Development of ABR Examination Questions

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American Board of Radiology Mission

“To serve patients, the public, and the medical profession. . .”

“by certifying that its diplomates have acquired, demonstrated, and maintained a requisite standard of knowledge, skill, and understanding. . .”
Genesis of New Exam Items

New exam content is created each year

**For Part 1 and Part 2:**
- 60% new items
- 40% reused items
  - From a bank of previously used items
  - Known item statistics facilitate an understanding of exam difficulty
Exam Content

Medical Physics Initial Certification (2014)

<table>
<thead>
<tr>
<th>Exam</th>
<th>Questions</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1 General &amp; Clinical</td>
<td>80 + 75</td>
<td>6 hrs</td>
</tr>
<tr>
<td>Part 1 Clinical Only</td>
<td>75</td>
<td>1.5 hrs</td>
</tr>
<tr>
<td>Part 2</td>
<td>80</td>
<td>4.5 hr</td>
</tr>
<tr>
<td>Orals</td>
<td>25</td>
<td>2.5 hr</td>
</tr>
</tbody>
</table>

Note: Question numbers will vary slightly

ABR exam items are written by volunteer committees of ~10 subject matter experts in various specialties of medical physics

- Part 1 Examination
  - General
  - Clinical
- Part 2 Examination
  - Medical Nuclear
  - Diagnostic Medical
  - Therapeutic Medical
- Oral Examination
  - Medical Nuclear
  - Diagnostic Medical
  - Therapeutic Medical
Genesis of New Exam Items
Genesis of New Exam Items

Exam Review Prior to Administration
Exam Review Post Administration

Item Feedback:

• Occasionally, candidates contact the AED or ABR physics trustees or ABR staff with concerns about a specific test item

Inquiries are handled by the AED, the trustees and content experts to resolve any issues
Oral exam review processes

- Performance evaluations of each oral examiner
  - Any irregularities are addressed appropriately
- Performance evaluations of each oral exam panel
  - Oral exam panels have remarkably similar performance
- Feedback: Any candidate inquiries concerning the conduct of the oral exam are handled by the AED and the trustees to resolve any issues

Developmental Cost
Developmental Cost

Clearly the most precious commodity in the creation of medical physics content of ABR certification exams is the participation of volunteer subject matter experts

~100 MP volunteers