

Initial Certification

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Competency In Medical Physics

Professional Standing	Lifelong Learning	Cognitive Expertise	Practice Quality Improvement
Exam Part 1 General MP	Exam Part 2 Discipline Specific MP	Exam Part 3 Discipline Clinical Competence	
Physics Education	Medical Physics Education	Clinical Education	

Competency In Medical Physics

**Professional
Standing**

**Lifelong
Learning**

**Cognitive
Expertise**

**Practice
Quality
Improvement**

**Exam
Part 1
General MP**

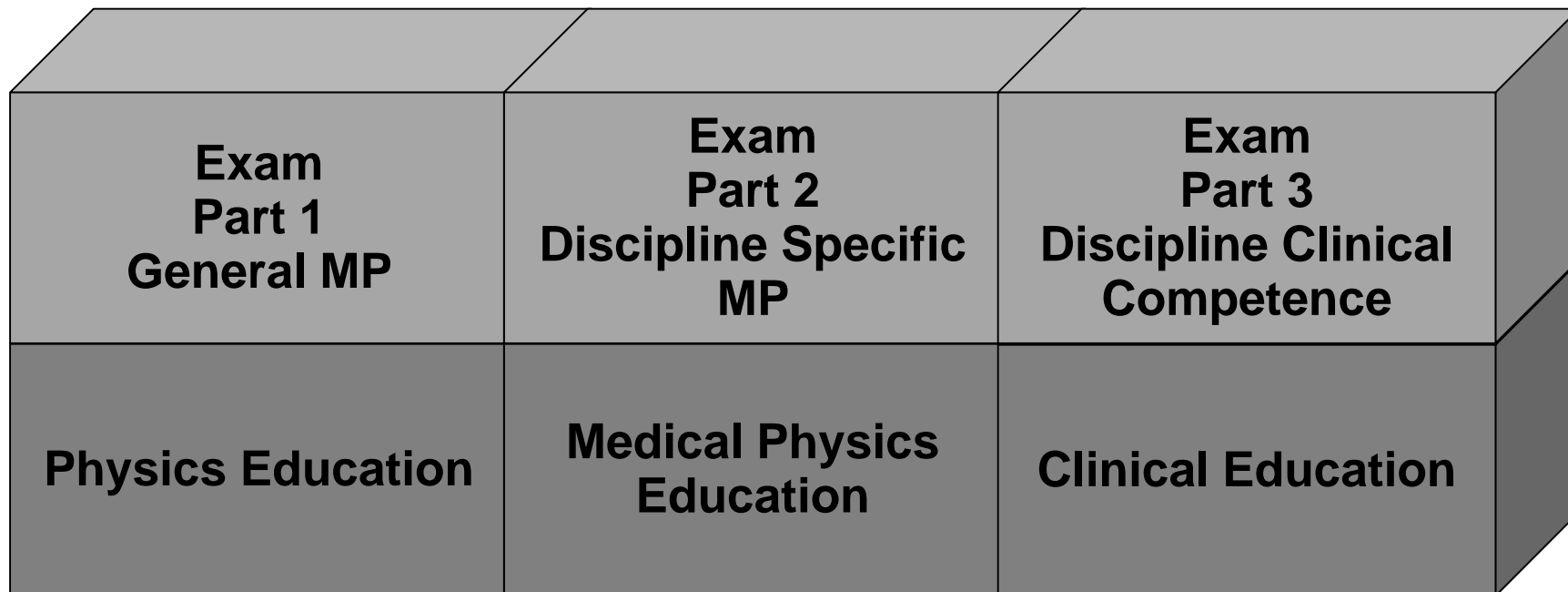
**Exam
Part 2
Discipline Specific
MP**

**Exam
Part 3
Discipline Clinical
Competence**

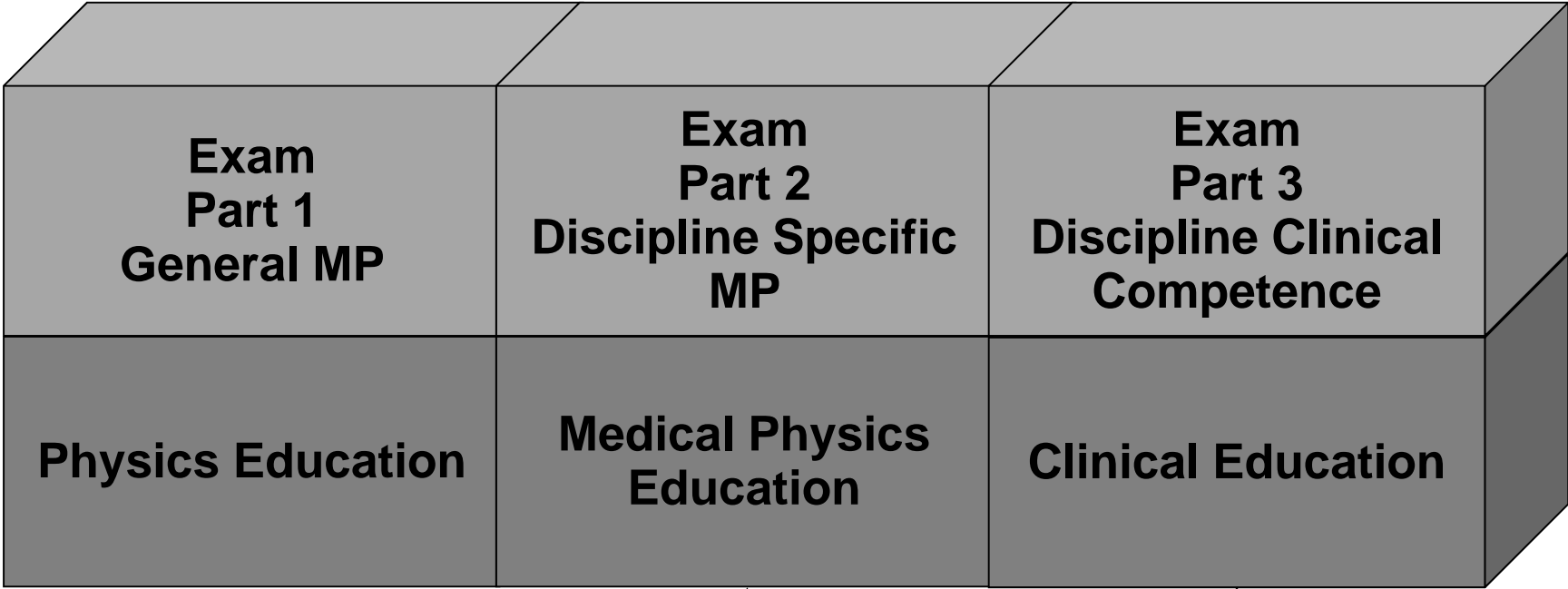
Physics Education

**Medical Physics
Education**

Clinical Education



Going Back to 2002



Few CAMPEP programs
Many candidates from non-MP programs

Largely non-standard OJT

Issues for Certification

- **Largely non-standardized didactic education**
- **Largely non-standardized clinical education**
- **Many candidates had gaps either in their cognitive or clinical expertise**

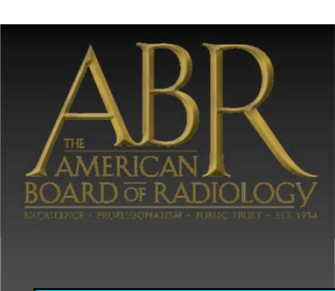
Steps to Improve the Process

In 2002 the ABR announced that beginning in 2012 a CAMPEP education would be required to sit for the ABR board

Discussion within the MP community developed the concept of the importance of residencies

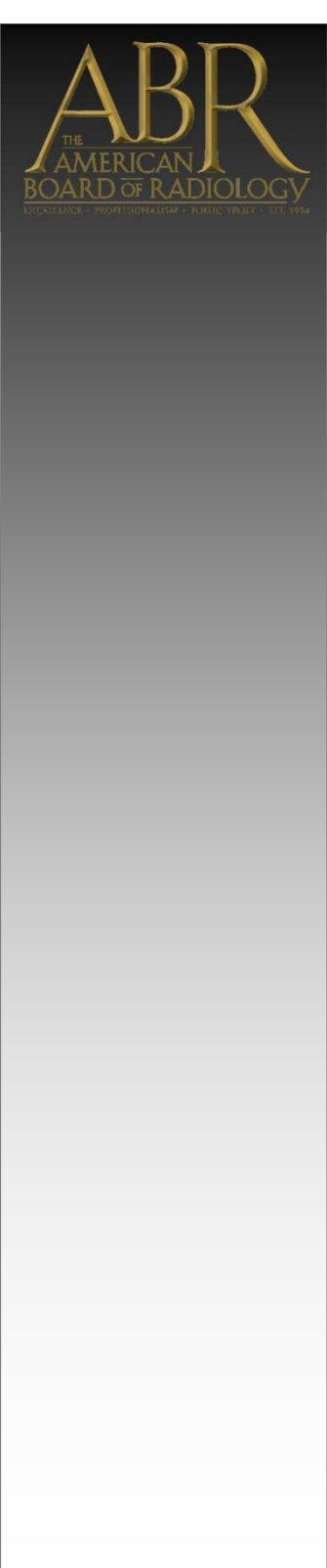
In 2007 the AAPM Board voted to recommend a residency as the appropriate pathway into MP

