they can participate in the management of their own care. |
| CC 12 | Manage patients in a hospital setting. |
| CC 13 | Manage the unique needs relating to the oral health care of infants. |
| CC 14 | Manage the unique needs relating to the oral health care of children. |
| CC 15 | Manage the unique needs relating to the oral health care of adolescents. |
| CC 16 | Manage the oral health care of adults, including the unique needs of women. |
| CC 17 | Manage the unique needs relating to the oral health care of geriatric patients. |
| CC 18 | Manage the unique needs relating to the oral health care of special needs patients. |
| CC 19 | Select and administer or prescribe pharmacological agents in the treatment of dental patients. |
| CC 20 | Anticipate, prevent, and manage complications arising from the use of therapeutic and pharmacological agents employed in patient care. |
| CC 21 | Prevent, diagnose and manage pain and anxiety in the dental patient. |
| CC 22 | Prevent, diagnose and manage temporomandibular disorders. |
| CC 23 | Diagnose and manage periodontal diseases. |
| CC 24 | Implement strategies for the clinical assessment and management of caries. |
| CC 25 | Maintain function and promote soft and hard tissue health. |
| CC 26 | Manage patients with oral esthetic needs. |
| CC 27 | Diagnose and manage developmental or acquired occlusal abnormalities. |
| CC 28 | Manage the replacement of teeth for the partially or completely edentulous patient. |
| CC 29 | Restore partial or complete edentulism with uncomplicated fixed or removable prosthetic restorations. |
| CC 30 | Manage the restoration of partial or complete edentulism using implant procedures. |
| CC 31 | Diagnose and manage pulpal and periradicular diseases. |
| CC 32 | Perform uncomplicated endodontic procedures. |
| CC 33 | Diagnose and manage oral surgical treatment needs. |
| CC 34 | Perform uncomplicated oral surgical procedures. |
| CC 35 | Manage patients requiring modification of oral tissues to optimize restoration of form, function and esthetics. |
| CC 36 | Prevent, recognize and manage medical and dental emergencies. |
| CC 37 | Perform basic cardiac life support. |
| CC 38 | Recognize and manage acute pain, hemorrhage, trauma, and infection of the orofacial complex. |
| CC 39 | Recognize and manage patient abuse and/or neglect. |
| CC 40 | Recognize and manage substance abuse. |
| CC 41 | Evaluate outcomes of comprehensive dental care. |
| CC 42 | Diagnose and manage oral mucosal and osseous diseases |
Practice and Profession

CC 43 Evaluate emerging trends in health care and integrate new medical knowledge and therapies relevant to oral health care.
CC 44 Evaluate social and economic trends and their impacts on oral health care.
CC 45 Utilize critical thinking and problem-solving skills.
CC 46 Evaluate scientific literature and integrate best research outcomes with patient values and other sources of information to make decisions about dental treatment.
CC 47 Apply advances in modern biology to clinical practice.
CC 48 Apply principles of ethics and jurisprudence to the practice of dentistry.
CC 49 Practice within one’s scope of competence and consult with or refer to professional colleagues when indicated.
CC 50 Apply appropriate interpersonal and communication skills.
CC 51 Apply psychosocial and behavioral principles in patient-centered care.
CC 52 Communicate effectively with individuals from diverse populations.
CC 53 Apply prevention, intervention and educational strategies to maximize oral health.
CC 54 Participate with dental team members and other health care professionals in health promotion and disease management for individuals and communities.
CC 55 Evaluate and apply contemporary clinical, laboratory and information technology resources in patient care, practice management and professional development.
CC 56 Evaluate different models of oral health care management and delivery.
CC 57 Apply principles of risk management, including informed consent and appropriate record-keeping in patient care.
CC 58 Use effective business and financial management skills.
CC 59 Use effective human resource management skills to coordinate and supervise the activity of allied dental health personnel.
CC 60 Apply quality assurance, assessment and improvement concepts.
CC 61 Assess one’s personal level of skills and knowledge relative to dental practice.
CC 62 Understand and apply local, state and federal laws and regulations pertaining to dentistry and healthcare, including OSHA and HIPPA.
CC 63 Develop a catastrophe preparedness plan for the dental practice.
CC 64 Utilize universal infection control guidelines for all clinical procedures.
CC 65 Communicate case design with laboratory technicians and evaluate the resultant restoration/prosthesis.
Foundation Knowledge Areas: Key Source/Reference

