

"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



From the American
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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 exper-

tise; 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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References

1. Messick S. Validity. In Linn RL ed. *Educational Measurement*. 3rd ed. New York, NY England: Macmillan Publishing Co, Inc; 1989:13-103.
2. Shepard LA. Evaluating test validity. *Rev Res Educ*. 1993;19(1):405-450.
3. Shepard LA. The centrality of test use and consequences for test validity. *Educ Meas Issues Pract*. 1997;16(2):5-13,24.
4. O'Neill TR, Royal KD, Puffer JC. Performance on the American Board of Family Medicine (ABFM) certification examination: are superior test-taking skills alone sufficient to pass? *J Am Board Fam Med*. 2011;24(2):175-180.
5. Royal KD, Puffer JC. Understanding the "sum of subtest to overall score discrepancy" on the maintenance of certification for family physicians examination. *J Am Board Fam Med*. 2012;10(1):81-82.
6. Royal KD, Puffer JC. The reliability of American Board of Family Medicine examinations: implications for test takers. *J Am Board Fam Med*. 2012;25(1):131-133.
7. Royal KD, Puffer JC. Dimensionality of the maintenance of certification for family physicians examination: evidence of construct validity. *Ann Fam Med*. 2013;11(3):286-288.
8. Royal KD, Puffer JC. Cheating: its implications for ABFM examinees. *Ann Fam Med*. 2012;10(3):274-275.
9. Royal KD, Puffer JC. Criterion-referenced examinations: implications for the reporting and interpretation of examination results. *Ann Fam Med*. 2013;11(2):185-187.
10. Royal KD, Puffer JC. A closer look at recertification candidate pass rates. *J Am Board Fam Med*. 2013;26(4):478-479.

11. Puffer JC. The American Board of Family Medicine certification examination: a proxy for quality. *Fam Med*. 2011;43(6):433-434.
12. O'Neill TR, Puffer JC. Maintenance of certification and its association with the clinical knowledge of family physicians. *Acad Med*. 2013;88(6):780-787.



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WHAT DOES TEAM LEADERSHIP MEAN IN THE PCMH?

A decade ago, the Future of Family Medicine report supported the development of a new model of practice.¹ This model quickly evolved into a clinical care entity known as the Patient-centered Medical Home (PCMH). There was much synergy for the new PCMH model between the primary care community and the business community. Paul Grundy, IBM Corporation's Global Director of Healthcare Transformation, in concert with 4 practicing physician organizations, led a movement to identify the PCMH model as the cornerstone of a new organization, the Patient-Centered Primary Care Collaborative (PCPCC). A critical step to catalyzing the PCPCC in 2007-2008 was defining the Joint Principles of the Patient Centered Medical Home adopted by the 4 professional societies who came together to form the PCPCC (the American Academy of Family Physicians (AAFP), the American Academy of Pediatrics, the American College of Physicians, and the American Osteopathic Association). These joint principles were then endorsed by more organizations in family medicine including the Association of Departments of Family Medicine (ADFM).

Since its release, one of the principles in the original language of the joint principles of the medical home has been a source of controversy causing ADFM leadership to evolve in our thinking²:

"Physician-directed medical practice—the personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients."

It is also noteworthy that the landscape of the "physician's practice" has changed with far fewer physician-owned solo practices today than were in existence a decade ago.

In early 2014, ADFM, along with our sister academic family medicine organizations in the Council of

Academic Family Medicine (CAFM): the Association of Family Medicine Residency Directors (AFMRD), the North American Primary Care Research Group (NAP-CRG), and the Society of Teachers of Family Medicine (STFM), published "The Four Pillars of Primary Care Physician Workforce Reform: A Blueprint for Future Activity."³ The AAFP and ADFM collaborated with CAFM to approve the "four pillars" concept featured in this publication. A notable bullet in the four pillars model under practice transformation states:

"Practice teams must include generalist physician leaders who serve as role models, and who deliver comprehensive, broad-scope primary care."

The language contained within this bullet was very intentional to mean that generalist physician leaders were to be on *teams among other health professional leaders*. Leadership within teams is 1 of the 4 core skills to great team functioning and should not imply a hierarchical structure.⁴ In fact, these same teams should also include other leaders such as nurses, nurse practitioners, social workers, pharmacists, and psychologists, to name a few. With effective teams, leadership skills should be practiced by all members of the team—along with the other core skills of mutual support, clear communication, and situation monitoring in the work environment.⁵ Our interpretation behind the intent of the four pillars language is in alignment with the sentiments expressed recently by Dr. Denise Rodgers, MD, FAAFP, Vice Chancellor for Interprofessional Programs and Director of the Rutgers Urban Health and Wellness Institute, Rutgers Biomedical and Health Sciences. In her plenary address, "Partners in Training: Interprofessional Education," at the 2014 ADFM Winter meeting, Dr. Rodgers commented that in a given clinical care situation, the physician may be more remotely connected to a team led by another health professional. There are times when the physician will be at the front of the team. There are other times when the physician will step back and not be the central driver of the team's activity, but ready to enter into the clinical care decision making when, and if, needed and willing to play a supportive role.

Leadership is often interpreted to mean a position of being "at the helm" in command at all times. True leadership happens at many levels and is often enacted more remotely. How we define and interpret the meaning of leadership on clinical care teams in the PCMH is a critical conversation to have among health professionals as we move together to achieve the Triple Aim⁶ for the American public.

This commentary has been prepared by members of the ADFM Executive Committee who were serving on the Council of Academic Family Medicine (CAFM) at the time "The Four Pillars for Primary Care Physi-