



MP MOC Statistics

Michael Yester, Ph.D.

(on Behalf of ABR Physics Trustees)



**KEEP
CALM**

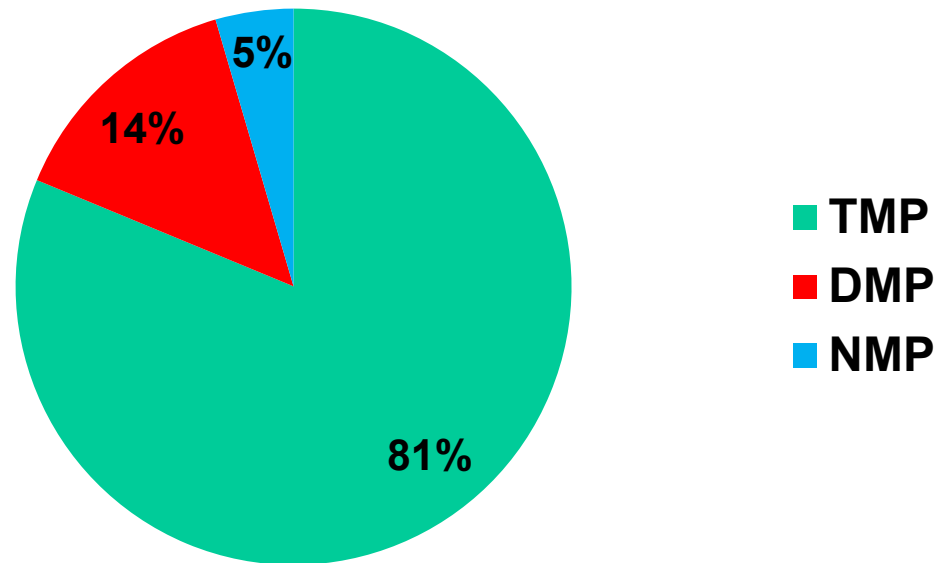
AND

**DON'T SHOOT
THE MESSENGER !!**

2534 MP Diplomates Enrolled in MOC
~ 1/2 of the total active diplomates

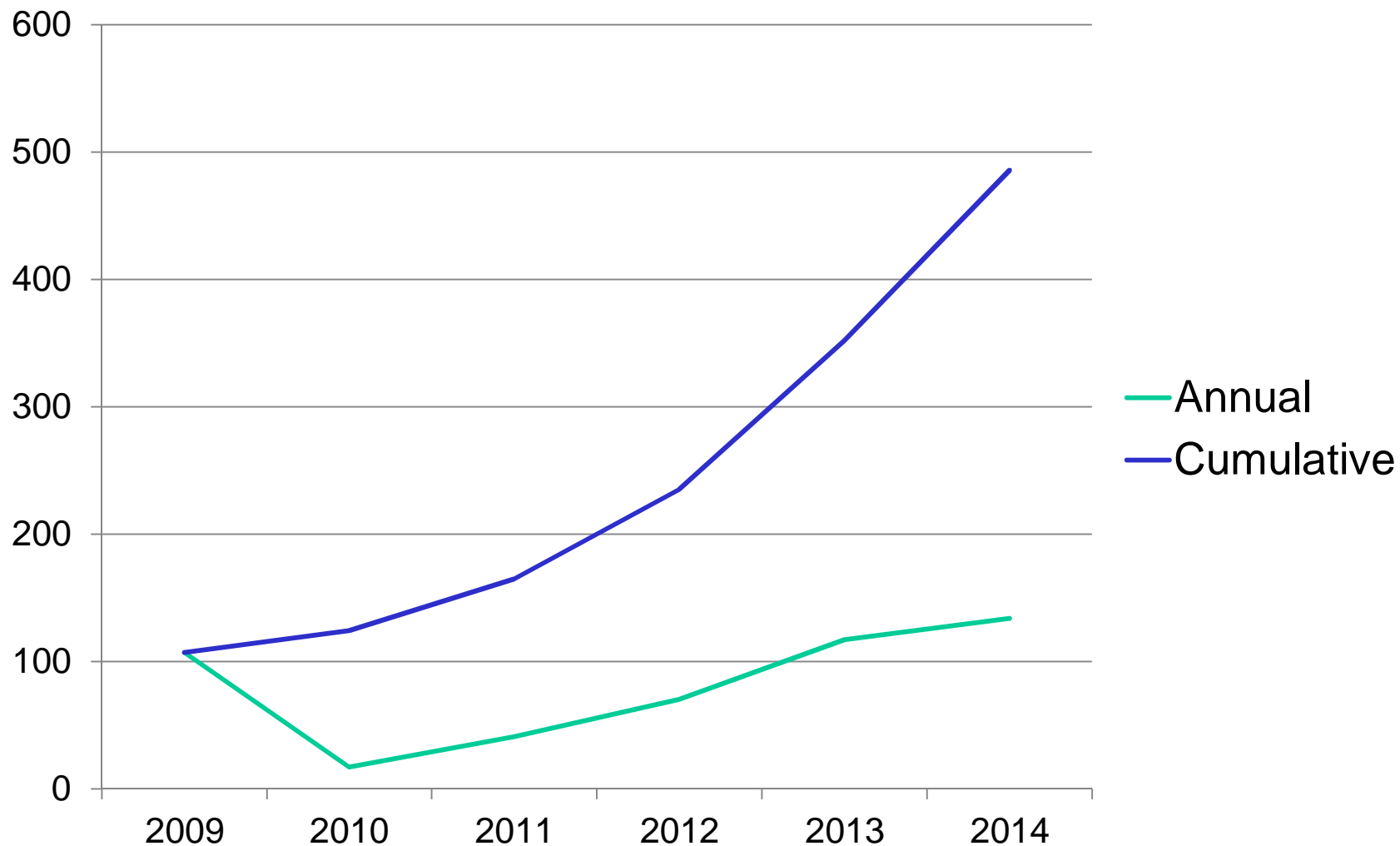
The MOC Exam

” The MOC exam has been given since 2009. Most candidates are from therapy with lesser numbers from diagnostic and nuclear



