



Development of ABR Examination Questions

Jerry D. Allison, Ph.D.

Trustee, ABR

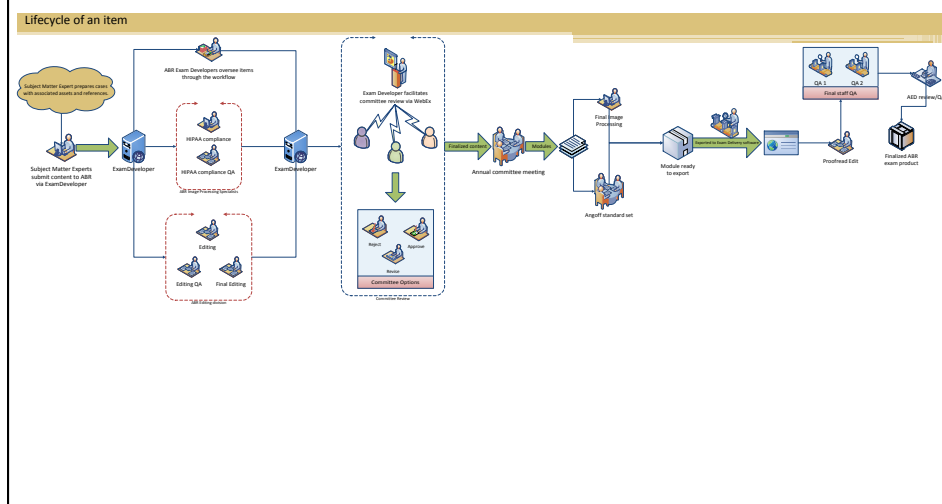


American Board of Radiology Mission

**“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

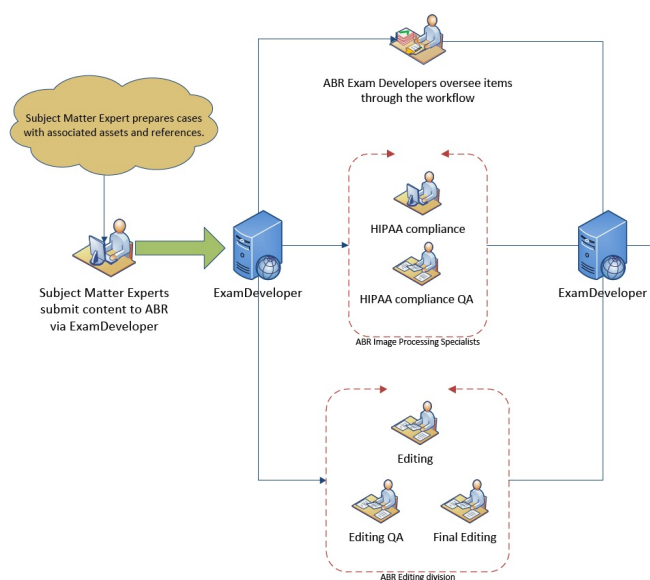
For Part 1 and Part 2:

- ***60 % new items***
- ***40 % reused items***
 - ***From a bank of previously used items***
 - ***Known item statistics facilitate an understanding of exam difficulty***

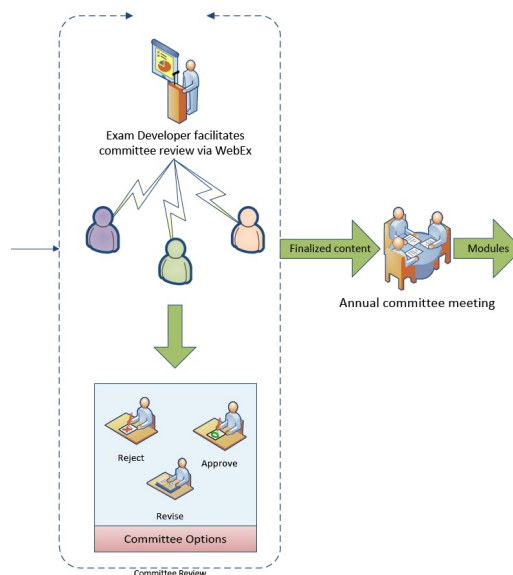
 <h2 style="text-align: center;">Exam Content</h2>		
Medical Physics Initial Certification (2014)		
Exam	Questions	Time
Part 1 General & Clinical	80 + 75	6 hrs
Part 1 Clinical Only	75	1.5 hrs
Part 2	80	4.5 hr
Orals	25	2.5 hr
Note: Question numbers will vary slightly		