Following the guidance of the community the board announced that beginning in 2014 a residency would be required



Application Date	Requirement for NEW Applications
Prior to 2012	Part 1: Appropriate graduate education Part 2: 3 years clinical experience
2012 & 2013	Part 1: Enrollment in CAMPEP degree, certificate or residency program Part 2: Completion of CAMPEP residency or 3 years of clinical experience
2014 and Beyond	Part 1: Enrollment in CAMPEP degree, certificate or residency program Part 2: Completion of CAMPEP residency

Requirements at the time of application continue to stay in force for reasonable amounts of time



NATURE OF THE EXAMS

Nature of Exams

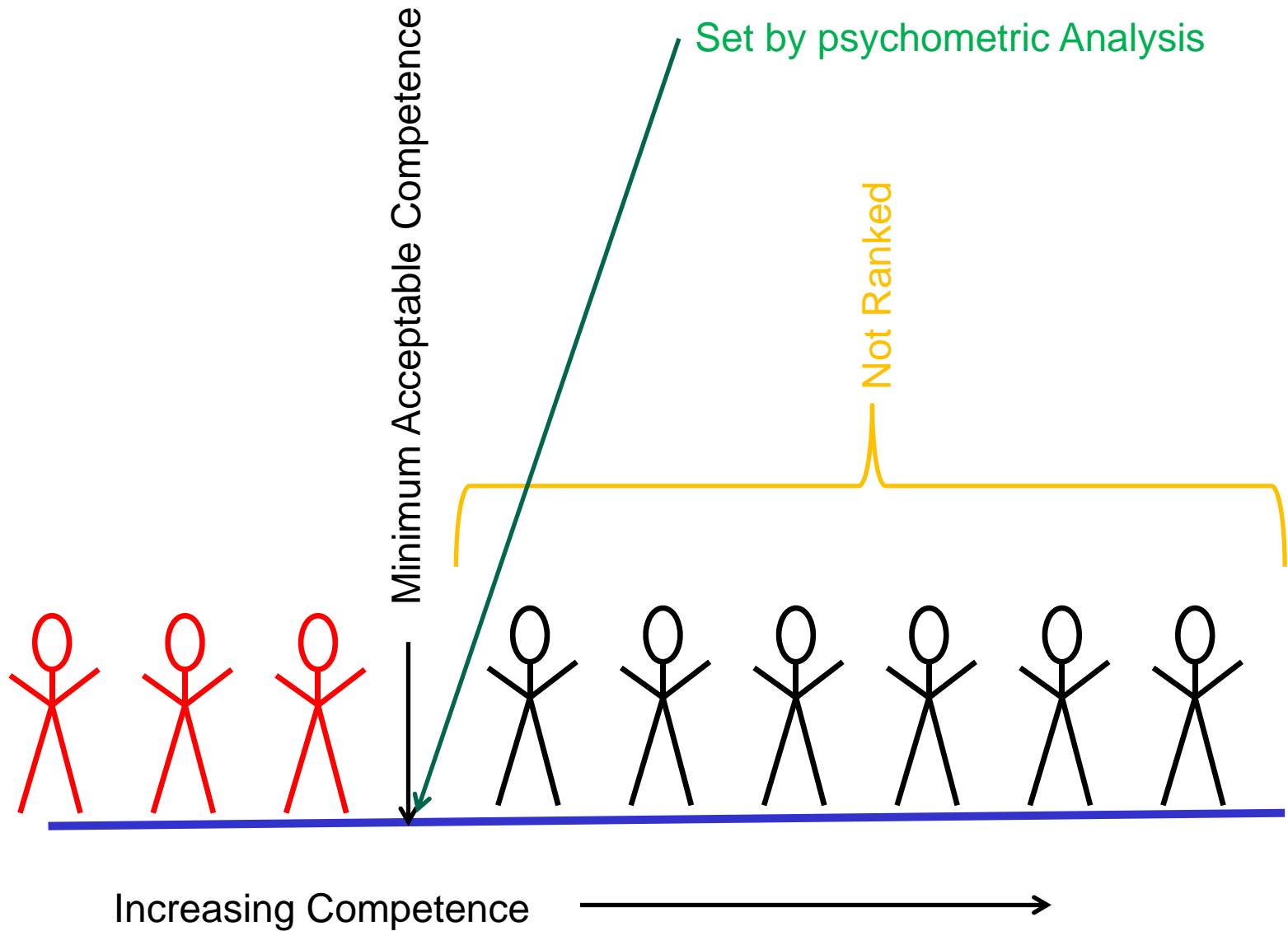
Exams are “criterion referenced.”

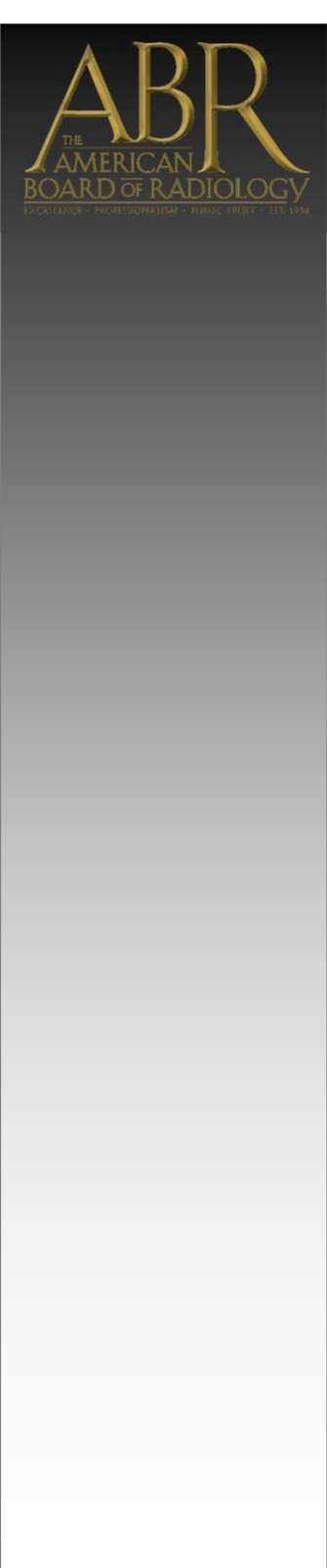
Everyone who meets the “standard” passes.

In principle everyone could pass or fail

This can be compared to “norm referenced” where the purpose of the test is to rank the participants

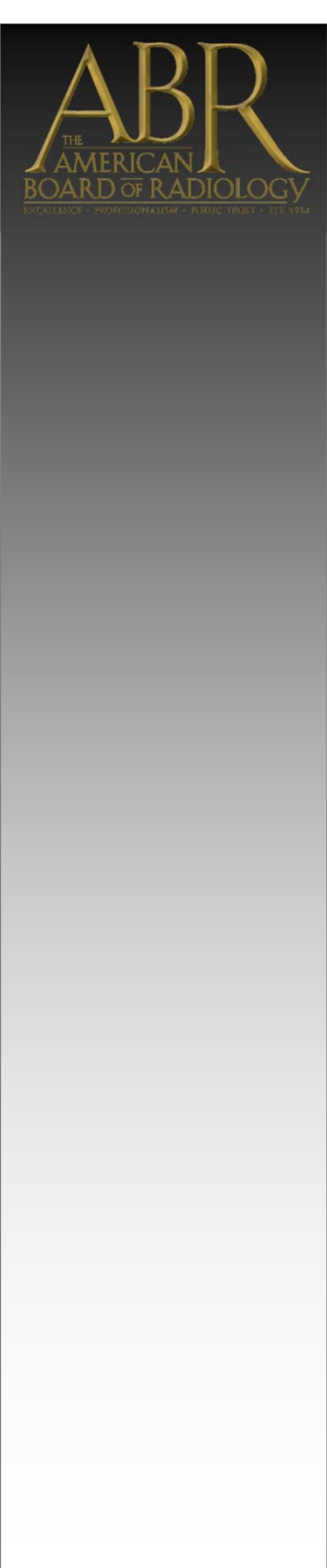
Criterion Referenced





How Are Criteria Determined?

