



## Results of the ABIM Nephrology Examination: Quality Nephrologists, Quality Board Examinations

Note from Editors: AJKD welcomes discussion of this topic in the comments section of the related blog post at [www.AJKDblog.org](http://www.AJKDblog.org).

The 2014 American Board of Internal Medicine (ABIM) Nephrology Board examination had a pass rate of 80% for first-time takers. From 2005 to 2010, the first-time pass rate was ~92%, decreasing to 86% to 87% in 2011 to 2013<sup>1,2</sup> (Fig 1). However, in 2014, of graduating nephrology fellows who successfully completed fellowship in Accreditation Council for Graduate Medical Education (ACGME)-approved training programs, 1 in 5 failed the certifying examination, which can be considered a threshold for minimum competency. This result comes at a time when nephrology training programs are struggling to find applicants and meet a multitude of new ACGME requirements for documentation of training milestones.<sup>3,4</sup> Further, many programs are perilously close to or have fallen below the ACGME threshold of a minimum 80% pass rate over a 5-year period.<sup>5</sup>

Aside from the possibility that the 2014 results are an anomaly, there are 4 potential explanations for this low first-time pass rate: (1) nephrology programs are admitting more fellows incapable of mastering the material; (2) training programs are not providing adequate education; (3) recent ACGME and ABIM educational initiatives, specifically the Next Accreditation System and the Milestones Initiative, are failing<sup>6</sup>; and/or (4) the ABIM nephrology certifying examination is losing validity and relevance.

In academic nephrology, we are tempted to respond by focusing on the first 2 possibilities while ignoring the second 2 (the first 2 possibilities will also likely be the public position of the ABIM and ACGME). However, consideration should also be given to the role of these oversight organizations. Figure 1 shows the temporal association of ACGME's introduction of the competencies, milestones, and work-hour initiatives with pass rates of the ABIM nephrology

certifying examination. Is it possible that the ABIM and the ACGME initiatives in nephrology are in need of quality improvement?

As nephrology training program faculty, we should not satisfy ourselves with the same tired statements: "It's all the international medical grads," "We need to get rid of the poorly performing programs," "There are just too many programs, and they take anybody," "Really good people aren't going into nephrology anymore," and "No one failed in my program, so it's not my problem." One platitude comes from the ABIM itself: "The eventual pass rate for most ABIM specialty area exams is approximately 96%, so most examinees are eventually successful once they master the content sufficient to achieve a passing score."<sup>7</sup> In other words, the process of developing and administering the examination and the examination itself are unquestionably valid, while a poor outcome is primarily the result of trainee failures in "motivation, training, preparation, and knowledge."<sup>7</sup>

Completing a nephrology fellowship is the culmination of 5 years of internal medicine and nephrology training. To qualify for the certifying examination, candidates must be board-certified internists and deemed by their nephrology fellowship program director to have "demonstrated sufficient competence to enter nephrology practice without direct supervision."<sup>5</sup> International medical graduates constitute a high percentage of nephrology trainees; however, they also must satisfactorily complete internal medicine training in the United States and pass the ABIM internal medicine examination to qualify for nephrology fellowship training. Enormous amounts of trainee time and money are spent attending board review courses, buying board review materials, and reviewing multiple-choice board-type questions. Most fellows we speak to believe that such materials, provision of which has become an industry, are necessary to pass the certifying examination—even though they have completed an accredited 2-year or longer fellowship. The goal of nephrology training programs and the ACGME should be that nearly every first-time test taker passes the ABIM certifying examination because the examination is developed using methodology that sets a pass threshold so as to identify a minimally competent examinee. This year, the ABIM nephrology certifying examination identified 20% of graduating nephrology fellows as *not* minimally competent. While this may be true, it is important to ensure that this is a valid finding because failing the certification examination has consequences for

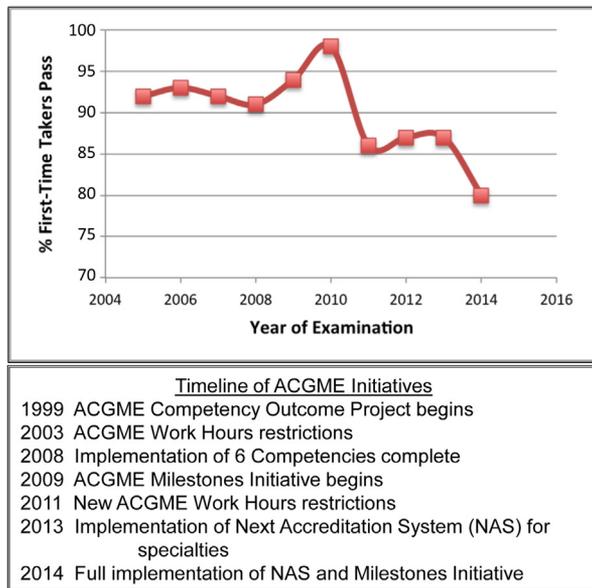
Originally published online April 14, 2015.

