

On June 11, 2020, members of the American Association of Physicists in Medicine (AAPM) Education Council and Students and Trainees Subcommittee met with medical physics trustees from the American Board of Radiology (ABR) to open lines of communication regarding medical physics initial certification exams. In the meeting, the ABR presented the issues it is facing, and the AAPM asked targeted questions about the anticipated plans moving forward. The meeting was ultimately fruitful for both sides, and we would like to provide insight that we believe will alleviate some of the concerns that candidates are facing in this unprecedented time.

To understand the problem the ABR is trying to solve, we need to look at who the ABR certifies as it involves a diverse set of exams (both oral and written) and trainees (medical physicists, diagnostic radiologists, interventional radiologists, and radiation oncologists).

BY THE NUMBERS...

WHO	EXAM NAME	EXAM TYPE	# OF CANDIDATES PER YEAR	TIMELINE
Medical Physics - Therapy	Part 3	Oral	~350-375	After completion of Part 2
Medical Physics – Diagnostic	Part 3	Oral		
Medical Physics – Nuclear Medicine	Part 3	Oral		
Medical Physics - Therapy	Part 2	Written	~230-300	After completion of a CAMPEP residency
Medical Physics - Diagnostic	Part 2	Written		
Medical Physics – Nuclear Medicine	Part 2	Written		
Medical Physics - all	Part 1	Written	~300-350	After 2 nd year of graduate school
Radiation Oncology	Certifying Exam	Oral	~200-250	After 12 months practice
Radiation Oncology	Qualifying Exams <i>Clinical Radiation Oncology Radiation & Cancer Biology Medical Physics for Radiation Oncology</i>	Written	~220-300	After PGY4
Diagnostic Radiology	Certifying Exam	Written	~1000-1100	≥ 12 months after completion of residency
Diagnostic Radiology	Core Exam	Written	~1200-1300	After 36 months of residency
Interventional Radiology	Certifying Exam	Written/Oral	~300-350	After completion of IR residency
Interventional Radiology	Core Exam	Written	N/A	After 36 months of residency

WHY DID THE ABR POSTPONE THE ORAL EXAMS?

You should notice from above, that by quantity of examinees, medical physicists make up a majority of oral exam candidates. The guiding principle for a virtual oral exam administered by the ABR is that they can replicate the experience of examinees in the past in-person oral exams in a new virtual format. This is to ensure commonality and fairness across among examinees across the years. The ABR recognizes that the medical physics oral exams do not need the high level of image quality required for some of the other specialties; however, the driving principle to postponing the oral exam in 2020 is to prevent a hastily prepared exam to be administered that might unfairly judge a candidate’s knowledge or an exam that is different than previous years in a way that compromises the psychometrics of the test. The ABR acknowledges that the difficulties in moving to a virtual exam are not just technological but include determining the best way to utilize virtual platforms to ensure replication of the in-person oral exams. A virtual oral exam must ensure that examinees can draw sketches to explain concepts and point to objects on the screen, allow the examinee and the examiner to see each other’s faces as well as the questions, permit observers to monitor examiners for quality control, maintain exam security, etc. The ABR recognizes that tools within existing virtual platforms meet many of these needs, but want to properly perform their due diligence to create robust processes for a virtual exam. For example, one communication failure in the exam process could send a ripple effect through the entire exam.

SO, DOES THAT MEAN THE ABR WON’T CONSIDER A VIRTUAL OPTION FOR THE ORAL EXAM?

That is not what that means at all. The ABR *is* considering virtual options, but realistically they cannot make this happen by the end of 2020. The problem is more complex than just transferring content to a virtual platform. Switching to an exam like this will require extensive testing of the platform as well as new process design to ensure both examinees and examiners understand how the test will be delivered. They are taking a thoughtfully conservative approach, but they are actively working on a solution. The ABR is

dedicated to reaching a solution for its trainees, but they want to make sure that quality is maintained and that extra undue stress in the form of an unfair exam is not placed upon its examinees.

OTHER SPECIALTIES OF THE ABMS LIKE OPHTHALMOLOGY, EMERGENCY MEDICINE, NEUROLOGICAL SURGERY, ETC HAVE TRANSITIONED TO VIRTUAL ORAL EXAMS. WHY CAN'T THE ABR JUST FOLLOW SUIT?