- **Expert Analysis**
- **Practice Surveys**
- **Professional Guidelines**

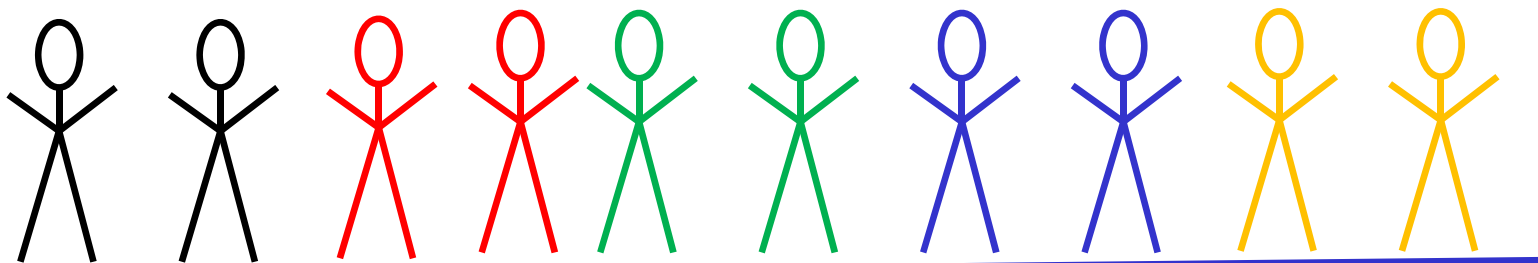



Passing Score

Set by psychometric analysis

Norm Referenced

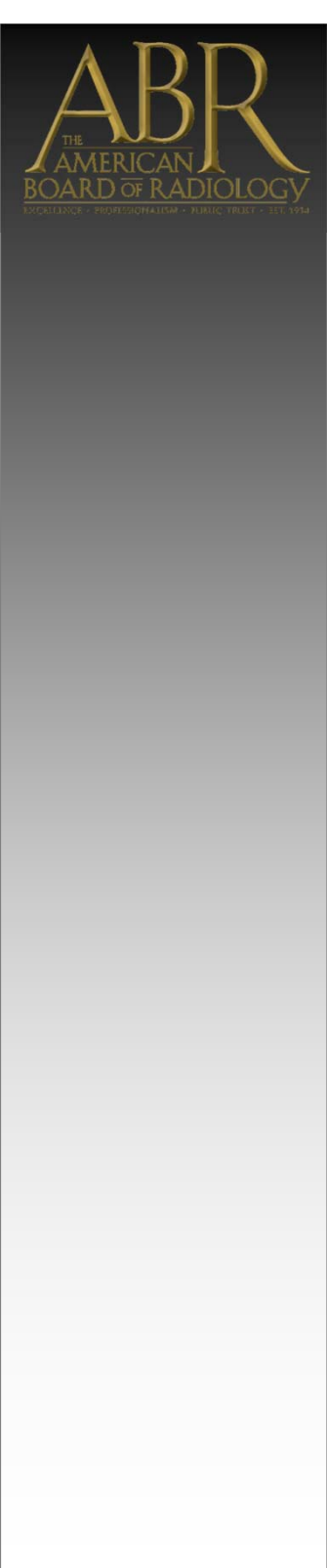
May not be a passing score



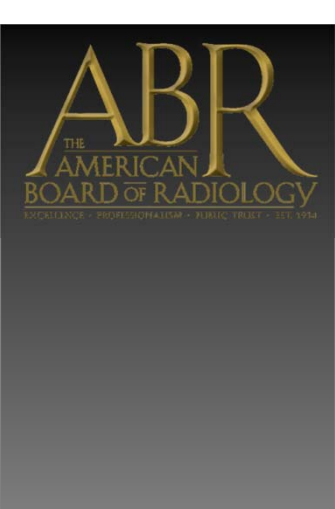
Increasing Competence 

Examples

- **Pure Criterion Referenced**
 - Board Certification
- **Pure Norm Referenced**
 - Scholastic Aptitude Test
- **Mixed**
 - Typical College Grades (A>B>C>D>F)



THE EXAMS THEMSELVES



Exam Length and Content

Part 1: General	53 Simple 27 Complex	4 hrs
Part 1: Clinical	75 Simple	1.5 hrs
Part 2	53 Simple 27 Complex	4 hrs
Part 3 (Oral)	5 Categories X 5 Examiners =25	5 x 25 min exam periods

Part 1 - Current Requirement

For New Applications Received after 2012

- **Applicants for Part 1 and the Clinical Exam must be enrolled in one of the following CAMPEP Accredited Programs:**
 - Graduate Education Program
 - Certificate Program
 - Residency

The candidate must be in good standing and the enrollment must be attested to by the program director

List of Commonly Used Constants

Beginning this last year a list of commonly used constants and physical values is provided for IC candidates

This reflects common practice for medical physicists

Informally called “Google List”

List is available on the ABR website



Part 1: General and Clinical

Must Pass Both Parts

If Candidate Fails Clinical

Repeat Clinical

If Candidate Fails General

Repeat Clinical & General

Part 2 - Current Requirement

For New Applications Received for 2014

- **Applicants for Part 2 must have completed a CAMPEP approved residency by August 31 of the year of the exam.**
The candidate must be in good standing and the enrollment must be attested to by the program director
- **If the applicant has completed their residency more than 1 year previously they must be employed as a medical physicist.**



Application for Part 2

Beginning in 2013 the ABR will not ask candidates who have passed Part 1 for an automatic update.

An application for Part 2 will be available on the ABR website

i.e. You must apply for Part 2

Applications are accepted from December 1 until January 31



Deadlines

Beginning with the applications received in 2013 the deadline for completing a candidate's clinical experience or residency will be August 31.

Part 3 (Oral) - Current Requirement

Long standing requirement

- **Applicants for Part 3 must have passed Part 2**

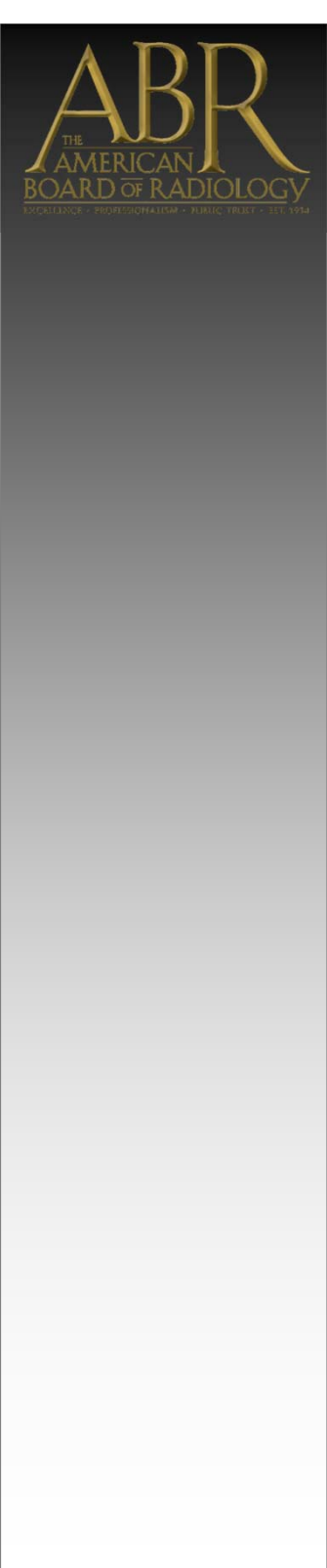
New Oral Categories

	DMP	NMP	TMP
Category 1	Radiography, mammography, fluoroscopy and interventional radiology / cardiology / vascular	SPECT and hybrids, including gamma cameras	Radiation protection and patient safety
Category 2	Computed tomography	Radiation protection	Patient-related measurements
Category 3	Non-ionizing techniques – MRI and ultrasound	PET and hybrids	Image acquisition processing and display
Category 4	Informatics, PACS, image display, image fundamentals	Radiation measurements	Calibration, quality control, and quality assurance
Category 5	Radiation shielding, protection, radiation dosimetry and patient safety	Clinical procedures	Equipment



Location of Orals

- **Orals remain in Louisville**
- **No change in content**
- **Content will be organized differently**



BOARD ELIGIBLE POLICY

Time Limits and Board Eligibility

- **Replace “opportunities” with time limits**
- **Require additional education or training if candidate “times out”**
- **Make “Board Eligible” an official status**