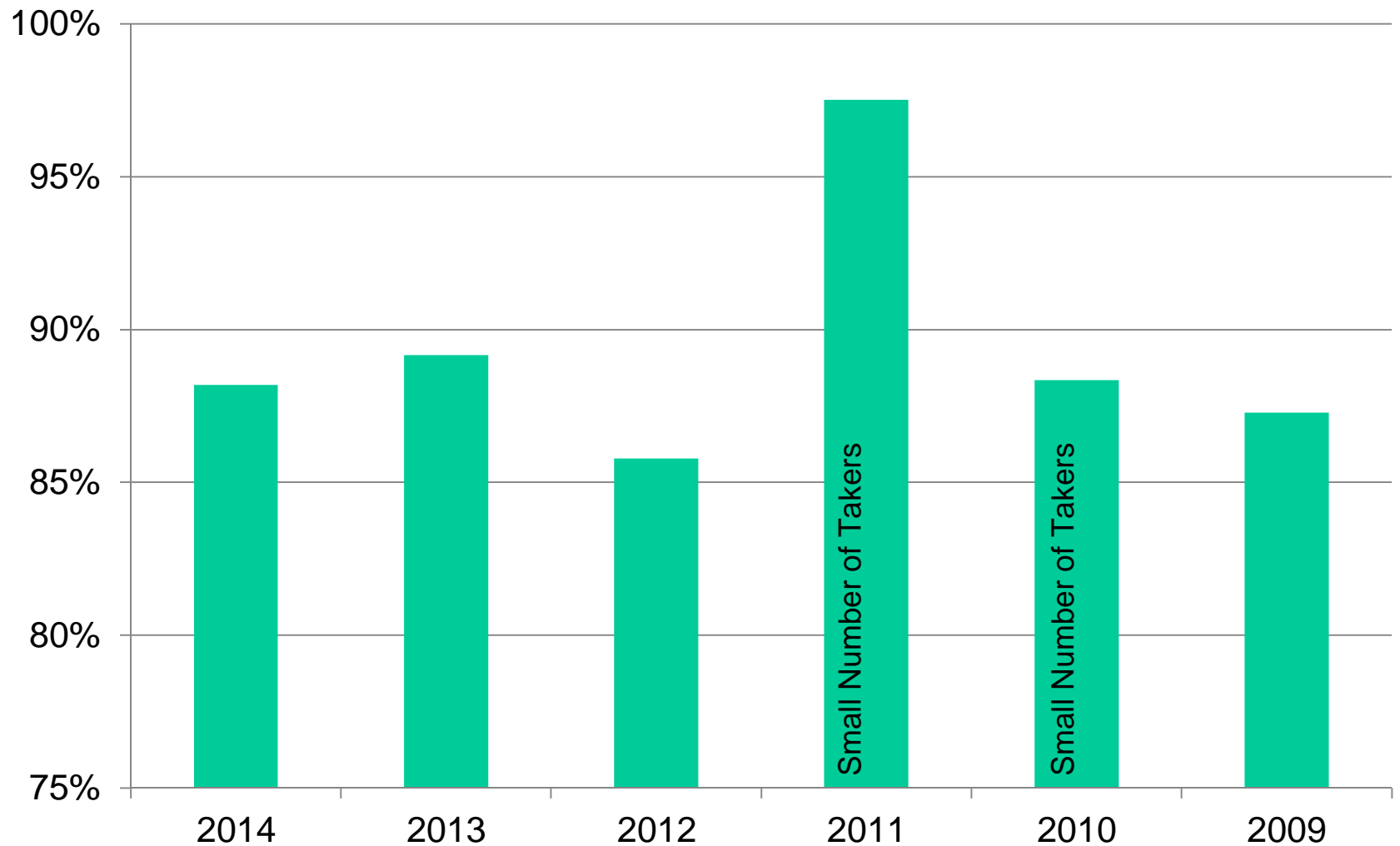
Percent of Takers by Specialty

Number of MOC Test Takers

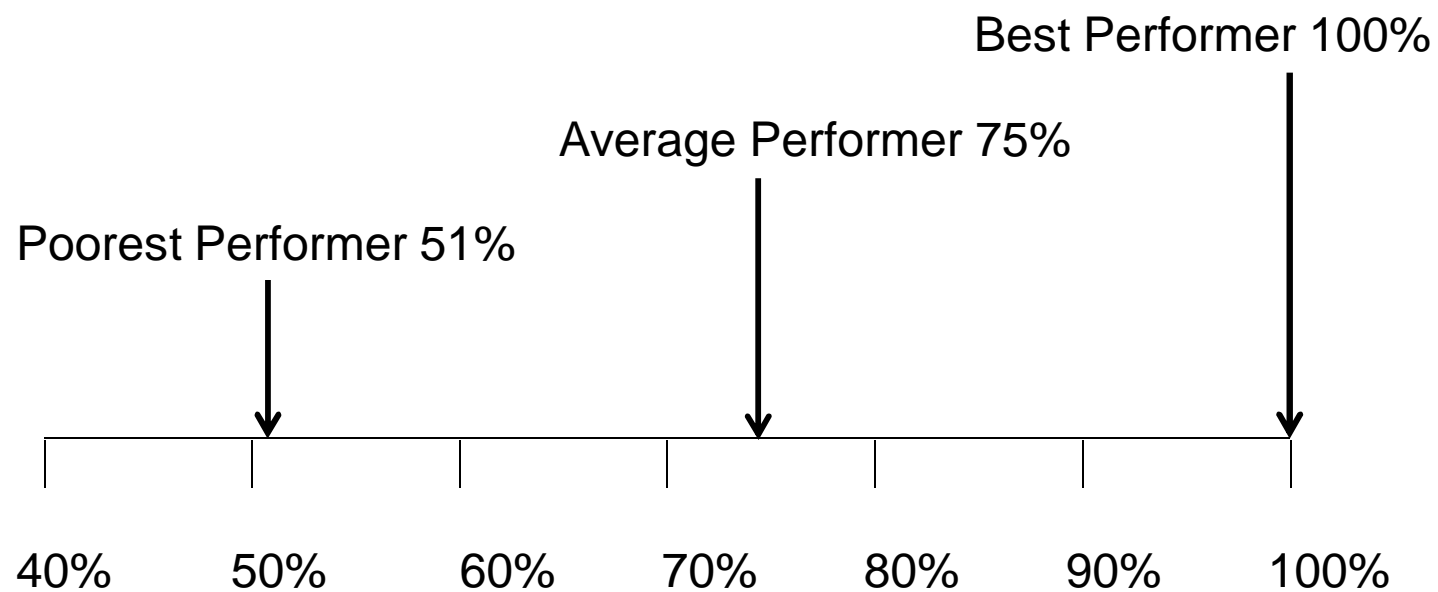


This number will continue to rise until ~2045

MP MOC Annual Pass Rates for 1st Time Takers



