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Recent Advances in Anatomic and Clinical Pathology
Board Examination Pass Rates

Brian D. Adkins, MD

The American Board of Pathology (ABP) publishes performance data annually following the spring and fall anatomic pathology (AP) and clinical pathology (CP) board examinations.1 Pass rates are a hotly debated topic among trainees as well as faculty, though discussion is often based on anecdotes as opposed to objective data. I reviewed ABP examination performance data from 2009 to 2019 to better characterize trends in board performance by examinees.

In the past decade, board pass rates have gone up overall though rates have remained similar among first time test takers and repeat test takers (Figures 1 and 2). Simple linear regression analysis showed a positive slope indicating upward trend for first-time test takers, repeat test takers, and overall test takers; however, this was only significant in the overall test takers group ($P = .002$ AP, $P = .001$ CP). Overall pass rates showed the greatest upward trend, followed by first-time test takers, and repeat test takers (data not shown). The number of total test takers based on 2009 versus 2018, the last full year of data available, has decreased in AP from 781 to 664 (15%) and in CP by 791 to 588 (26%), including decreases in first time test takers (in AP by 606 to 578 [5%] and CP 543 to 534 [2%]), and repeat test takers (in AP 175 to 86 [51%] and in CP 248 to 54 [78%]). Likewise, the average pass rates from 2015 to 2019 are generally greater than pass rates from 2009 to 2014 (Table). First time test takers consistently have significantly higher pass rates than repeat test takers ($P \leq .001$, Mann-Whitney $U$ test). One limitation of this evaluation is ABP data are reported based on individual exams and as such there are no data available for which examinees took both exams; however, the majority of graduating pathology residents, as of 2019, are AP/CP track.2 Statistics were performed using PRISM 8 (GraphPad Software, San Diego, CA) and a $P$ value $< .05$ was considered significant.

As incremental pass rate increases are happening in other fields, including medicine, pediatrics, and surgery, as well as rising United States Medical Licensing Examination Step 1 scores among medical students, contemporary electronic study materials may be improving preparation.3–6 Numerous pathology question banks are available for free or as subscription services. Likewise Web-based pathology reference materials have expanded with free texts available on Pathology Outlines (https://www.pathologyoutlines.com/) or behind a paywall at services such as ExpertPath (https://www.expertpath.com). Social media sharing of pathology materials through Twitter and Facebook is becoming increasingly common, with numerous institutions and physicians actively participating.7 Conversations about physical study materials (such as Anatomic Pathology Board Review by Lefkowitch8 for AP and Quick Compendium of Clinical Pathology by Mais9 for CP), which traditionally were occurring in-person, are being replaced by consensus recommendations on message boards or in email chains with senior residents.

As more information is shared among trainees, it is unknown how much “remembrances” continue to contribute to board preparation. A number of years have elapsed since board certification was withheld from examinees for sharing board question information, though the topic comes up frequently.10 An honor code that represents a legally binding contract has been put out by the ABP by which all pathology residents sitting for boards are bound.11 Fear of repercussion has created an environment where general advice is more common, and most trainees and attending physicians remain apprehensive of revealing specific details.

Efforts by training programs to better prepare residents for boards are occurring concurrently. Lax scheduling in the latter half of senior residents’ fourth year is common among training programs to allow for exam preparation. Programs have a vested interest in the education and training of residents, and institutional pass rates are reported to the Accreditation Council for Graduate Medical Education (ACGME). All United States pathology residencies currently participate in the Resident In-Service Examination (RISE).12 A 2011 study comparing spring RISE scores with pass rates showed those who did well on the RISE had superior pass rates on board exams.13 It is unclear if changes in formalized feedback, such as the ACGME milestones, have impacted results, though the practice was implemented beginning in 2012 and mirrors the recent increase in pass rates.14 Repeat test takers routinely do not fare as well. This is possibly due to poor preparation during residency and prior attempts, though numerous factors likely contribute. Of note, the number of repeat test takers continues to drop by a larger percentage than overall test takers, which may also be related a higher percentage of test takers passing on the first try leading to a smaller pool of repeat test takers. However, this may also be representative of residents seeking jobs outside

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From the Department of Pathology, University of Virginia Health System, Charlottesville.
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Corresponding author: Brian D. Adkins, MD, Department of Pathology, University of Virginia Health System, HEP Room 3031, 1215 Lee St, Charlottesville, Virginia 22908 (email: brian.adkins@virginia.edu).

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of pathology after unsuccessful board attempts, while the reduction in test takers overall may be indicative of fewer medical school graduates seeking careers in pathology.

As it stands, pass rates have improved for first time test takers, though repeat test takers tend to do poorly on subsequent attempts. Data on residents sitting for AP and CP exams are unavailable but is likely similar among first time test takers. Additional studies are required to identify the impact of electronic study materials, correlation of RISE scores and board exam success, and the impact of ACGME milestones. Passing remains contingent on efforts both by the trainee and training program, though the trend is that most first-time test takers will pass. As it stands, the boards remain a challenging exam, a rite of passage even, though pass rates are increasing overall.

References