Part 1 and Clinical

- **Approved to take Part 1 & Clinical after January 1, 2011**
 - Must pass Part 1 & Clinical within 5 years of approval
- **Approved to take Part 1 & Clinical prior to January 1, 2011**
 - Must pass Part 1 & Clinical by December 31, 2016
- **If you do not pass by the required date you must complete an additional year of education at an institution that has a CAMPEP accredited educational program before you can be approved to retake part 1**

Part 1 to Part 2 Approval

**The ABR does not have a time limit
between passing Part 1 and being
approved for Part 2**

“Board Eligible”

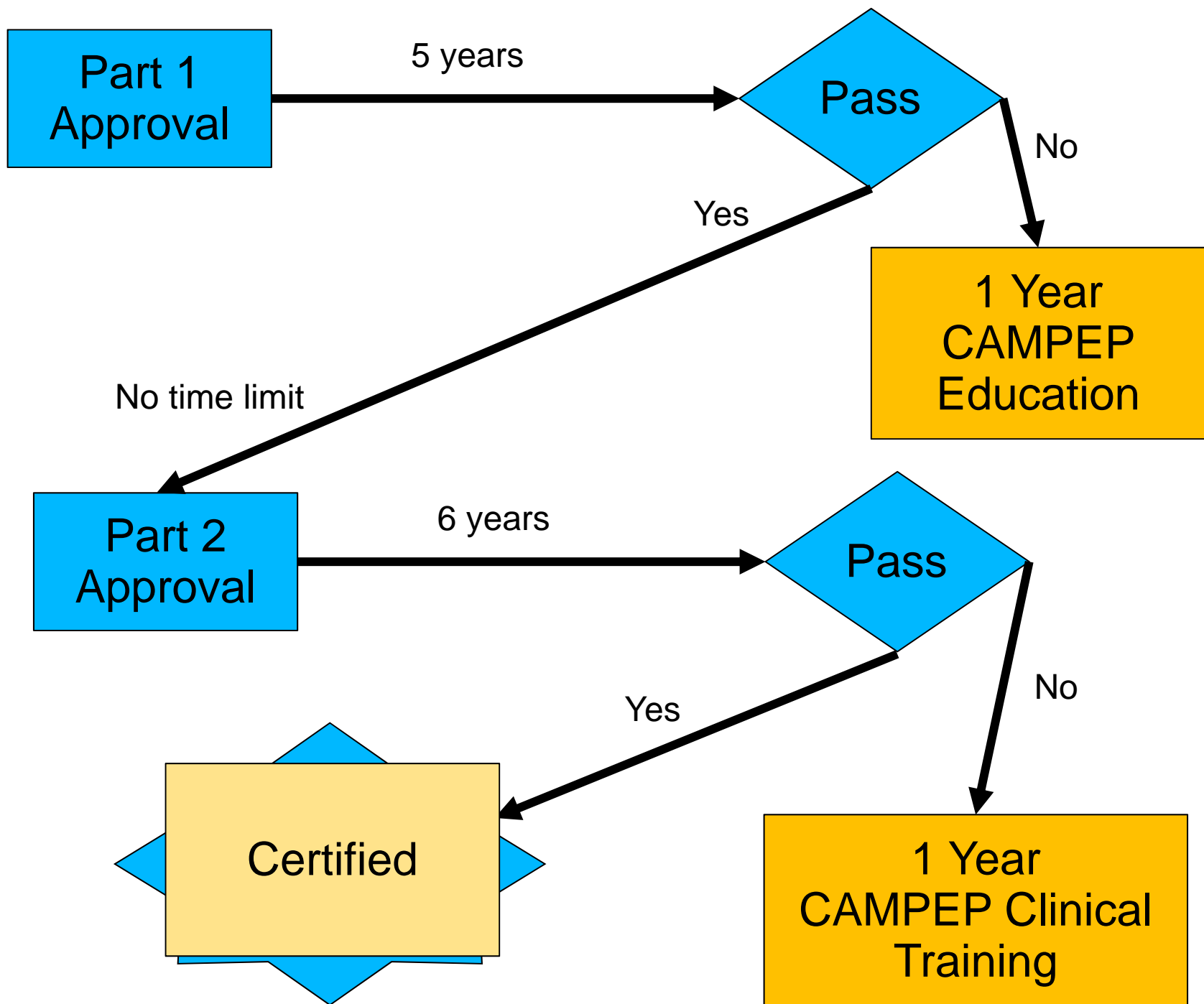
When one is approved for Part 2 or completes a CAMPEP residency one becomes “Board Eligible”

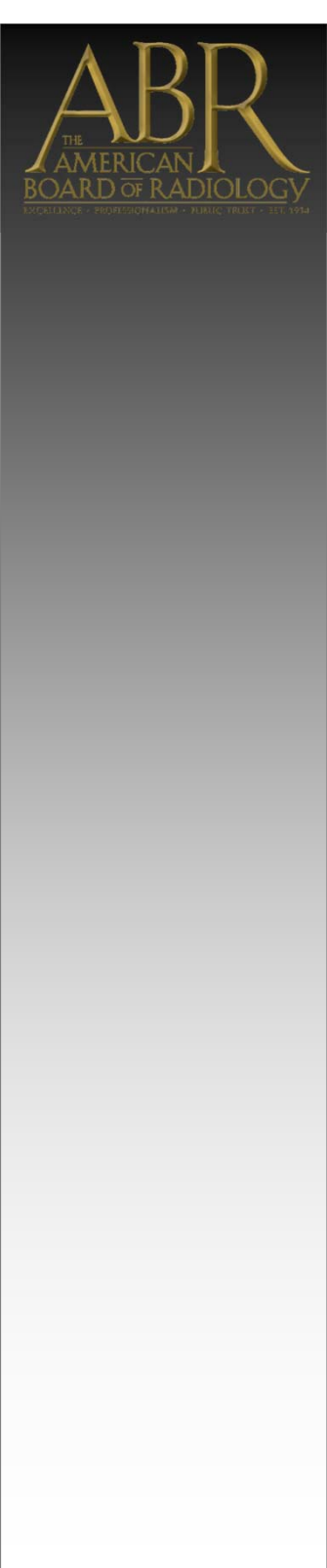
This is an official ABR and ABMS status and the candidate may describe themselves as “Board Eligible”

The ABR will report the candidate as “Board Eligible”

Board Eligible

- **Approved after January 1, 2011**
 - Must become certified within 6 years of approval
- **Approved prior to January 1, 2011**
 - Must become certified by December 31, 2016
- **If you do not pass by the required date you must complete an additional year of training at an institution that has a CAMPEP accredited residency program before you can be approved to be board eligible**
- **The ABR will show your status as “Not Certified and Not Eligible for Certification”**





