The Advanced Dental Admission Test (ADAT) Program

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Director, ADA Department of Testing Services

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Overview

- ADAT Purpose
- Program Oversight
- Test Content, Design, and Construction
- Test Administration Schedule
- Administration, Eligibility, and Retest Policy
- Scoring, Reporting, Results Interpretation, and Norms
- Resources and Communication
Purpose

• The Advanced Dental Admission Test (ADAT) is a computer based examination designed to provide advanced dental education programs with insight into applicants’ potential for success in their program.

• The ADAT is a professionally developed, content valid examination containing questions written by dental subject matter experts.

• The ADAT enables programs to quantitatively compare applicants using a nationally standardized and objective test.

• The ADAT can be used in conjunction with other assessment tools to help inform program admission decisions.
Commissions at the ADA

• The ADAT is overseen by the Council on Dental Education and Licensure (CDEL)
• The relationship between the ADA, CDEL, and the Joint Commission on National Dental Examinations (JCNDE) is often poorly understood
• The JCNDE is a Commission that operates independently from CDEL
Commissions and the ADA

Commissions that are established within the ADA Bylaws act as semi-autonomous agencies of the ADA:

- Commission on Dental Accreditation (CODA)
- Commission for Continuing Education Provider Recognition (CCEPR)
- Joint Commission on National Dental Examinations (JCNDE)
- National Commission on Recognition for Dental Specialties and Certifying Boards (NCRDSCB) (established 2017)
Operating Principles for Commissions

• Philosophical foundation of Commissions:
  ✓ Consistent, free from bias and free from conflicts of interest; remaining objective.
  ✓ No single community of interest should 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 are subject to the ADA Bylaws and Standing Rules, while maintaining their own Bylaws and Rules, in accordance with the mission of the Commission and with HOD approval. Commissions also adhere to the Governance and Operation Manual of the ADA.

• **Commissions maintain independent authority to carry out their program.**
Commonalities among the Commissions

- Recognition that there are many stakeholders outside the ADA.
- Often most Commissioners are appointed independently by outside stakeholders relevant to the purpose of the Commission (e.g., AADB, ADEA, ADHA, ASDA, or sponsoring organizations of ADA recognized dental specialties).
- The number of ADA appointees are often in the minority with respect to the full Commission (e.g., 3 out of 15 members of the Joint Commission are ADA appointees).
- Commissions typically include at least one public member.
- Commissioners serve four year terms (except students); qualifications of commissioners are expertise-based; dentists must be ADA members.
- The ADA approves the Commission’s operating budget and the ADA employs the staff.
- Commissions elect their own chairs and select their own consultants (e.g., test constructors, psychometricians).
Policies and Procedures for Commissioners

• Roles of Commissioners

- Serve as liaison for respective stakeholder (e.g., AADB, ADEA, ADA, ADHA, ASDA)
- Prepare and participate in meetings and committees
- Comply with ADA rules of conduct, etc.
- Oversee and participate in Commission activities, where appropriate and as assigned
- Establish & oversee Commission policies
- Maintain confidentiality of Commission information where appropriate
- Oversee Commission budget
Commissions act in accordance with ADA Governance

**ADA Governance Documents**
- ADA Constitution and Bylaws
- ADA Standing Rules for Councils and Commissions
- ADA Governance and Operation Manual
- ADA Principles of Ethics and Code of Professional Conduct

Commissions can create their own governance documents, in accordance with ADA governance documents. For example:

**JCNDE Governance Documents**
- JCNDE Bylaws (composition and responsibilities)
- JCNDE Standing Rules (roles of JCNDE committees)
- JCNDE Examination Regulations (testing policies and procedures)
- JCNDE Test Construction Teams and Member Selection Criteria
Conflict of Interest and Simultaneous Service Policies

While the members of Commissions have been appointed by different associations, each member is to fully adopt the purpose and mission of the Commission in their decision making.
“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.”

