2016 ABA Exams Report

Society of Academic Anesthesiology Associations

Santhanam Suresh, M.D.
Director, American Board of Anesthesiology
Chair, ABA Pediatric Anesthesiology Examination Committee

Ann & Robert H. Lurie Children’s Hospital
Chicago
75 Junior Editors

9 were selected in 2015
Write questions (18/year)
Revise questions based on feedback

42 Senior Editors & Committee Members

Edit questions
Mentor junior editors
Question Development

• Question generation for the ABA Examinations: BASIC, ADVANCED, Part 1 and ITE
  – Approximately 1,400 questions generated
  – Three senior editors meetings and 8 webinars to review items
  – ITE and BASIC Exam forms reviewed by exams committees in August and September 2016
  – ADVANCED form to be reviewed in January 2017
2017 In-Training Exam

• Internet-based exam delivered via vendor
  – Exam may be delivered any time from **12 a.m. EST on Thursday, Feb. 16, to 11:59 p.m. EST on Tuesday, Feb. 21**, with multiple administrations

• Remains a secure, proctored exam

• Direct connections to the Internet are strongly preferred, but laptops with wireless connections may be used

• Systems check is required on every computer used for the ITE

• Administration guidelines will be distributed in December
ITE Results Reporting

- **Personal Performance Reports** include information about individual performance on BASIC and ADVANCED items
  - Scaled score based on the whole exam
  - Percent Correct Scores based on BASIC and ADVANCED items, respectively
  - Performance within content/category areas
  - Keywords associated with items answered incorrectly

- **Program Summaries** include information about program performance on BASIC and ADVANCED items
  - Program performance on individual items compared to entire test-taking population at each training level
ITE: Reported Categories

- Basic Sciences
- Clinical Sciences: Anesthesia Procedures, Methods and Techniques
- Clinical Subspecialties
- Organ-Based Basic and Clinical Sciences
- Special Problems or Issues in Anesthesiology
ITE, ADVANCED & PART 1 EXAMS

Question Types

• Graphics
  – Still shots of a monitor screen
  – Ultrasound images

• Video clips
  – From a simulator or real-time bedside monitor
  – Basic level TEE video clips
  – Beginning in 2017, we will no longer use videos on ITE
ITE-PAIN MEDICINE (ITE-PM)

• In 2016, 80 programs administered the exam to nearly 300 fellows

• 2017 ITE-PM will be administered at fellowship program sites on **Friday, March 24**

• Additional subspecialty ITEs will likely be added in the future as our item banks grow
IN-TRAINING EXAM PERFORMANCE
BY TRAINING LEVEL & EXAM YEAR
Relation of Scores
ITE to the BASIC Examination

The correlation between the 2016 ITE scaled scores and 2016 June BASIC Exam scaled Scores is 0.569, p < 0.001
## Relation of Scores

### ITE to the BASIC Exam

<table>
<thead>
<tr>
<th>Scaled Score</th>
<th>N</th>
<th>2016 June BASIC Scaled Score Mean (S.D.)</th>
<th>BASIC Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤25</td>
<td>364</td>
<td>214 (46)</td>
<td>75%</td>
</tr>
<tr>
<td>26-30</td>
<td>614</td>
<td>239 (41)</td>
<td>91%</td>
</tr>
<tr>
<td>31-35</td>
<td>456</td>
<td>266 (41)</td>
<td>98%</td>
</tr>
<tr>
<td>36-40</td>
<td>191</td>
<td>297 (40)</td>
<td>100%</td>
</tr>
<tr>
<td>41-45</td>
<td>23</td>
<td>320 (58)</td>
<td>100%</td>
</tr>
<tr>
<td>≥46</td>
<td>5</td>
<td>380 (64)</td>
<td>100%</td>
</tr>
</tbody>
</table>
The correlation between the 2016 ITE scaled scores and 2016 ADVANCED Exam scaled Scores is 0.557, p < 0.001.
# Relation of Scores

## ITE to First Attempt on ADVANCED Exam

<table>
<thead>
<tr>
<th>Scaled Score</th>
<th>N</th>
<th>2016 ADVANCED Scaled Score Mean (S.D.)</th>
<th>ADVANCED Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤25</td>
<td>34</td>
<td>171 (54)</td>
<td>47%</td>
</tr>
<tr>
<td>26-30</td>
<td>184</td>
<td>208 (44)</td>
<td>81%</td>
</tr>
<tr>
<td>31-35</td>
<td>547</td>
<td>239 (41)</td>
<td>95%</td>
</tr>
<tr>
<td>36-40</td>
<td>542</td>
<td>259 (42)</td>
<td>99%</td>
</tr>
<tr>
<td>41-45</td>
<td>159</td>
<td>287 (38)</td>
<td>100%</td>
</tr>
<tr>
<td>≥46</td>
<td>51</td>
<td>319 (51)</td>
<td>98%</td>
</tr>
</tbody>
</table>
EXAMINATION SCORING

• Standard-setting study conducted every five years

• Following exam administration, preliminary item analysis conducted (difficulty & discrimination)

• Key validation for items
  – negative discrimination
  – no clear correct answer
STANDARD-SETTING PROCESS
BASIC AND ADVANCED EXAMS

• Third BASIC Exam standard-setting study was conducted in June with a panel of program directors

• The ADVANCED Exam standard-setting study was conducted in August

• The Hofstee Method
  – Combined panel member judgments about an appropriate passing score and an appropriate pass rate
2016 June BASIC Exam Results

- Candidates were assigned to examine on Friday or Saturday
- Key validation eliminated 7 items and rekeyed 2 items
- 90.7% of candidates passed