The ABR would love to follow suit and is monitoring these exams closely; however, these exams have had issues that would compromise the integrity of the exams under the purview of the ABR. This is not something the ABR is willing to compromise. Problems already encountered in initial pilot examinations by other boards include:

- Unexpected connectivity challenges during the exams, for both candidates and examiners
- Questions of exam security in variable locations (e.g. the candidate's home rather than a departmental office)
- Inability to include certain types of content, including some images

I UNDERSTAND THE ABR IS TRYING TO FIND A SOLUTION, BUT I AM CONCERNED ABOUT THEIR TIMELINE AS I DO NOT KNOW WHEN TO STUDY.

The ABR **will not** reschedule the Part 3 Oral Exam in a manner which provides candidates with any less than **4 months' notice**. This is the amount of lead time required for a Part 3 Oral Exam to go from 'decision' to 'delivery'. Within this time frame, the ABR has to schedule examiners, set the schedules of the examinees, reserve rooms, etc. The ABR wants to reassure examinees about the timeline of exam rescheduling, and we hope to alleviate the stress of the unknowns by at least providing a known amount of time you will have to prepare.

WILL THERE BE TWO PART 3 EXAMS IN 2021?

While no Part 3 exams have been scheduled yet, it is *likely* that the ABR will be offering two Part 3 exams in the year 2021. It is the goal of the ABR to do everything possible to ensure there will be enough examiners and capability to deliver two administrations of the Part 3 oral exams in 2021.

PART 1 & 2. THOSE ARE ALSO OF CONCERN TO TRAINEES...HERE IS WHAT WE KNOW:

- Pearson VUE is generally scheduling their testing centers 90 days out.
- The Pearson VUE centers are currently operating at 50% capacity.
- Presently, Pearson VUE has ensured the ABR that they are holding slots for the exams on December 7 and 8.
- With 50% capacity, there *could* be an issue of availability of testing spots in your local region.
 - How can you prevent this? 1) Register for an exam slot as soon as you can. 2) Keep your address up to date on the ABR website as your zip code is used to do an analysis of the distribution of candidates and the testing centers.
- The ABR will send an email to examinees about 1-2 weeks before the exam location registration opens.
- Should the exam need to be rescheduled, the ABR will provide at least 4 months' notice before the exam date.

WHAT IF ANOTHER COVID-19 OUTBREAK PREVENTS PART 1 & 2 FROM GOING ON AS SCHEDULED?

The ABR recognizes that there is still much uncertainty about the trajectory of the COVID-19 pandemic. The ABR is actively seeking alternative solutions to the Pearson VUE testing centers that would allow candidates to take the exam remotely should the need arise. In some respects, the written exam provides fewer barriers to a virtual or remote option, and the ABR is diligently working to establish new processes for these exams as well.

WHAT IF I WORK IN A STATE THAT REQUIRES STATE LICENSURE DEPENDENT ON ABR EXAMS?

The four states requiring licensure are Texas, New York, Florida, and Hawaii. The ABR recognizes that the postponement of the exams could set the licensure process back, and they also understand that some recently graduated medical physicists are not able to perform the duties of a certified physicist, which may put a burden on already strained clinics. While the ABR wants to do everything it can to help, an exam that is ill-prepared or rushed would not help these candidates or the medical physics field. The ABR will create an official statement for candidates needing documentation to provide to the licensing boards in these states to let them know the situation and the timeline in place as more information is obtained. The ABR is also hopeful that if two Part 3 exams are scheduled in 2021, this will alleviate issues brought about by postponing the 2020 Part 3 exam.

IN SUMMARY

The AAPM and the ABR are committed to finding solutions to the qualifying and certifying exam issues that have been brought about by the pandemic. We want the candidates to appreciate that the decisions facing the ABR are challenging and more complex than many of us realize, and they must maintain exam integrity but also aim to help the candidates continue along their career path. All the candidates have worked diligently to get here, and we recognize your achievements. Both the AAPM and the ABR will work to hear your concerns and address them in a timely manner. Please reach out to the AAPM Students and Trainees Subcommittee with

any feedback or concerns you would like raised with the ABR. Please contact the AAPM Students and Trainees Subcommittee by using the email link on our [website](#) or tweet us @aapmstsc with those concerns. You also may reach out directly to the ABR at information@theabr.org or (520) 790-2900.