Committee Members

Co-Chair
Robert J. Alpert, M.D.
Dean
Emory University School of Medicine

Co-Chair
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Stanford University

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Penn State University College of Medicine

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Director of Medical Gross Anatomy
Vanderbilt University Medical Center

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Lewis and Clark College

Jules L. Dienstag, M.D.
Dean for Medical Education
Carl W. Walter Professor of Medicine
Harvard Medical School

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Chairman, Division of Education
Cleveland Clinic Foundation

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Department of Microbiology and Immunology
Stanford University School of Medicine

Dee Silverthorn, Ph.D.
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The University of Texas at Austin

https://www.aamc.org/download/271072/data/scientificfoundationsforfuturephysicians.pdf
Foundation Knowledge Areas

The successful entry-level general practitioner is focused on the prevention, diagnosis, and management of oral disease, and the promotion and maintenance of general health. This requires application of knowledge in the following areas:

<table>
<thead>
<tr>
<th>FK1</th>
<th>Molecular, biochemical, cellular, and systems-level development, structure and function</th>
</tr>
</thead>
<tbody>
<tr>
<td>FK2</td>
<td>Physics and chemistry to explain normal biology and pathobiology</td>
</tr>
<tr>
<td>FK3</td>
<td>Physics and chemistry to explain the characteristics and use of technologies and materials</td>
</tr>
<tr>
<td>FK4</td>
<td>Principles of genetic, congenital and developmental diseases and conditions and their clinical features to understand patient risk</td>
</tr>
<tr>
<td>FK5</td>
<td>Cellular and molecular bases of immune and non-immune host defense mechanisms</td>
</tr>
<tr>
<td>FK6</td>
<td>General and disease-specific pathology to assess patient risk</td>
</tr>
<tr>
<td>FK7</td>
<td>Biology of microorganisms in physiology and pathology</td>
</tr>
<tr>
<td>FK8</td>
<td>Pharmacology</td>
</tr>
<tr>
<td>FK9</td>
<td>Sociology, psychology, ethics and other behavioral sciences</td>
</tr>
<tr>
<td>FK10</td>
<td>Quantitative knowledge, critical thinking, and informatics tools</td>
</tr>
</tbody>
</table>
Basic and Foundation Sciences covered in part by Foundation Knowledge 7 (FK7) (3C)

| FK7 | Biology of microorganisms in physiology and pathology |

- Epidemiology
- Immuno-pathology
- Microbiology
- Mycology
- Oral Biology
- Parasitology
- Pharmacology
- Preventive Medicine and Dentistry
- Pulp Biology
- Public Health
- Virology

Color Coding

| Part I | Part II | Parts I & II | NEW |

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Basic and Foundation Sciences covered in part by Foundation Knowledge 8 (FK8) (3C)

The subject areas and disciplines covered by NBDE Parts I and II carry forward to the new exam, and there are also new areas.

<table>
<thead>
<tr>
<th>FK8</th>
<th>Pharmacology</th>
</tr>
</thead>
</table>

- Basic and Applied Pharmacology
- Biomedical Research
- Cancer Biology
- Evidence-based Dentistry
- Public Health Policy

See the JCNDE web site at [http://www.ada.org/JCNDE](http://www.ada.org/JCNDE).
Validation

• A practice analysis was conducted in 2011 with a sample of new dentists (i.e., dentists who had obtained their license within the previous five years)
  – All 65 clinical content areas were at least “moderately important to patient care.”
  – Frequency and criticality ratings were used to calculate the relative importance of each clinical content area and section.
  – The relative importance of each clinical content area determined how many items should be allocated to each clinical content area.

• Two science review panels were conducted to determine the strength of the relationship between each Foundation Knowledge area and each clinical content area.
  – All 10 Foundation Knowledge areas were determined to be related to one or more clinical content areas
  – The relative strength of the relationship between each Foundation Knowledge Area and each clinical content area determined how many items should be allocated to each Foundation Knowledge area, within each clinical content area.
Percentage of Items (450 items*)

* The number of items on the INBDE has not yet been finalized.
A five member INBDE Test Construction Committee (TCC) was formed for each clinical content section. 
• Diagnosis and Treatment Planning
• Oral Health Management
• Practice and Profession

TCCs met within their 5-person groups and also as a full unit (15 members) during item reviews.