<table>
<thead>
<tr>
<th>N</th>
<th>Mean Scaled Score</th>
<th>Standard Deviation</th>
<th>Pass Rate</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,661</td>
<td>249.62</td>
<td>50.53</td>
<td>90.7%</td>
<td>0.76</td>
</tr>
</tbody>
</table>
2016 BASIC EXAM
Top 10% Letters

• The ABA sent congratulatory letters to examinees who scored in the top 10% on the June BASIC Examination
  – Program directors also received copies of these letters

• All November 2016 BASIC Exam top 10% letters will go out in December
  – Program directors will receive copies
2016 JULY ADVANCED EXAM
RESULTS

• Candidates were assigned to examine on Friday or Saturday
• Key validation eliminated 6 items
• 94.4% of candidates passed

<table>
<thead>
<tr>
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<th>Mean Scaled Score</th>
<th>Standard Deviation</th>
<th>Pass Rate</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,560</td>
<td>248.95</td>
<td>50.11</td>
<td>94.4%</td>
<td>0.75</td>
</tr>
</tbody>
</table>
PART 2 EXAMINATION
SUCCESS RATES

![Graph showing success rates for Part 2 Examination from 2010 to 2016. The graph includes lines for All First Takers, Total Group, and All Repeaters.](image-url)
The correlation between the 2016 Part 2 Exam scaled scores and First Attempt Part 1 Exam scaled scores is 0.409, p < 0.001
Staged Examinations

**BASIC Examination**
- Focuses on scientific basis of clinical anesthetic practice
- Residents are strongly encouraged to take it as soon as eligible

**ADVANCED Examination**
- Emphasis on subspecialty based practice and complex clinical issues, but includes content from entire BASIC /ADVANCED Exam content outline
- Offered the first time in July; Next administration is Jan. 27-28, 2017

**APPLIED Examination**
- Will replace the Part 2 (Oral) Examination in 2017, and include both the oral exam and Objective Structured Clinical Examinations (OSCEs) beginning in 2018
**WHO TAKES STAGED EXAMS?**

- **Traditional Part 1 and Part 2 Exams**
  Residents who completed training before June 30, 2016

- **Staged Exams**
  Residents who began their four-year training in anesthesiology on or after July 1, 2012, and will complete training on or after June 30, 2016
Duration of Candidate Status

• Candidates who completed residency training prior to Jan. 1, 2012, have until Dec. 31, 2018 to satisfy all certification requirements

• Candidates who complete residency training on or after Jan. 1, 2012, have seven years from the last day of the year in which residency training was completed to satisfy all certification requirements
2017 BASIC EXAMINATION

• BASIC Exam administered at Prometric testing centers:
  - **June 2017:** Friday, June 9, and Saturday, June 10
  - **November 2017:** Friday, Nov. 17, and Saturday, Nov. 18

• Residents are assigned an exam day

• They must register for exam with ABA, then schedule seat with Prometric
  - Registration opens **March 1** for June exam, **Aug. 1** for November exam
If a Resident Fails the BASIC Exam...

• They can take it six months later

• After failing a second time, a resident:
  – automatically receives an unsatisfactory (“U”) for that reporting period
  – will continue to receive a “U” until the exam is passed

• Failing the examination three or more times will extend residency training
Why Add OSCEs?

- Intended to assess domains that are difficult to assess in written or oral exam formats, such as:
  - Communication and Professionalism
  - Technical skills
- Evidence that these domains are important in physician performance after training
- Role of exams in driving training priorities
OSCE Timeline

2015: OSCE Task Force established to draft and test scenarios (11 members)

2016: Content outline created and expanded to provide additional details; OSCE overview video created; further scenario development

2017: Scenarios tested/viewed at program director meetings in Raleigh; extensive validation of delivery and scoring

2018: OSCEs launch
The OSCEs

- OSCE component of the APPLIED Exam will take **84 minutes** from start to finish
  - Seven-station circuit to evaluate proficiency in seven of the nine OSCE Content Outline skills
  - Each scenario will be eight minutes long
  - Four minutes between stations to review the next scenario

- Candidates will interact with a **standardized patient actor** in some rooms, directly with examiners in others
  - Examiners will not be in most exam rooms
  - Sessions will be recorded for grading purposes
The OSCEs

• Expanded content outline now available online
  – Communication and Professionalism (Six skills)
    Informed consent, Treatment options, Peri-procedural complications, Ethical issues, Communication with other professionals, Practice-based learning and improvement
  – Technical skills (Three skills)
    Interpretation of monitors, Interpretation of echocardiograms, Application of ultrasonography (TEE)

• Designed to provide as much information as possible regarding format and expectations
**The OSCEs**

- OSCEs will be administered to candidates in the Assessment Center in Raleigh on the same day they take the SOE component
  - If candidates fail one component (OSCE or SOE), they will only retake that component

- APPLIED Exam registration fee will remain the same with the addition of the OSCE component in 2018
Who Will Take the OSCEs?

- Candidates who complete residency training on or after Oct. 1, 2016, will take both the SOE and the OSCE of the APPLIED Exam.

- Candidates who completed residency training between June 30 and Sept. 30, 2016, will not take the OSCE component of the APPLIED Exam. 
  - Only required to pass the SOE component.
Sample questions, content outlines, blueprints, administration schedules and videos are available.

Blueprint information for all exams includes:
- Exam purpose
- Exam content
- Exam specifications
- Exam administration information
- Number and relative percentage of questions in content categories
Questions?

Communications Center:
Phone: (866) 999-7501
Fax: (866) 999-7503
Email: coms@theABA.org

Mail Correspondence:
ABA Secretary
4208 Six Forks Rd, Suite 1500
Raleigh, NC 27609-5765