Note that the above mission statement does not make any reference to the achievement of ADA strategic goals. Commissions maintain independent authority and operate semi-autonomously as they work to carry out their program.
ADAT Program Oversight

• The ADA’s Council on Dental Education and Licensure (CDEL) oversees ADAT policies.

• CDEL’s Committee on Dental Admission Testing (CDAT) monitors the program and makes recommendations to CDEL concerning policies.

• The ADA’s Department of Testing Services (DTS) implements the ADAT program under the direction of CDEL and its CDAT.
Candidates

The ADAT is designed for administration to individuals seeking admission to advanced dental education programs:

- 3rd and 4th year dental students
- U.S. dentists interested in post-graduate training or degrees
- International dental students/graduates applying to advanced dental education programs or advanced standing in pre-doctoral programs.
ADAT Content Structure and Reported Scales

ADAT
Critical thinking in dentistry.

- Biomedical Sciences
- Clinical Sciences
- Data, Research Interpretation, & Evidence Based Dentistry
# Test Specifications Overview

<table>
<thead>
<tr>
<th>Number of Items per Subject</th>
<th>Biomedical Sciences</th>
<th>80</th>
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</thead>
<tbody>
<tr>
<td>ADAT Overall Scale</td>
<td>Clinical Sciences</td>
<td>80</td>
</tr>
<tr>
<td>(Critical Thinking in Dentistry)</td>
<td>Data, Research Interpretation, and Evidence Based Dentistry</td>
<td>40</td>
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<tr>
<td></td>
<td>TOTAL</td>
<td>200</td>
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<td>Test Specifications</td>
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<tr>
<td><strong>Biomedical Sciences (80)</strong></td>
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<tr>
<td>Anatomic Sciences</td>
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<td>Biochemistry-Physiology</td>
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<td>Microbiology-Pathology</td>
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<td>Dental Anatomy-Occlusion</td>
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<tr>
<td><strong>Data, Research Interpretation, and Evidence Based Dentistry (40)</strong></td>
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<tr>
<td>Study Design</td>
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<tr>
<td>Data Analysis</td>
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<td>Result Interpretation</td>
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<tr>
<td>Inference and Implication</td>
<td></td>
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<tr>
<td><strong>Clinical Sciences (80)</strong></td>
<td></td>
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<tr>
<td>Endodontics</td>
<td></td>
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<td>Operative Dentistry</td>
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<tr>
<td>Oral and Maxillofacial Surgery / Pain Control</td>
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<tr>
<td>Oral Diagnosis</td>
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<tr>
<td>Orthodontics / Pediatric Dentistry</td>
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<tr>
<td>Periodontics</td>
<td></td>
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<td>Pharmacology</td>
<td></td>
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<tr>
<td>Prosthodontics</td>
<td></td>
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<tr>
<td>Principles of Ethics</td>
<td></td>
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<tr>
<td>Patient Management</td>
<td></td>
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<tr>
<td>Case-based items</td>
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</tbody>
</table>
3. Which stratum layer of the epidermis contains stem cells undergoing mitosis?

A. Basale  
B. Corneum  
C. Granulosum  
D. Lucidum  
E. Spinosum
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A. Basale
B. Corneum
C. Granulosum
D. Lucidum
E. Spinosum
### Patient

**Female, 85 years old**

### Chief Complaint

“I don't like the way my dentures look.”

### Background and/or Patient History

- Osteoarthritis
- Right hip replacement 10 years ago
- Moderate hypertension controlled with a calcium channel blocker
- Patient reports well-fitting dentures

### Current Findings

- Lesion as shown in associated image
- Patient unaware lesion bleeds when manipulated, denies pain
- Lesion is attached to the palatal tissue through a 10mm pedunculated base

### Question 45

What is the first step in management of this patient?

- **A. Perform an excisional biopsy**
- **B. Perform an incisional biopsy**
- **C. Perform a soft acrylic reline of the existing denture**
- **D. Request the patient remove the denture for two weeks and re-evaluate**
### Patient

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- Lesion as shown in associated image
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45. What is the first step in management of this patient?