	
<p>ABR exam items are written by volunteer committees of ~10 subject matter experts in various specialties of medical physics</p>	
<ul style="list-style-type: none"> • Part 1 Examination <ul style="list-style-type: none"> • General • Clinical • Part 2 Examination <ul style="list-style-type: none"> • Medical Nuclear • Diagnostic Medical • Therapeutic Medical • Oral Examination <ul style="list-style-type: none"> • Medical Nuclear • Diagnostic Medical • Therapeutic Medical 	

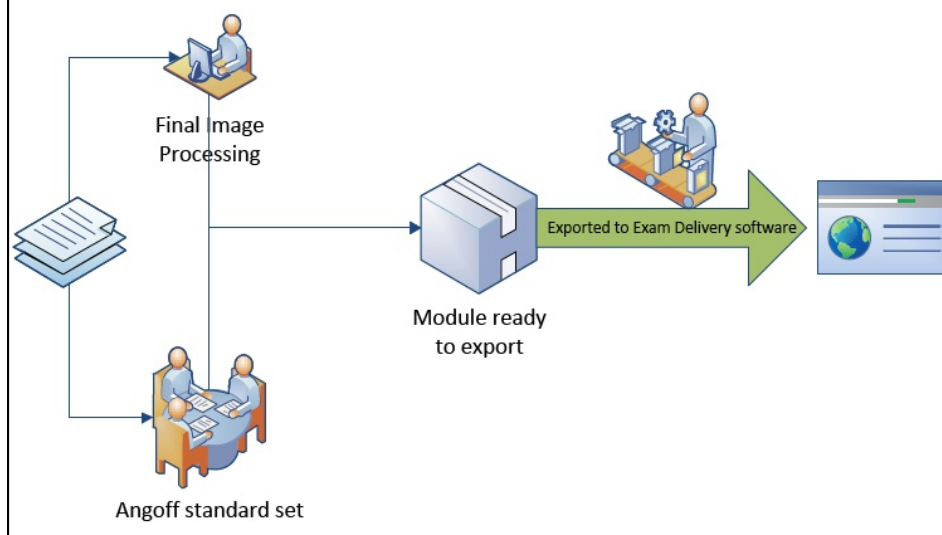