INBDE TCCs have drafted over 500 items over 7 sessions.

A second set of TCCs will launch in the 2nd quarter of 2016.

Items are currently being written to support field testing efforts.
### Patient History Chart

**Sample Testlet**

<table>
<thead>
<tr>
<th>Age</th>
<th>65 YRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>☒ Male ☐ Female</td>
</tr>
<tr>
<td>Height</td>
<td>5' 09&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>240 LBS</td>
</tr>
<tr>
<td>B/P</td>
<td>170/100</td>
</tr>
</tbody>
</table>

**Chief Complaint**

“I lost the filling in my back tooth.”

**Medical History**

last saw his physician 2 years ago
father died of heart attack at age 52

**Current Medications**

- diuretic for hypertension
- statin for hypercholesteremia
- low dose aspirin

**Social History**

- married, grown children
- retired construction foreman
- has smoked a pipe daily for 25 years

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**Scenario**

The patient presents for replacement of a filling in tooth 19. He reports that he lost the filling over a year ago, but he delayed seeking care because the tooth has not been sensitive. Upon examination, tooth 19 has a missing occlusal restoration and a fractured ML cusp.

Extraoral examination revealed mild actinic damage of his lower lip vermilion border.
INBDE Patient Box

A corner tab signifies that a Patient Box is shared by multiple items.

Reminder:
The actual display of the Patient Box during the examination will depend upon the capability of the selected examination administration vendor.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Female, 28 years old.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Complaint</td>
<td>“I haven’t been able to open my mouth for two days.”</td>
</tr>
<tr>
<td>Background and/or Patient History</td>
<td>Three days prior, left mandibular third molar extraction.</td>
</tr>
<tr>
<td>Current Findings</td>
<td>Maximum opening is 10 mm</td>
</tr>
</tbody>
</table>
Patient:
Female, 28 years old.

Chief Complaint:
“I haven’t been able to open my mouth for two days.”

Background and/or Patient History:
Three days prior, left mandibular third molar extraction.

Current Findings:
Maximum opening is 10 mm

<table>
<thead>
<tr>
<th>Section</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>• This section presents patient demographic characteristics (gender, age, and potentially ethnicity).</td>
</tr>
</tbody>
</table>
| Presentation Format | • Male or Female, x years old.  
• Ethnicity may be included if relevant. |
| Example       | • Female, 28 years old.                                                                           |
Patient

Female, 28 years old.

Chief Complaint

“I haven’t been able to open my mouth for two days.”

Background and/or Patient History

Three days prior, left mandibular third molar extraction.

Current Findings

Maximum opening is 10 mm.
Patient

Female, 28 years old.

Chief Complaint

“I haven’t been able to open my mouth for two days.”

Background and/or Patient History

Three days prior, left mandibular third molar extraction.

Current Findings

Maximum opening is 10 mm
**Patient**

- Female, 28 years old.

**Chief Complaint**

- “I haven’t been able to open my mouth for two days.”

**Background and/or Patient History**

- Three days prior, left mandibular third molar extraction.

**Current Findings**

- Maximum opening is 10 mm

---

<table>
<thead>
<tr>
<th><strong>Section</strong></th>
<th><strong>Current Findings</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>• This section presents information collected by dental professionals during the current visit.</td>
</tr>
<tr>
<td><strong>Presentation Format</strong></td>
<td>• Can include information such as height and weight, vital signs, results of diagnostic tests, and a general assessment of the patient condition.</td>
</tr>
</tbody>
</table>
| **Example** | • Facial edema  
• Lymphadenopathy  
• Extensive apical radiolucency associated with tooth 6  
• Temp. 100.3°  
• Blood glucose 240 mg/dL  
• BP 150/93 |
INBDE Model Items

Model Item 7

Which graph best shows the patient’s likely plaque pH response after drinking a sugary beverage?

Patient

Female, 75 years old

Chief Complaint

“My mouth has been dry for over a month.”