A. **Perform an excisional biopsy**
B. Perform an incisional biopsy
C. Perform a soft acrylic reline of the existing denture
D. Request the patient remove the denture for two weeks and re-evaluate
Administration (2018)

• Administration dates
  • March 1 through August 31 of 2018 **NEW in 2018**
  • Testing windows lessen the possibility and implications of test content security breaches, thereby protecting the validity of the examination.

• Retesting policy
  • Candidates may test two times per calendar year, and are limited to two testing attempts separated by a minimum of 45 days.
  • After two testing attempts, candidates must provide DTS with proof they are actively applying to advanced dental education programs.

• Program Participation
  • A list of participating advanced dental education programs is currently posted on the ADAT website.
Fees (2018)

• 2018 ADAT fees:
  • Examination fee: $365
  • Additional ADAT score reports: $37
  • Non-accredited candidate processing fee: $200

** This Score Report fee covers score report requests made after the time of application. Score reports requested at the time of application are processed at no additional charge.
2018 Results Reporting

• ADAT results are made available through ADEA PASS, and an online score reporting portal developed by the ADA (i.e., the DTS Hub).

• Official results are released to candidates and programs three to four weeks after the candidate takes the examination. **NEW in 2018**
  • For example, if a candidate takes the ADAT on April 1, 2018, his or her official results will be released by May 1, 2018.
Program Participation (2018)

2018 ADAT Program Participation

- AEGD
- DPH
- ENDO
- GPR
- ORTHO
- OM
- PEDIATRIC
- PERIO
- PROSTHO

Legend:
- Blue: Require
- Orange: Accept
- Gray: Neither
Results Interpretation

- A User’s Guide was created to assist programs with results interpretation. It includes information such as the following:
  - Utilization of ADAT Results in Admission Decisions
  - Evidence Supporting Use of the ADAT
  - ADAT Content and Scales
  - Interpretation of ADAT Results
  - Guidelines for Interpreting and Applying ADAT Results
  - Scale reliabilities
  - Normative information
### Scale Reliabilities (2017)

<table>
<thead>
<tr>
<th>ADAT Scale</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAT Overall (ADAT)</td>
<td>.91</td>
</tr>
<tr>
<td>Biomedical Sciences (BIO)</td>
<td>.78</td>
</tr>
<tr>
<td>Clinical Sciences (CLI)</td>
<td>.74</td>
</tr>
<tr>
<td>Data, Research Interpretation, &amp; Evidence Based Dentistry (DRI)</td>
<td>.79</td>
</tr>
</tbody>
</table>

A total of 483 ADAT administrations occurred in 2017
### Descriptive statistics for ADAT scales: 2016-2017 (N= 945)

<table>
<thead>
<tr>
<th>Scale Type</th>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>ADAT Overall (ADAT)</td>
<td>505.3</td>
<td>72.8</td>
<td>200</td>
<td>740</td>
</tr>
<tr>
<td>Discipline</td>
<td>Biomedical Sciences (BIO)</td>
<td>508.0</td>
<td>93.0</td>
<td>200</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Clinical Sciences (CLI)</td>
<td>504.0</td>
<td>90.1</td>
<td>200</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Data, Research Interpretation, &amp; Evidence Based Dentistry (DRI)</td>
<td>502.1</td>
<td>95.8</td>
<td>200</td>
<td>800</td>
</tr>
</tbody>
</table>

Frequency distribution for the ADAT Overall: 2016-2017 (N= 945)

Frequency distribution for the ADAT Biomedical Sciences: 2016-2017 (N= 945)

Frequency distribution for the ADAT Clinical Sciences: 2016-2017 (N= 945)

Frequency distribution for the ADAT Data, Research Interpretation, & Evidence Based Dentistry: 2016-2017 (N= 945)
## Test Administration Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Biomedical Sciences (80 items)</td>
<td>95 minutes</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Clinical Sciences (80 items)</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Break (optional)</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Data, Research Interpretation, and Evidence-Based Dentistry (40 items)</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Post Test Survey (optional)</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Total Time</strong></td>
<td><strong>4 hours 30 minutes</strong></td>
</tr>
</tbody>
</table>
Use of ADAT Results in Admission Decisions

• With respect to ADAT participation, programs require, accept, or do not accept ADAT results at their own discretion.