Genesis of New Exam Items



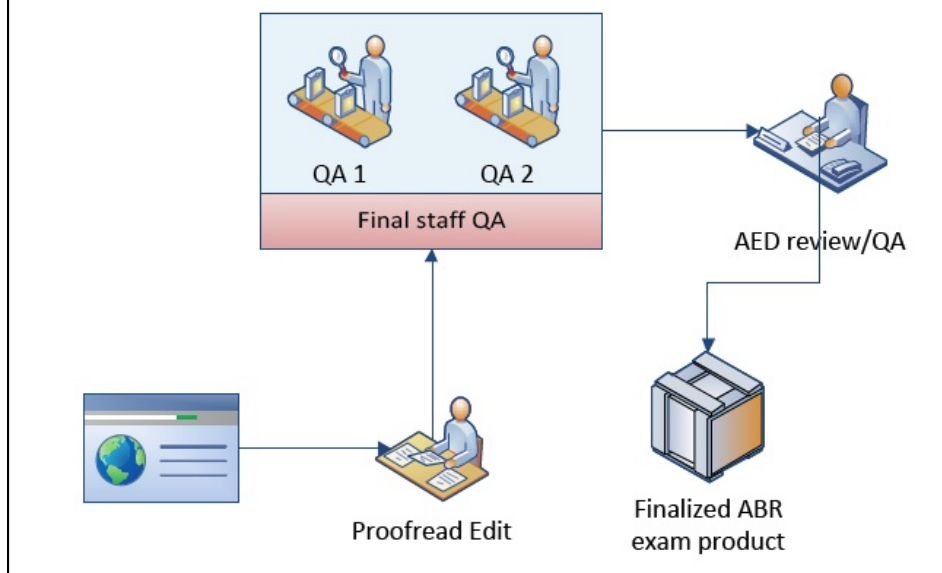
Genesis of New Exam Items

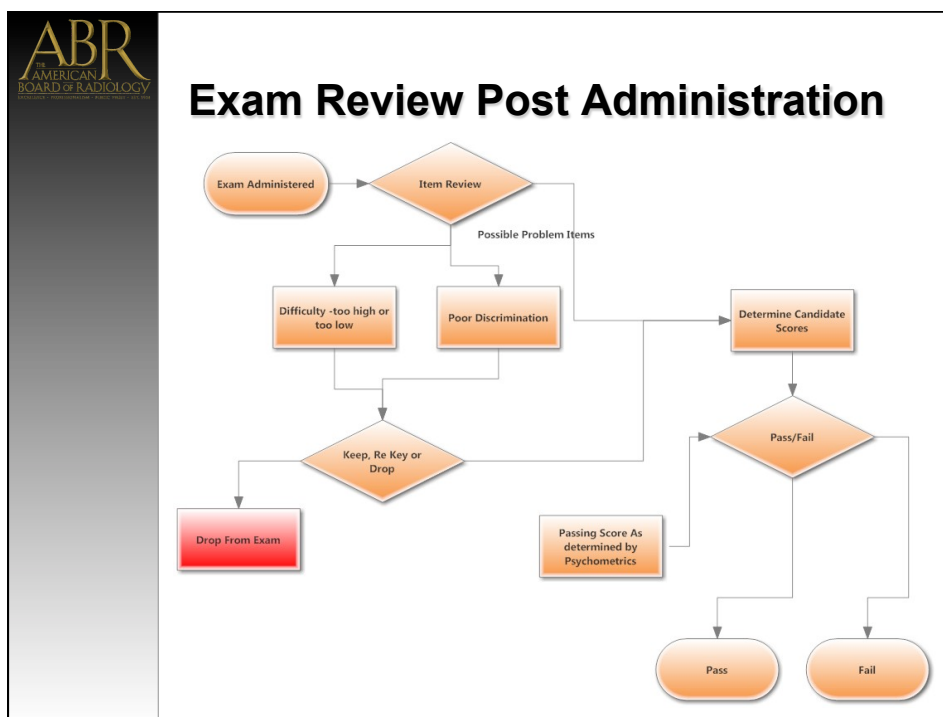


Genesis of New Exam Items



Exam Review Prior to Administration





ABR
THE AMERICAN BOARD OF RADIOLOGY

Item Feedback:

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

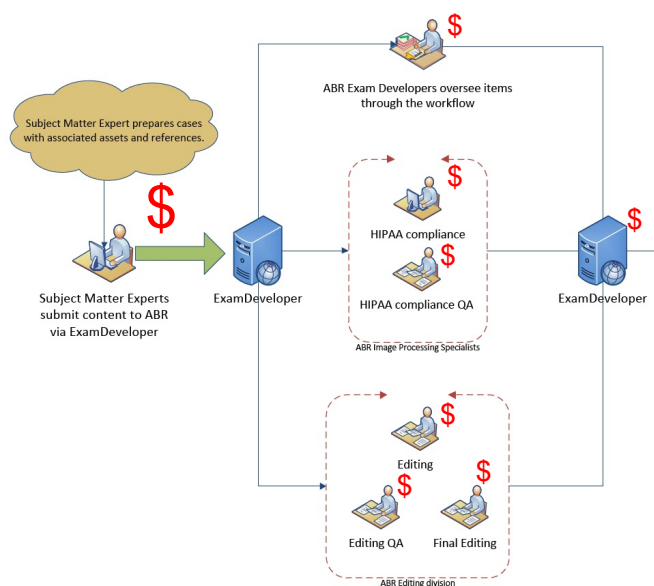
Inquiries are handled by the AED, the trustees and content experts to resolve any issues



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