ADDITIONAL CERTIFICATES

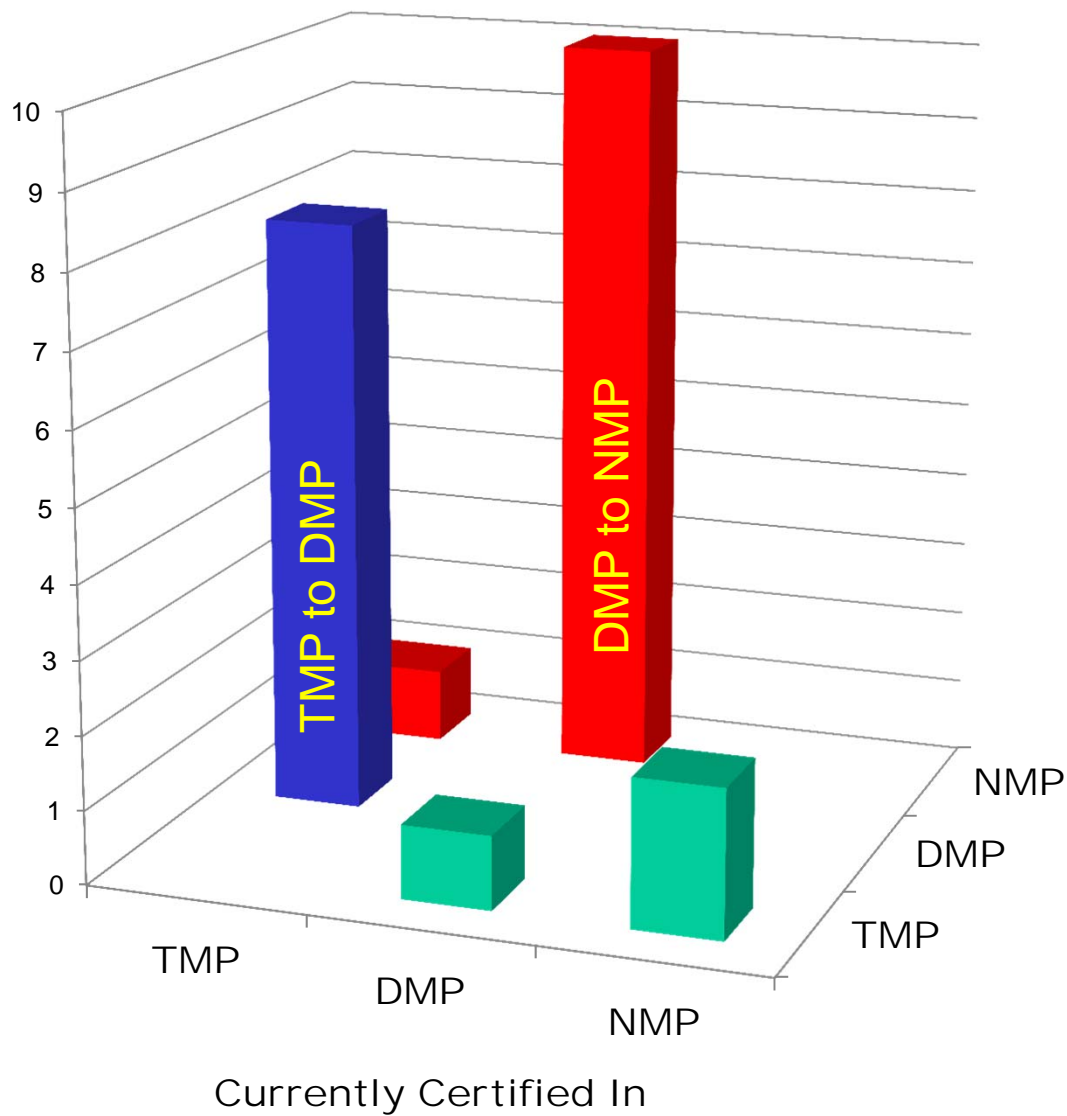
Additional Certificates

You may apply for additional certificates after 1 year of clinical training under the supervision of an ABR physicist

You are then “Board Eligible” in additional discipline

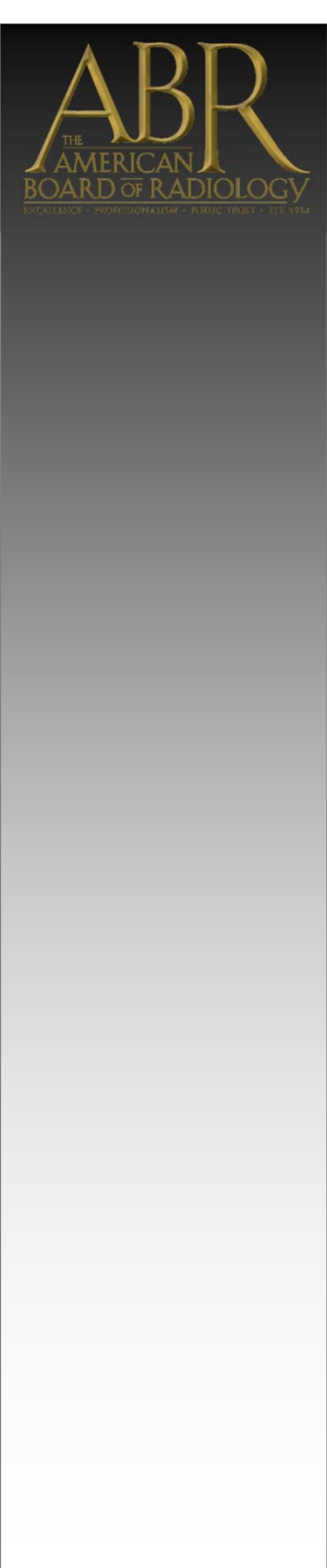
- Part 2**
- Oral**

You must become certified in the additional field within 6 years of approval or a year of clinical training at an institution that has a CAMPEP residency is required