Background and/or Patient History

Oropharyngeal cancer treated by radiation.

Current Findings
Which graph best shows the patient’s likely plaque pH response after drinking a sugary beverage?

**Patient**
- Female, 75 years old

**Chief Complaint**
- “My mouth has been dry for over a month.”

**Background and/or Patient History**
- Oropharyngeal cancer treated by radiation.

**Current Findings**

**Answer:** A
Where would a loss of taste be expected?

A. 1 and 2  
B. 2 and 3  
C. 3 and 4  
D. 2, 3, and 4

---

**Patient**

Male, 38 years old

**Chief Complaint**

“I haven’t been able to taste on the left side of my tongue for the past three days.”

**Background and/or Patient History**

Left inferior alveolar nerve block during a prior dental treatment.
Where would a loss of taste be expected?

A. 1 and 2
B. 2 and 3
C. 3 and 4
D. 2, 3, and 4
The patient is scheduled for an MOD amalgam. What is the correct protocol?

A. Obtain an INR the morning of the procedure.
B. Proceed without treatment modification.
C. Discontinue Pradaxa® the morning of the appointment.
D. Use lidocaine 2% with 1:50,000 epinephrine.
The patient is scheduled for an MOD amalgam. What is the correct protocol?

A. Obtain an INR the morning of the procedure.
B. **Proceed without treatment modification.**
C. Discontinue Pradaxa® the morning of the appointment.
D. Use lidocaine 2% with 1:50,000 epinephrine.
Patient

Male, 75 years old

Chief Complaint

“I’m here to have my filling done.”

Background and/or Patient History

Atrial fibrillation
Medications:
dabigatran (Pradaxa®)
metoprolol (Toprol®)

Current Findings

The procedure results in a carious exposure of the pulp. The patient chooses to have the tooth extracted. What is the next step at this appointment?

A. Prophylactic antibiotics and extraction
B. Pulp cap and temporary restoration
C. Discontinue Pradaxa® for three days followed by extraction
D. Immediate extraction and placement of sutures if necessary
The procedure results in a carious exposure of the pulp. The patient chooses to have the tooth extracted. What is the next step at this appointment?

A. Prophylactic antibiotics and extraction
B. Pulp cap and temporary restoration
C. Discontinue Pradaxa® for three days followed by extraction
D. Immediate extraction and placement of sutures if necessary
INBDE Sample Item Survey

Purpose

- To understand how dental students apply knowledge of the biomedical, clinical, and behavioral sciences in responding to INBDE items.
- To collect feedback from dental students regarding the presentation of examination content.

Implication

- The survey was intended to help the CIE determine whether any changes were required to INBDE item development.

Survey and Sample

- The survey was voluntary in nature, and administered to NBDE Part II candidates.
- There were three separate survey forms, each containing five items, with one item shared across all three forms. Each candidate received one form.
- Items were selected to be broadly representative of the Foundation Knowledge and Clinical Content areas. Some were created via Automatic Item Generation.
- The survey was conducted online from July 1, 2015 through September 22, 2015.
- 170 NBDE Part II candidates participated (3.8% response rate).
INBDE Sample Item Survey

Results

Overall, the feedback was very positive, with candidates indicating:

• They could apply their knowledge and clinical experiences.
• They found the items straightforward, fair, and clinically relevant.
• Many commented about the high quality of images presented.
• They found the Patient Box presentation clean and simple, and some commented that they preferred this question format to what is currently used on the Board Exams.
• No clear differences were noted between items generated via Automatic Item Generation (AIG) and those generated via traditional means.

Conclusions

• Study results indicated no major adjustments were needed to the current INBDE item development process, and no major changes were needed to the INBDE format or item writing approach.
INBDE Short Form Field Test

Purpose
• This field test will permit evaluation of item development, test administration, and scoring functions for the INBDE Short Form. The number of items on the INBDE are expected to be finalized based upon the results of this field test.

Test Content
• This field test includes two short forms of the INBDE. Each form contains 120 items (80 unique items plus 40 shared items that are used on both forms). This yields a total of 200 items to be evaluated. (80 + 80 + 40 = 200 items).

Administration Date
• First administration in September 2016.

