"Or, students move through their clinical rotations, love them all and then suddenly, they realize that family medicine provides all of that variety."

Kozakowski noted that family medicine interest groups (FMIGs)—supported on medical school campuses with funding from the AAFP—have helped create and maintain enthusiasm for family medicine, especially when medical students are given opportunities to rub elbows with family physicians at FMIG events.

"When medical students are exposed to family physicians who are passionate about their work, that passion is infectious," said Kozakowski.

Payment Issues Continue to Challenge

All that said, payment for primary care services still is not on par with that of subspecialist physicians, a problem the AAFP continues to address through its advocacy efforts at the federal policy level.

"The most immediate way to get more students to go into family medicine is to increase payment for primary care," said Blackwelder.

Provisions in the ACA, including a 10% Medicare incentive payment for services provided by primary care physicians, as well the establishment of demonstration projects like the Comprehensive Primary Care Initiative, are spurring progress on the primary care payment front.

Ditto for the ACA's support of teaching health centers designed to train primary care physicians in community-based programs and the expansion of the National Health Service Corps. The latter provides scholarships and loan forgiveness for students who agree to provide primary care services in rural and other medically underserved areas.

"I'm encouraged by the changes we've seen in terms of policy and payment reform," said Blackwelder. "Things are moving in the right direction, but we can't let up, especially when it comes to helping alleviate student debt.

"Every advance we make in payment reform must be celebrated and then our efforts accelerated. We have to keep building on payment reform policies in order to attract medical students to family medicine because we need new family physicians to help build the primary care workforce that this country deserves."

Sheri Porter
AAFP News

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THE CONSEQUENTIAL VALIDITY OF ABFM EXAMINATIONS

Measurement scholar, Samuel Messick, defines validity as "an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores. ..."[1(p13)] Messick's definition of validity differed from previous validity theorists in that he acknowledged test scores often affect social policy, and thus argued social consequences should be examined. Messick referred to this form of validity as "consequential validity." Shepard[2,3] further clarified social consequences to include both the positive/negative and intended/unintended consequences that may result from score-based inferences. The purpose of this article is to discuss consequential validity as it pertains to American Board of Family Medicine (ABFM) examinations.

To date, the ABFM has published numerous papers[4-10] that evidence the adequacy and appropriateness of inferences based on examination scores. Many of these papers are validity studies that involve rigorous data analyses with state of the art psychometric methods, whereas others are papers advocating responsible score reporting and interpretation. Given that Messick's framework for validity also includes the social consequences that may result from score inferences, it is important to also address this aspect of validity. Unlike other indicators of validity, consequential validity has less to do with data analysis and more to do with making inferences. Thus, the extent to which ABFM examination scores are appropriately interpreted and used depends largely on others. Our intention is to clarify some key inferences that should and should not be made about ABFM examination score results.

ABFM examinations measure a physician's fund of medical knowledge within the context of the clinical practice of the specialty of family medicine. The examinations do not measure other important aspects of family medicine, such as one's clinical or procedural skills, the ability to communicate with patients, professional attitudes and behaviors, the ability to practice within a system of care, nor the ability to learn from the practice of family medicine to continuously improve care to patients. Unfortunately, many

consumers of ABFM examination score results often make inappropriate inferences about what exactly the scores mean. For example, consumers rightly infer that a passing score conferring certification is a surrogate for quality.[11,12] Consumers also rightly infer that a passing score and subsequent certification should facilitate privileging within the hospital setting or credentialing within a medical group. Unfortunately, consumers sometimes wrongly infer that a non-passing score is indicative of a physician not worthy of being certified, and thus by extension, one that does not or is not capable of providing high quality care. Additionally, some consumers incorrectly infer that a higher examination score is more indicative of a better physician (compared with one that has lower scores), whereas it is well understood that multiple factors determine whether a physician is "good."

It is critical that consumers understand that simply because a physician fails the Maintenance of Certification for Family Physicians (MC-FP) examination does not mean he or she is a physician incapable of providing high quality care, or someone that is incapable of becoming more knowledgeable about the important body of knowledge that defines the specialty of family medicine. Knowledge is fluid, thus everyone has the propensity to become more knowledgeable. In fact, the ABFM staff has heard from hundreds of physicians over the years that initially failed the MC-FP examination, and who then developed an improved study plan and passed on the very next attempt. Despite the initial stumble, most of these physicians continue to provide quality care to their patients today. Moreover, certification is voluntary. A number of excellent physicians practice family medicine without board certification. Thus, the lack of certification does not imply poor quality; it simply implies the physician has not evidenced his or her knowledge and commitment to continuous improvement by way of a formal certification process.

Fully aware that an examination in and of itself is unable to provide sufficient information about the quality of a physician, the ABFM along with all American Board of Medical Specialties (ABMS) member boards adopted a more comprehensive approach to assessing physician performance in 2000. This new paradigm, called Maintenance of Certification, assesses 6 general competencies: professionalism, medical knowledge, communication and interpersonal skills, patient care, systems-based practice, and practice-based learning and improvement. These are assessed by the ABFM within a four-part construct that (1) assesses professionalism, licensure, and personal conduct; (2) measures the ability of the physician to self-assess and develop a program of lifelong learning; (3) assesses by examination cognitive expertise; and (4) assesses the physician's performance in practice and the ability to develop mechanisms to continuously improve quality based upon the assessment. We would argue that this expanded approach to physician assessment provides additional information from which appropriate inferences can be made about the quality of care that a physician delivers and has far greater consequential validity within the construct defined by Messick above.

Conclusion

Empirical data analyses with rigorous research methodologies are critical for providing evidence that an examination is functioning well and measuring the intended construct. The ABFM has produced a considerable body of research that evidences the accuracy and trustworthiness of the score results produced by its examinations. Similarly, the ABFM has continually emphasized the purpose of the examination is to measure a physician's fund of medical knowledge in clinical family medicine and has emphasized appropriate and responsible score interpretations. Unfortunately, some consumers continue to attach additional meaning to these score results that can affect a physician in unintended ways. In order to preserve the integrity of the score inferences and their impact for physicians, it is important that all consumers of ABFM examination score results make appropriate and responsible inferences about what exactly the scores do and do not mean.

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