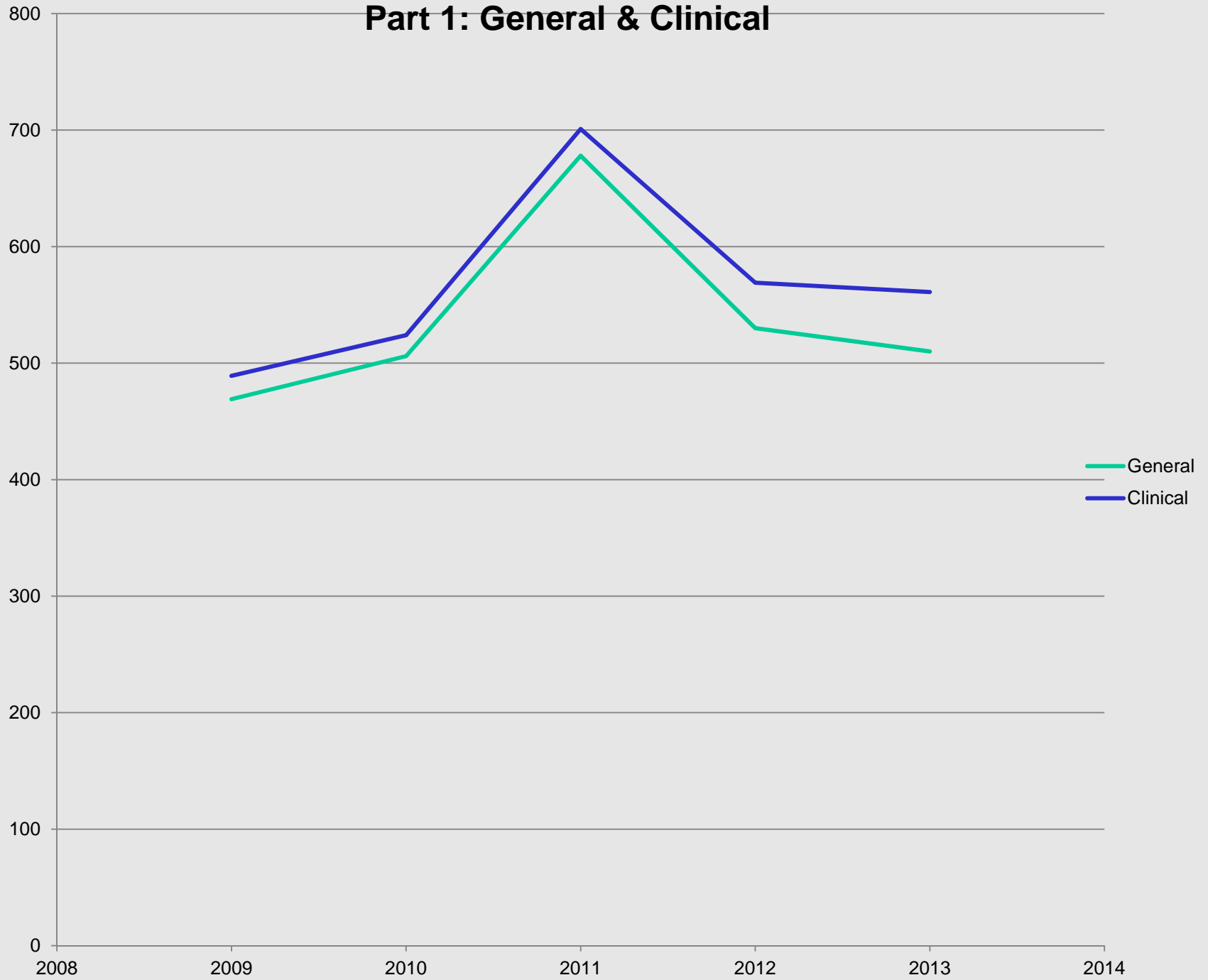
- TMP
- DMP
- NMP

Applying for
Certification In

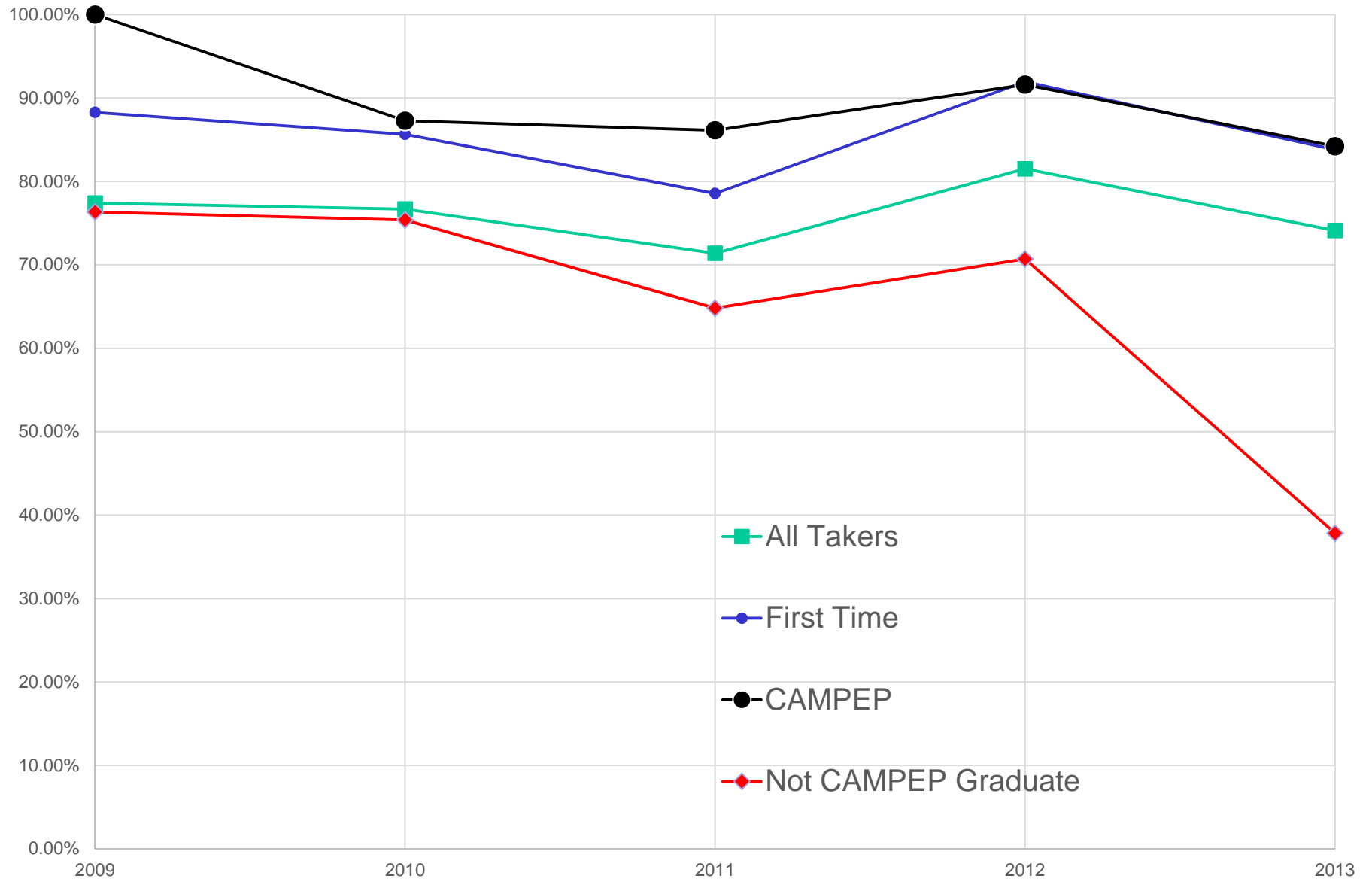


STATISTICS

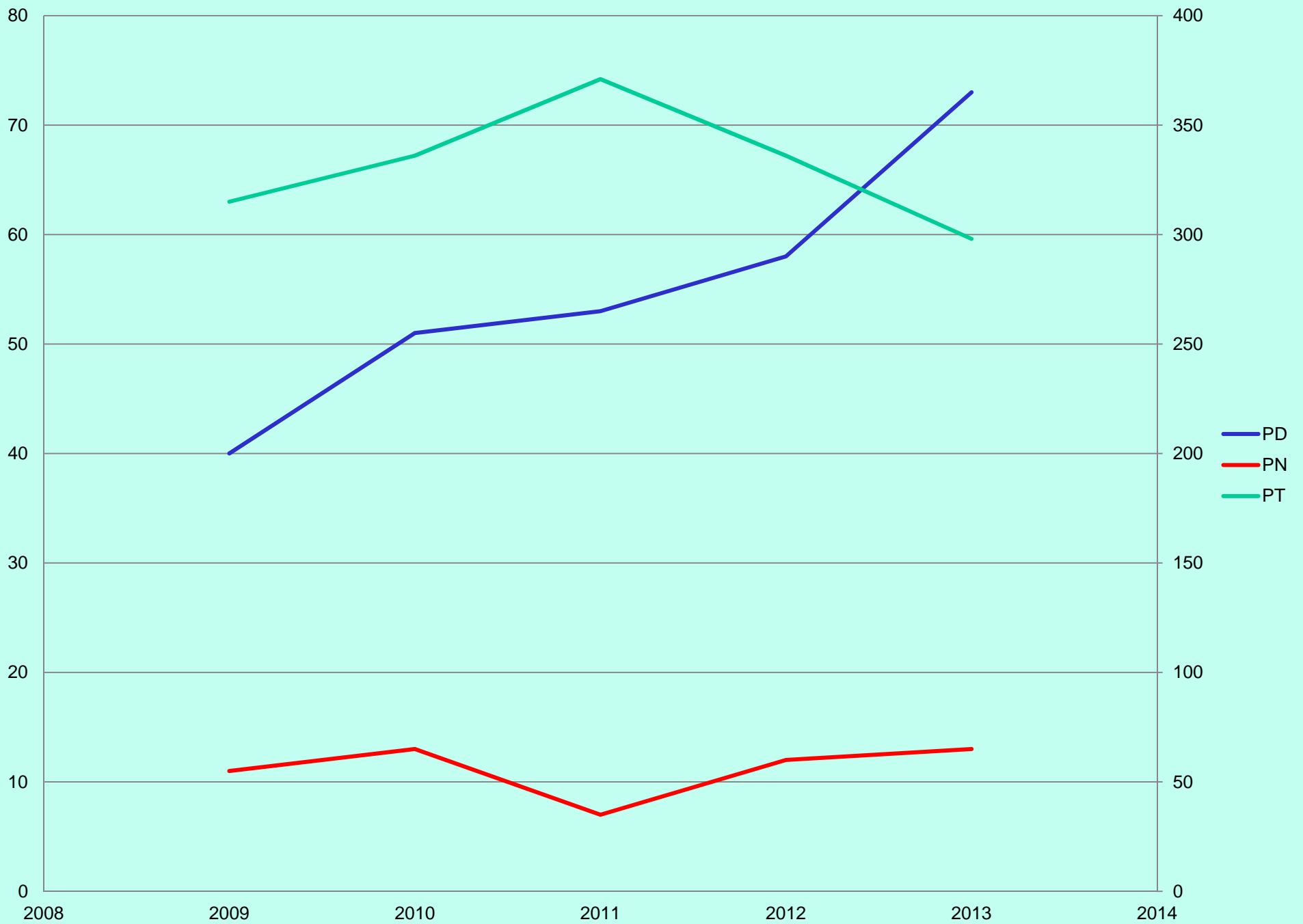
Part 1: General & Clinical



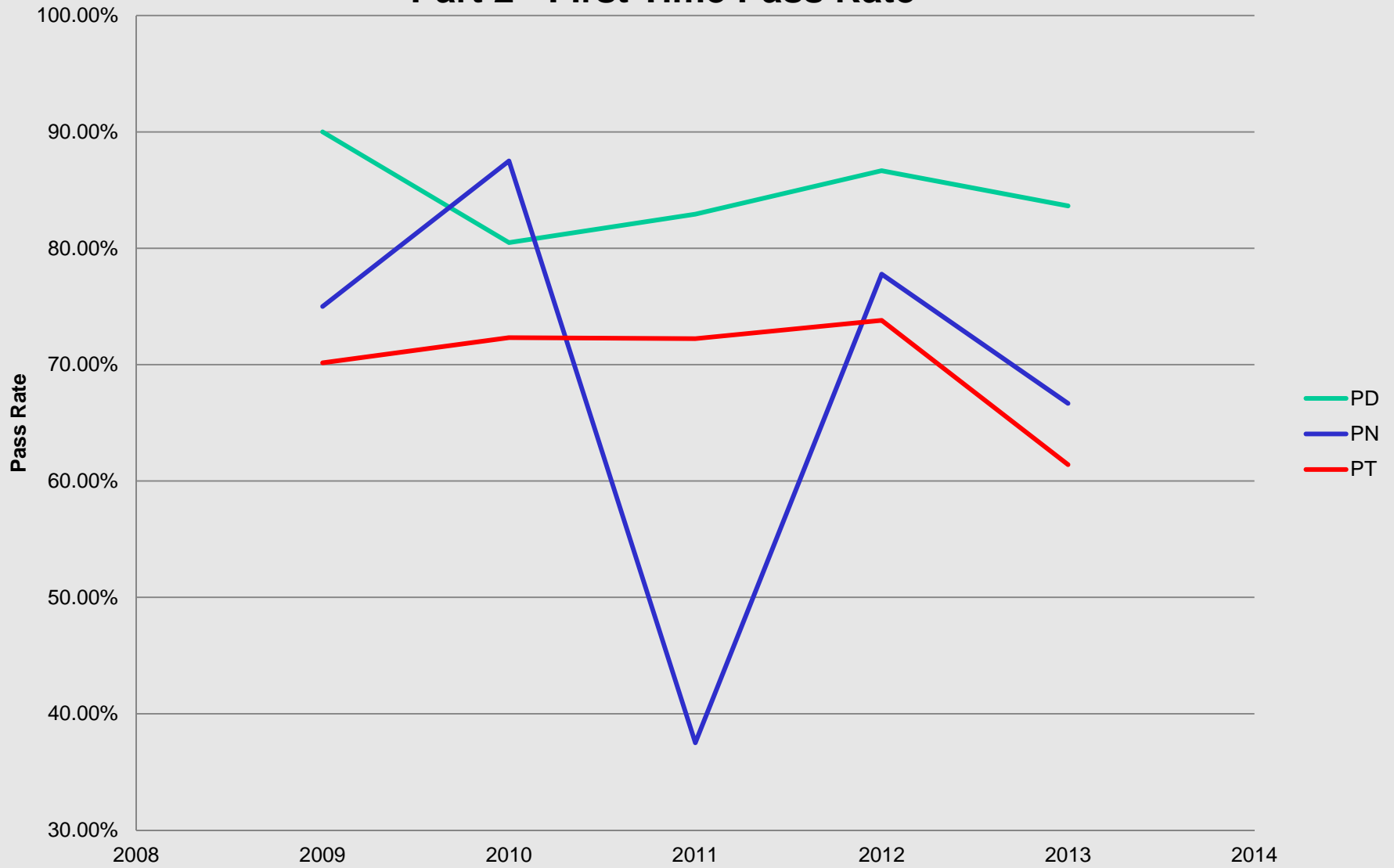
Part 1 General

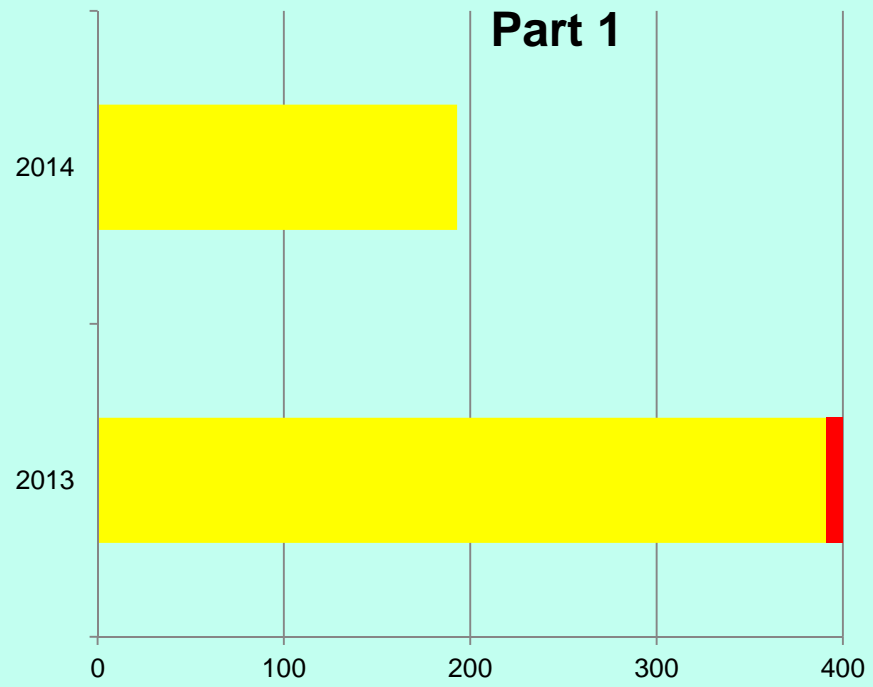