• Programs make their own decisions as to the use of ADAT results in admission decisions.
  – For example, those who “require” ADAT results could simply “collect and evaluate” those results.

• DTS has surveyed advanced dental education programs to understand their intended involvement in the ADAT program in 2018.

• The 2018 program participation list has been posted. Candidates should continue to monitor this list for changes, and can contact programs directly to understand their participation status.

• Admission decisions should consider available validity evidence that supports current admission tools, as well as evidence supporting use of the ADAT.

• Programs should base their decisions on the tools that have the greatest validity in supporting admission decisions.
ADAT Content Validity Evidence

- The ADAT relies on content validity evidence (appropriateness and relevance of content). Current evidence includes the following:
  - Overall test specification content areas based on findings from an ADA Task Force and ADEA/FADEA survey on advanced dental education.
  - Clinical science test specifications were based on the practice analysis that supports National Board Dental Examination (NBDE) Part II.
  - Biomedical science test specifications similarly based on NBDE Part I.
  - CDEL reviewed and approved the test specifications and TCC members provide additional input; adjustments were made in 2017 in accordance with psychometric considerations and TCC input, in keeping with the examination purpose.
  - TCC members are dental & biomedical subject matter experts who receive extensive item writing training; many have years of experience writing National Board items.
  - The ADAT is administered under controlled, standardized testing conditions.
  - Window testing is employed for test security.
  - Test development, administration, scoring, and reporting occurs by a professionally trained staff, many of whom hold advanced degrees in testing.
  - DTS staff have years of experience in high stakes testing (e.g., NBDE, NBDHE)
ADAT Communications

• Website  www.ada.org/adat
  Examination Guide, User’s Guide, Practice Test, FAQs, past presentations, program tracker tracker spreadsheet, test specifications, reference texts, link to ADA/ADEA PASS video, Volunteer Test Constructor application, etc.

• Presentations
  American Dental Education Association (ADEA)(3/18; 10/16; 3/16; 3/15); American Academy of Pediatric Dentistry (AAPD) (5/17; 5/16; 10/15); American College of Prosthodontics (4/17; 4/16); American Association of Endodontists (8/17); ADEA Council of Students Residents and Fellows (3/16; 10/16); American Association of Orthodontists (4/16); ADA/ASDA Board Meeting (7/16); ADEA Council of Hospitals and Advanced Education Programs (COHAEP) (3/15)

adat@ada.org
Two-way Communication: Listening to Students and Programs

The ADA listened to feedback from students and advanced educational programs, and took steps to facilitate the transition to the ADAT Program.

- Reduced exam fees in 2016 (from $350 to $250)
- Widened the test administration window in 2017 and 2018 to make it easier for candidates to test
- Provided a 100-item practice test booklet online, free of charge
- Posted an online, updated “program tracker” sheet that shows which advanced dental education programs “require,” “accept,” or “do not accept” ADAT results
- Provided preliminary results reporting (2016 and 2017) to help inform decision making; transitioned in 2018 to standard reporting to help improve procedures.
- Provided programs with a user’s guide to help inform interpretation of the ADAT
- Collaborated with ADEA PASS to develop an online video involving the ADAT (http://www.adea.org/PASSapp/2017_ADEA_PASS.aspx)

The ADA and the ADAT Program will continue to consider feedback from stakeholders and communities of interest in 2018 and beyond, in support of this examination program.
Questions?
Thank You