Sample
• Eligible NBDE Part II candidates enrolled in accredited dental schools will be encouraged to participate, with a target participation of 2,000 candidates.

Results
• INBDE results obtained under this field test will be kept confidential and will not be reported to dental schools and state boards.
Test Content
• This study involves developing and administering a standard form of the INBDE, containing between 300 and 450 items.

Administration Date
• First administration in September 2017.

Sample
• Eligible NBDE Part II candidates enrolled in accredited dental schools will be encouraged to participate, with a target participation of approximately 1,400 candidates.

Results
• INBDE scores obtained from this field test will be kept confidential and will not be reported to dental schools and state boards.
• Depending upon study findings, additional field testing might be necessary to ensure production forms of the INBDE are of the highest quality.
INBDE Implementation Plan and Recommended Actions
INBDE Implementation Plan

• To address concerns from stakeholders and communities of interest regarding the timing of INBDE implementation, the JCNDE indicated it would provide four years’ notice before the INBDE is implemented and the NBDE discontinued.

• In response to these concerns and to provide reasonable notice, the Joint Commission approved an INBDE Implementation Plan for immediate distribution to stakeholders and communities of interest.

• The INBDE Implementation Plan provides information concerning how INBDE implementation will occur, the information that will be made available to help facilitate the transition, and recommended actions for stakeholders and communities of interest.
Integrated National Board Dental Examination (INBDE) Implementation Plan: “Best Case Scenario”


Dental Class of 2020
Dental Class of 2021
Dental Class of 2022
Dental Class of 2023

INBDE Implementation Plan Announcement
March 13, 2016

Notice of INBDE Implementation and National Board Dental Examination (NBDE) Discontinuation
August 1, 2018

First Official INBDE Administration
August 1, 2020

NBDE Part I Discontinued
July 31, 2020

NBDE Part II Discontinued
July 31, 2022

Note: This implementation plan communicates the best case scenario. Dates presented should be interpreted as “no sooner than.” Actual dates will be contingent upon field testing results. INBDE Practice Test Questions are anticipated for release in 2019.
INBDE Implementation Plan

• On August 1, 2018, the Joint Commission intends to provide stakeholders and communities of interest with notice of INBDE implementation and NBDE discontinuation. This notice will include the following:
  – The projected date when the INBDE will be first available for administration, the official name of the new examination, and how results will be reported.*
  – The dates when NBDE Part I and NBDE Part II will be discontinued.
  – Retesting policies, eligibility rules, and any additional rules needed to facilitate the transition.

• Two years after notification has been provided, NBDE Part I will be discontinued (approx. July 31, 2020).

• The first official administration of the INBDE is expected to take place on August 1, 2020.

• Two years after NBDE Part I is discontinued, NBDE Part II will be discontinued (approx. July 31, 2022).

• Notification of INBDE implementation and NBDE discontinuation is contingent upon successful completion of the INBDE Field Testing Program (not depicted in the preceding diagram).

* Similar to Part I and Part II, INBDE results will be reported as “Pass/Fail.”
INBDE Implementation Plan

• In considering the dates provided, please note the following:
  – The plan as presented communicates the “best case scenario.”
  – The dates provided may be delayed if difficulties are encountered. However, the dates will not be “moved up” (e.g., NBDE Part I will be discontinued no sooner than August 1, 2020).
  – The Joint Commission reserves the right to make changes to the plan at any time and as needed, in keeping with the Joint Commission’s mission and purpose.
  – Any significant changes to this plan will be published as soon as information becomes available.

• Communication of INBDE Implementation Plan
  – The plan is currently posted online (http://ada.org/jcnde/inbde).
  – The plan was presented at the March 2016 ADEA Conference.
  – The plan was presented at the April 2016 National Dental Examiners’ Advisory Forum, subsequent to the AADB mid-year meeting.
  – The plan will be sent directly to each state dental board in April 2016.
• Information concerning the INBDE is available via the Joint Commission’s website (www.ada.org/JCNDE/INBDE)
• The following information is currently available and is updated as changes occur:
  – INBDE background
  – INBDE FAQ’s
  – Domain of Dentistry and general validity evidence
  – Preliminary test specifications
  – Preliminary sample questions
• The following information will be posted as soon as it becomes available:
  – INBDE practice test questions (anticipated one year in advance of initial INBDE administration)
  – Technical report(s) providing detailed information concerning validity
INBDE Information from other Sources (not the JCNDE)

- INBDE eligibility rules for students of U.S. dental schools accredited by the Commission on Dental Accreditation (CODA).
  - These rules are determined by each dental school.