Item Difficulty for 2014



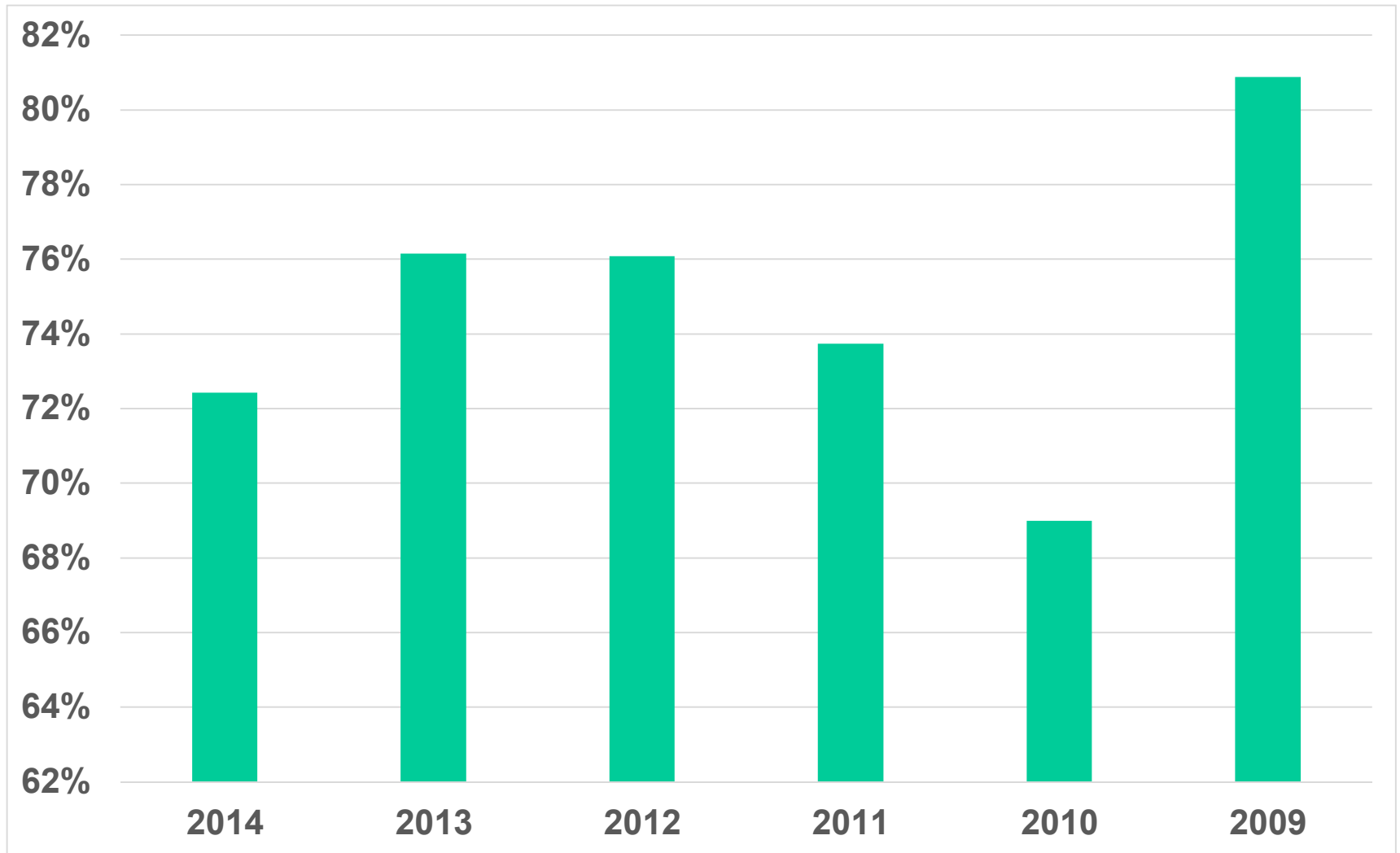
Average performance is close to optimal from a statistical perspective

Average Item Difficulty

A good exam has moderately difficult items. Items that are too easy (>90% correct) or too hard (<20% correct) do not separate the good performers from the poor performers.

Individuals who are used to doing very well on tests sometimes are anxious about the difficulty of the items they encounter.