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0272-6386

<http://dx.doi.org/10.1053/j.ajkd.2015.02.332>



**Figure 1.** Percent of first-time takers passing the American Board of Internal Medicine Nephrology certifying examination by year, and timeline of Accreditation Council for Graduate Medical Education (ACGME) initiatives.<sup>1,2,17</sup>

graduating nephrologists, including potential limitations on obtaining hospital credentials and patient access to results, which may affect graduates' ability to build a practice.<sup>8</sup>

Test question development for the ABIM nephrology examination is opaque, making meaningful discussion of test validity outside the ABIM challenging.<sup>9</sup> Aside from the 9-member Nephrology Board Examination Committee<sup>10</sup> and internal controls at the ABIM, there is no external oversight of or accountability for examination validity. The selection mechanisms and criteria for the 9 examination committee members are not well delineated, and the only clear requirements are a current ABIM certification in nephrology and involvement in direct patient care.<sup>11</sup> In 2014, at least 17% of the questions on the 200-question 8-hour examination were pretest questions, defined as questions in development that are not counted toward the score. Although it is an industry standard to include such questions, the recommended maximum proportion of pretest questions is 10%; higher proportions increase the risk of test-taker anxiety and fatigue, especially if the pretest question is confusing or poorly written.<sup>12</sup>

Whether the examination itself is an accurate gauge of medical knowledge in nephrology has been questioned.<sup>13</sup> Performance on the American Society of Nephrology in-training examination to date has not been reported to predict ABIM nephrology examination performance, despite 5 years of administration. The ABIM Nephrology Board Examination Committee is composed of distinguished members of the

nephrology community; not surprisingly, the committee overwhelmingly includes older academic nephrologists.<sup>10</sup> Increasing the number of expert voices in developing the certifying examination, in particular including younger nephrologists and those who practice outside academia, would be valuable. In line with increasing use of electronic media and changing educational strategies, current medical trainees and recent graduates acquire, access, and retain medical knowledge differently from both experienced members of the nephrology community and those who trained just 10 years earlier.<sup>14</sup> How do we identify and involve these “Millennial” nephrologists in the development and validation of the certifying examination? One way is to leverage the insights and expertise of those who have recently passed the initial or recertifying examination and are participating in Maintenance of Certification (MOC).

Recently, there has been criticism leveled at the ABIM and the MOC program.<sup>15</sup> One criticism is that the MOC is not pertinent to clinical practice and does not reflect the way physicians learn new information in the digital age. The ABIM has responded with an apology, and one of the changes they are undertaking is to elicit diplomate feedback on the relevance of the internal medicine MOC examination blueprint.<sup>16</sup> Incorporating nephrologist feedback, specifically from physicians with a wide range of experience, should also be applied to the certifying examination in nephrology and the nephrology MOC process. In the first 2 to 4 years after passing a secure examination, nephrologists could participate in MOC by opting to assist in certifying examination development, thus applying their knowledge of clinical practice to improve examination quality. Approximately 800 to 900 nephrologists take, and pass, the certification/recertification examination annually. They constitute a large pool of candidates to review the distribution of topics, submit questions, and evaluate pretest questions. A cohort could take and validate portions of new examinations; their performance would inform the process of setting the pass threshold.

The nephrology ABIM certifying examination is a high-stakes test, and it is one of the few objective and quantitative outcome measures that can be used to assess nephrologist competence and nephrology training program performance. Reflecting this importance, confidentiality and proprietary concerns should no longer be cited as reasons to shield the certifying examination from meaningful external peer review. If the ABIM wants the certifying examination and the MOC programs to inform public perception of nephrologist quality performance, it is incumbent upon the ABIM to demonstrate—rather than simply assert—that the certifying and recertifying examinations are valid quality measures.

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## ACKNOWLEDGEMENTS

The views expressed in this report are those of the authors and do not reflect the official policy of the US Department of the Army, the Department of the Navy, the Department of Defense, or the US Government.

*Support:* None.

*Financial Disclosures:* The authors declare that they have no relevant financial interests.

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