- Additional school requirements concerning the INBDE (e.g., linking successful completion of the INBDE to graduation requirements).
  - These rules are determined by each dental school.

- Written examination requirements for each state.
  - These requirements are determined by each state dental board.
The requirements of key stakeholders and communities of interest were carefully considered in developing the implementation plan.

- State Dental Boards
- Dental Schools
- US Dental Licensure Candidates

The following slides indicate specific considerations involving the aforementioned groups, as well as recommended actions.

The considerations indicated should NOT be regarded as comprehensive of all of the INBDE-related interests of the aforementioned groups.
# State Dental Boards

<table>
<thead>
<tr>
<th>Implementation Plan Requirement</th>
<th>How Requirement is Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide sufficient time for state dental boards to assess and understand INBDE validity evidence.</td>
<td>• Post and update validity information on JCNDE website as it becomes available.</td>
</tr>
<tr>
<td>• Provide sufficient time for state dental boards to incorporate the INBDE into licensure decision-making and communicate its acceptability to future licensure candidates.</td>
<td>• Communicate validity information on annual basis at National Dental Examiners’ Advisory Forum (NDEAF).</td>
</tr>
<tr>
<td>• Provide sufficient time for state dental boards to prepare to receive INBDE results on day one of availability.</td>
<td>• Release details of implementation plan in 2016, and provide the following notifications:</td>
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<tr>
<td>• Consider whether any modifications to practice acts, rules, policies, or procedures will be required.</td>
<td>• INBDE first administration possible as soon as 2020.</td>
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</table>
| • Provide sufficient time for state dental boards to accept both exam sequences:  
  1) INBDE and  
  2) NBDE Parts I and II. |   • NBDE Part I final administration possible in 2020. |
|                                |   • NBDE Part II final administration possible in 2022. |
|                                | • Provide notice in 2016 of JCNDE plans for indicating the official name of the INBDE and how results will be reported. Current discussions indicate the JCNDE is likely to associate the name “NBDE” with the INBDE, to ease the transition with regard to state rules and practice acts. |
Recommended Actions for State Dental Boards

- Understand the INBDE and keep apprised of new developments.
  - Review information concerning the INBDE on the Joint Commission’s website ([www.ada.org/JCNDE/INBDE](http://www.ada.org/JCNDE/INBDE)), and attend the National Dental Examiners' Advisory Forum (NDEAF) annually.
  - Review INBDE validity evidence and the results of field testing as these studies occur.
  - Monitor the website to understand and prepare for any changes as they occur.
- Prepare to use the INBDE in licensure decision-making.
  - Prepare to receive INBDE results on day one of availability.
  - Prepare to accept candidates who have successfully completed the National Boards. This could occur under either of the following sequences: 1) INBDE or 2) NBDE Parts I and II.
  - Communicate information concerning the acceptability of the INBDE to future licensure candidates.
## Implementation Plan Requirement

### How Requirement is Addressed

- Provide sufficient time for U.S. dental schools to adjust curricula and prepare students for the INBDE (also consistent with current CODA requirements).

- Provide sufficient time for U.S. dental schools to adjust academic policy for incoming students regarding eligibility to sit for National Board Examinations.

- Provide sufficient time for U.S. dental schools to adjust academic policy for incoming students regarding school utilization of NBDE Part I and II results (e.g., as prerequisites for students to continue their studies or as a graduation requirement).

- Release details of implementation plan in 2016, and provide the following notifications:
  - INBDE first administration possible as soon as 2020.
  - NBDE Part I final administration possible in 2020.
  - NBDE Part II final administration possible in 2022.

- Post INBDE preliminary sample questions publicly in 2016.

- Provide INBDE practice test questions one year before INBDE initial administration.

- Provide updates on the INBDE annually at the ADEA conference and subsequently post the presentations online.