Item Difficulty

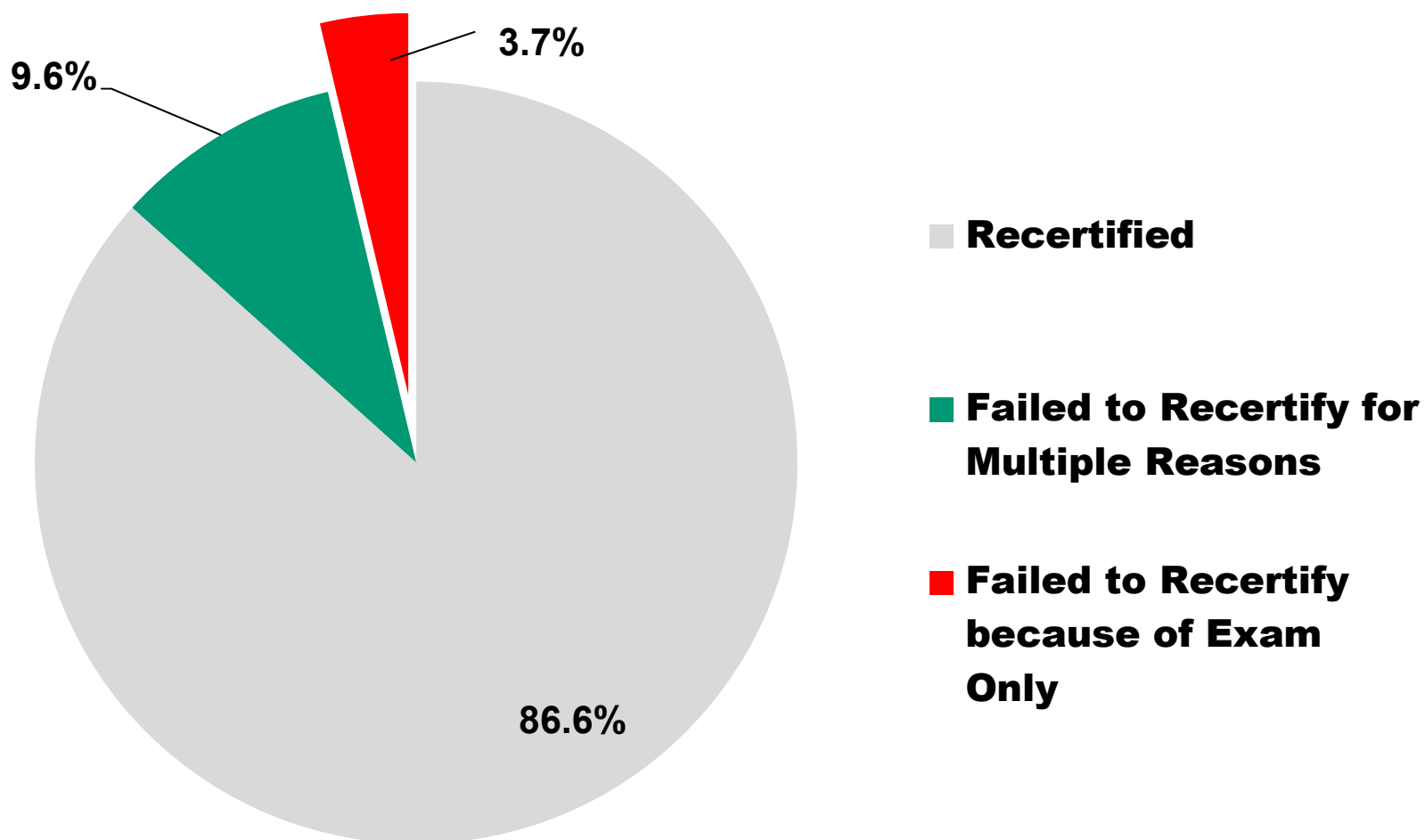




Failure to Successfully Complete The Exam

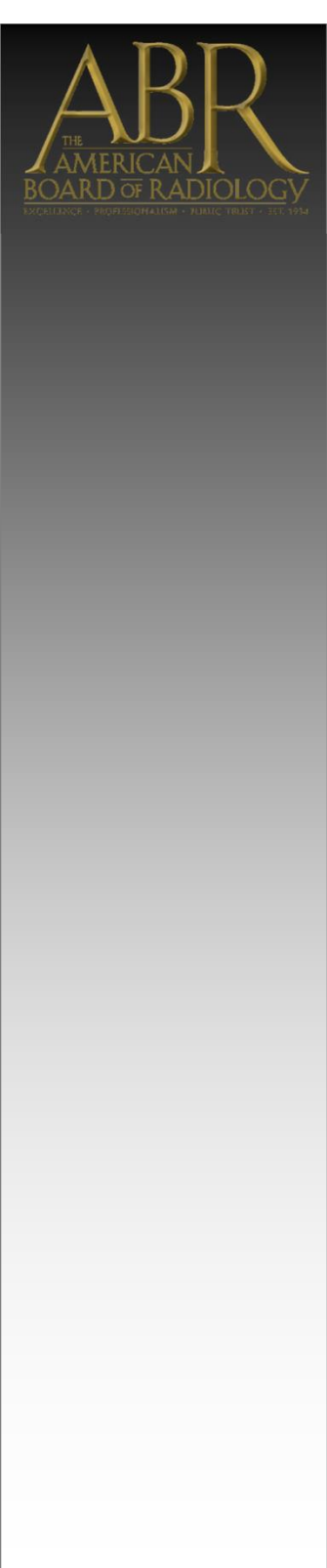
- “ If you fail to pass the cognitive exam within 10 years you are shown as**
 - “ Certified . Not Meeting MOC Requirements**
- “ If you do not pass the exam within 11 years you are shown as**
 - “ Not Certified**
- “ There is a reentry path that does not require additional formal training and can be completed in no more than a year**

MOC Status – First 3 10 Year Cohorts



Summary

- “ **Six years experience with MP MOC Exam**
- “ **Exam is very reliable**
- “ **Exam discriminates well**
- “ **Number of takers has increased as expected**



Notes on the Exam and Process

Cognitive Exam

Data shows that clinical performance decreases with time from initial certification and that the decrease is halted by additional examinations.

Further the actual clinical performance of physicians is improved by participation in cognitive examinations.

This research contributed to the decision by the American Board of Medical Specialties to require that all their member boards require a periodic cognitive exam.



MOC Exam construction

The content of the ABR MOC examination is defined by committees of volunteers, all of whom are in MOC.

These committees are composed of both MS and Ph.D. physicists and by private practice, consulting and academic physicists.