Part 2 Candidates

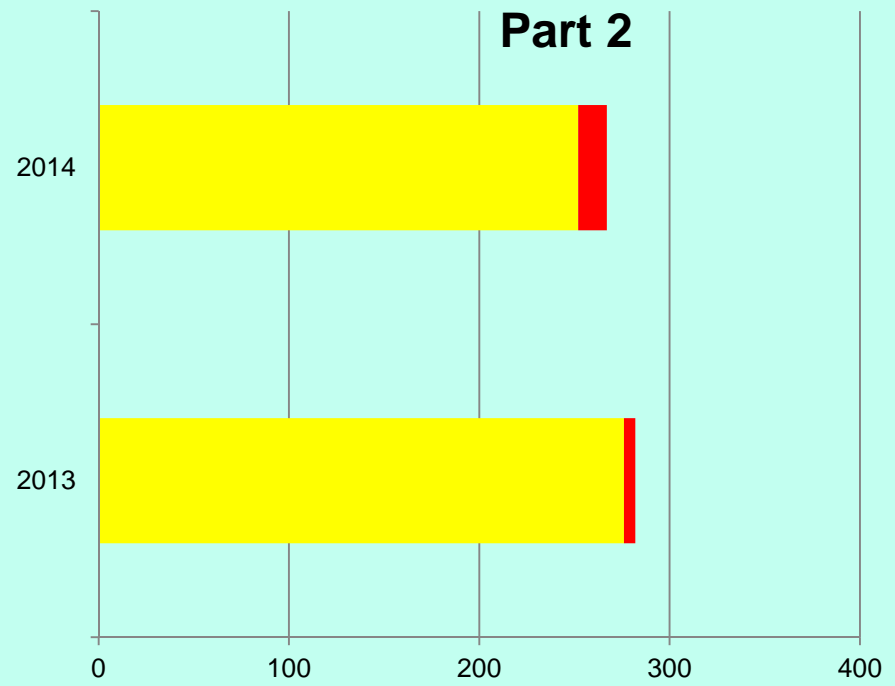


Part 2 - First Time Pass Rate



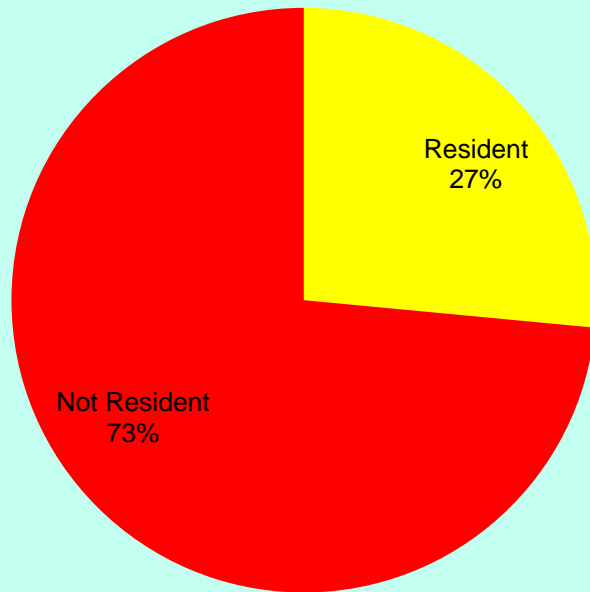


■ Approved
■ Not Approved

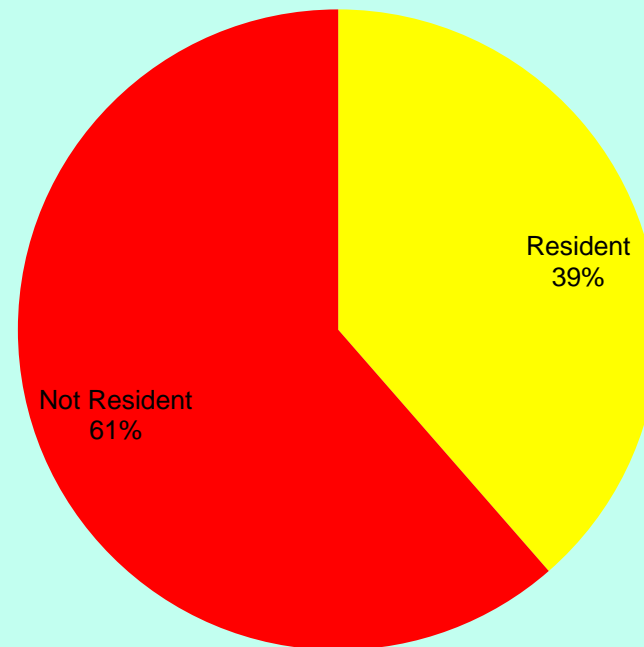


■ Approved
■ Not Approved

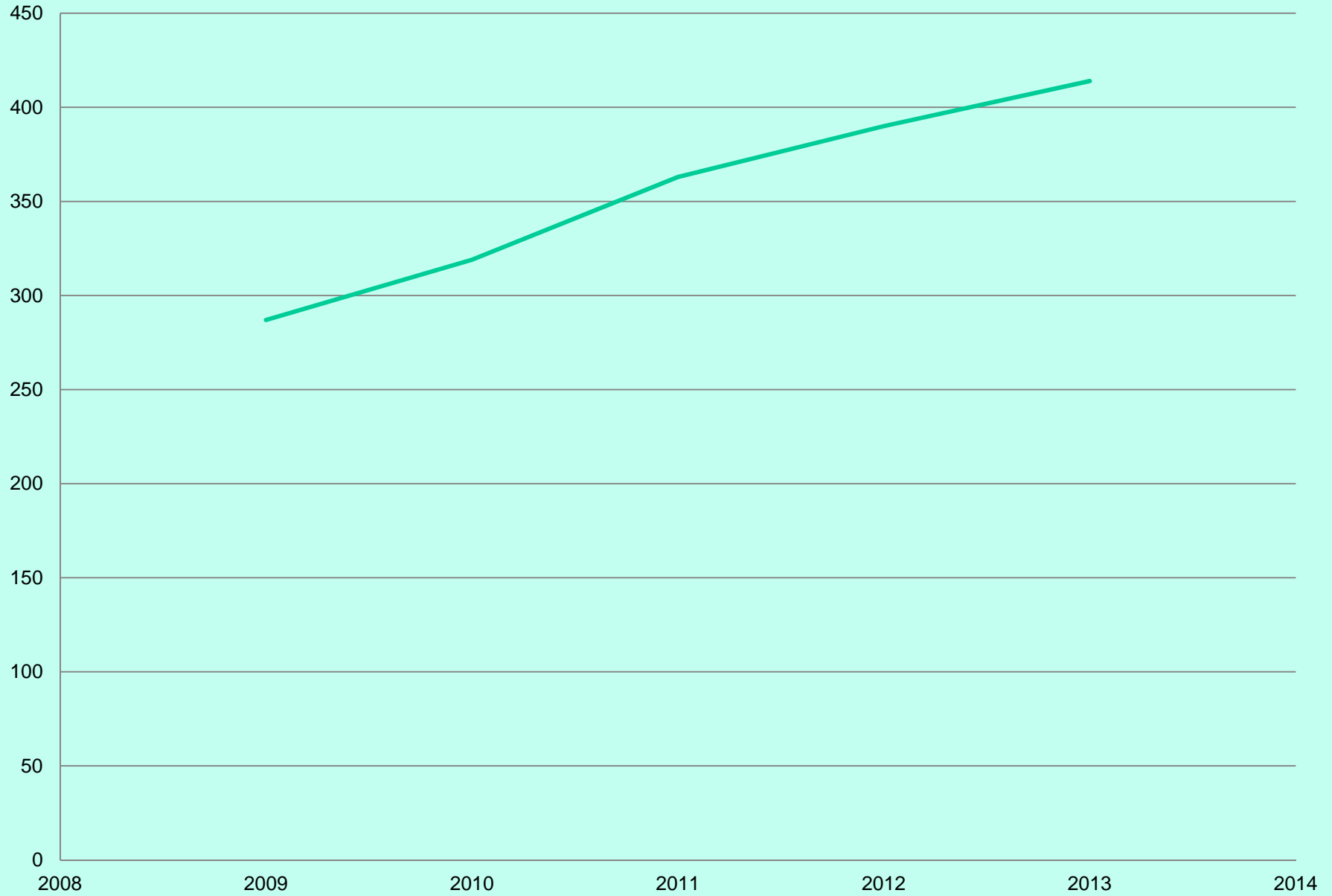
2013