Note: For US candidates, dental schools now approve the eligibility of Part I and Part II examinees and will determine when their students will transition to the new exam, within the feasible available options. For international candidates, eligibility for Parts I and II involves providing proof of dental school graduation (through ECE). This practice is expected to continue for the INBDE.
Recommended Actions for Dental Schools

• Understand the INBDE and keep apprised of new developments.
  • Review information concerning the INBDE on the Joint Commission’s website (www.ada.org/JCNDE/INBDE), and attend ADEA sessions on the INBDE.
  • Review INBDE validity evidence and field testing results as these studies occur.
  • Monitor the website to understand and prepare for any changes as they occur.
• Prepare your school and students for the INBDE.
  • Review and revise curricula to prepare students for the INBDE and the updated CODA standards.
  • Review academic policy for incoming students and revise as needed concerning:
    • student eligibility to sit for National Board Dental Examinations.
    • school utilization of NBDE Part I and II results.
# U.S. Dental Licensure Candidates

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<th>Implementation Plan Requirement</th>
<th>How Requirement is Addressed</th>
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<tr>
<td>• Provide U.S. dental licensure candidates with a reasonable opportunity to demonstrate competence with respect to the knowledge and skills required for licensure and measured by a written examination.</td>
<td>• Begin INBDE administrations before NBDE Part II is discontinued.</td>
</tr>
<tr>
<td>• Provide reasonable time and sufficient notice so candidates can plan ahead and take action to avoid being “caught between examination programs” (e.g., preparing for Parts I and II but then finding themselves forced to shift to the INBDE).</td>
<td>• Release details of implementation plan in 2016, and provide the following notifications:</td>
</tr>
<tr>
<td>• Provide sufficient time for candidates to understand retesting policies concerning the INBDE and Parts I and II during the transition period, so candidates can plan and make decisions accordingly.</td>
<td>• INBDE first administration possible as soon as 2020.</td>
</tr>
<tr>
<td>• Provide test specifications and practice materials so candidates can prepare for the INBDE and know what types of questions to expect.</td>
<td>• NBDE Part I final administration possible in 2020.</td>
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<td>• NBDE Part II final administration possible in 2022.</td>
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<tr>
<td></td>
<td>• Provide practice test questions one year before initial INBDE administration, and post INBDE preliminary sample questions publicly in 2016.</td>
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<tr>
<td></td>
<td>• Provide notice in 2018 concerning INBDE retest policy, and coordinate INBDE retest policy with NBDE retest policy.</td>
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Recommended Actions for U.S. Dental Licensure Candidates

• Understand the INBDE and keep apprised of new developments.
  • Review information concerning the INBDE on the Joint Commission’s website (www.ada.org/JCNDE/INBDE).
  • Review INBDE test specifications and practice questions.
  • Monitor the website to understand and prepare for any changes as they occur.

• Prepare for the National Board Examinations.
  • Determine which examination track to pursue (NBDE Parts I and II or the INBDE) in consultation with the most recent INBDE implementation plan and:
    • your dental school, its requirements, and your progress in meeting those requirements.
    • the dental boards of states where you intend to apply for licensure.
    • Joint Commission policies (e.g., retesting policies under both examination tracks).
    • Study the areas indicated in the test specifications of your intended examination track.
Additional Information and Resources

Joint Commission on National Dental Examinations
http://www.ada.org/en/jcnde

Integrated National Board Dental Examination
http://www.ada.org/en/jcnde/inbde/

National Boards (Examination Guides, FAQ’s, DENTPIN® Information, Score Report Requests)
  Part I and Part II:
    http://www.ada.org/en/jcnde/examinations/nbde-general-information
  Dental Hygiene:

Test Construction Committee Information
http://www.ada.org/en/jcnde/examinations/test-construction/

Technical Reports, ADEA Presentations, Item Development Guides
http://www.ada.org/en/jcnde/news-resources/technical-reports
http://www.ada.org/en/jcnde/news-resources/presentations
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The INBDE and the Cone of Uncertainty

• We are in the midst of a highly complex project that is of great importance.
• This is an innovative research endeavor.
  – Research findings can sometimes perplex.
  – Planning has to be flexible to address project needs and stay as close as possible to schedule.
Questions?