MOC Exam construction

Their goal is to develop an exam that covers materials that a physicist in clinical practice is expected to know.

Material that is included must be in common use.

The exam covers the entire range of each specialty since most private practice and consulting physicists span the entire range of medical physics in their clinical practice.



MOC Exam Content

Study guides posted on the ABR website for each discipline define the scope of the MOC exams.

Items in the study guides are reviewed periodically for clinical relevance.

Approximately 30% of the exam is designed to be basic medical physics information. The remaining 70% of the content is selected from areas that focus on developments in medical physics from the previous ten years.

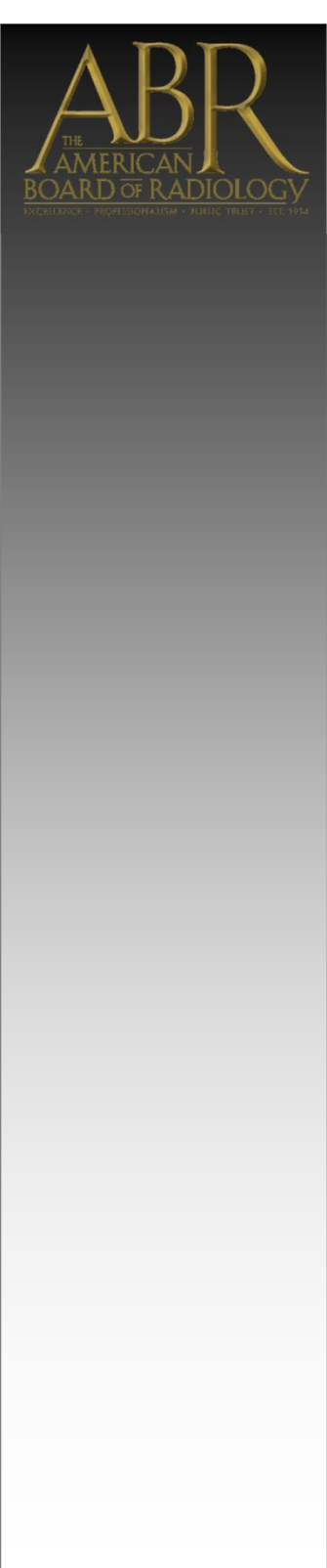


MOC Exam Content

The exam questions are based on a series of documents that the committees review and revise periodically. The list of documents is published in the study guides.

Questions are developed from and referenced to the documents in the study guides.

All of the questions on recent developments in medical physics are referenced to a document in the study guide. The 30% basic questions are referenced to common textbooks.



Reference

This information presented was just published in the latest AAPM newsletter (March/April 2015)