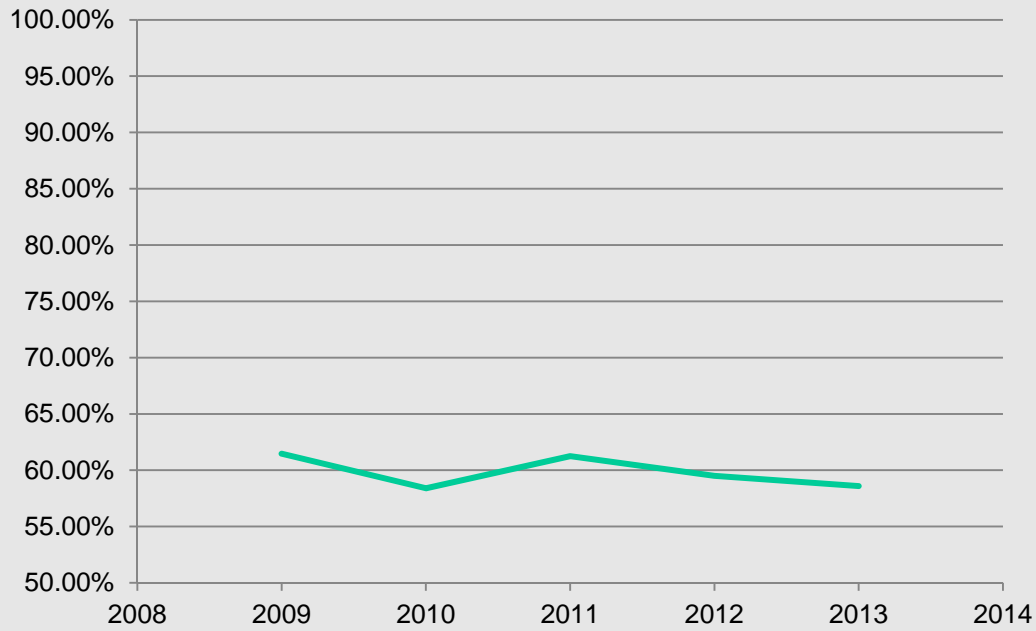
2014



Number of Oral Exam Takers

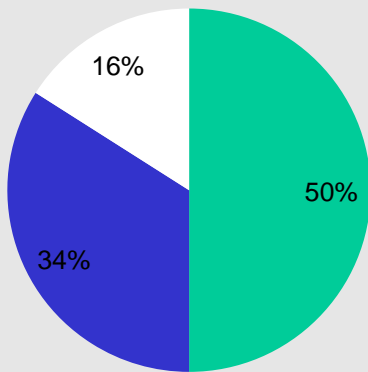


First Time

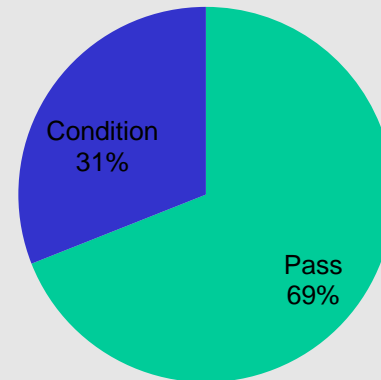


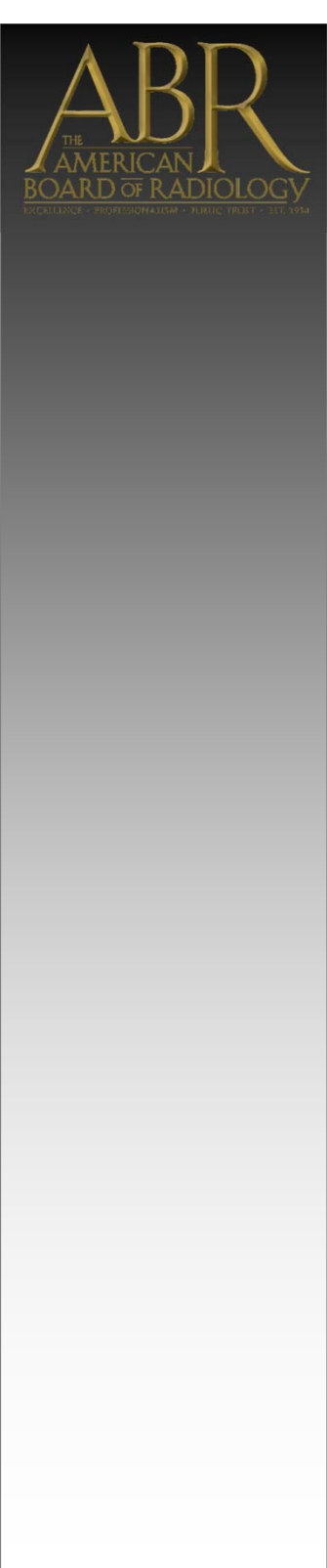
2013 Oral Results

■ Pass ■ Fail ■ Condition



2013 Condition Results





Questions?