POLICY BRIEF

Performance of Graduating Residents on the American Board of Family Medicine Certification Examination 2009–2016

James C. Puffer, MD, Michael R. Peabody, PhD, and Thomas R. O'Neill, PhD

In response to growing concern about the declining performance on the American Board of Family Medicine Certification Examination, several strategies were employed to assist program directors with preparing their residents to take the examination. The effect of these efforts seems to have resulted in significant improvement in performance. (J Am Board Fam Med 2017;30:570–571.)

Keywords: Certification, Graduate Medical Education

Previous reports expressed concern about the declining pass rate of graduating residents on the American Board of Family Medicine (ABFM) Certification Examination (CE) from 2007 to 2011. In analyzing program pass rates, Falcone and Middleton demonstrated that 47.8% of family medicine residency training programs violated Accreditation Council of Graduate Medical Education program requirements with greater than 10% of their residents failing the examination on a 3- to 5-year rolling average.

To assist program directors better prepare their residents to take the examination, the ABFM undertook several strategic initiatives beginning in 2009. This included creating a common scoring scale in 2009 across the administrations of both the CE and In-Training Examination (ITE); moving up the first administration of the CE in each year from July to April in 2012; introducing Family Medicine Certification entry requirements, including mandatory completion of at least 1 Self-Assessment Module (SAM), in 2012; and providing better predictive feedback from the ITE using the Bayesian Score Predictor in 2013. Given these changes, we wished to determine

what effect, if any, they may have had on subsequent resident performance on the CE.

Using ABFM examination data, we calculated the pass rate for both United States medical graduate (USMG) and international medical graduate (IMG) initial certifiers who had not failed a previous attempt on the CE for years 2009 to 2016. Given that the minimum passing standard (MPS) for the CE was lowered by the ABFM Board of Directors in 2014 from a scaled score of 390 to 380, we calculated 2014 to 2016 pass rates using both the 380 and 390 passing standards to adjust for the effects of the change in MPS.

The results are shown in Figure 1 below. USMG performance reached a low of 91.3% in 2010 and increased steadily thereafter to reach a high of 98.3% in 2016. IMG performance reached a nadir of 81.2% in 2011 and for the most part increased steadily thereafter to reach a high of 96.8% in 2016. The change in the MPS for the 2014 to 2016 cohorts did increase the pass rate for both USMGs and IMGs, but the increase in pass rate from the 2013 baseline to the 390-adjusted pass rate was always larger than the increase from the 390-adjusted pass rate to the 380-actual pass rate.

Although it is difficult to attribute the variance in these trends to each of the individual strategies employed, we have previously demonstrated the predictive value of the ITE on subsequent CE performance as well as greater likelihood of passing the CE after completion of a SAM.^{3,4} Given the timing of when these initiatives were implemented and when the pass rate increases occurred, it seems plausible that a time lag related to the adoption of the tools/policies and how educators and

This article was externally peer reviewed.

Submitted 20 February 2017; revised 8 May 2017; accepted 8 May 2017.

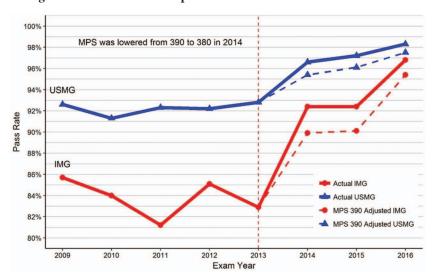
From the American Board of Family Medicine, Lexington, KY (JCP, MRP, TRO)

Funding: none.

Conflict of interest: JCP, MRP, and TRO are employees of the ABFM.

Corresponding author: James C. Puffer, MD, 1648 McGrathiana Parkway, Suite 550, Lexington, KY 40511 (E-mail: jpuffer@theabfm.org).

Figure 1. Pass rates for graduating residents on the ABFM CE 2009 to 2016. Includes only first-time takers and not those residents retaking the examination due to a prior failure.



residents learned to make the best use of them may have been operant. However, we cannot discount that some or all the improvement might be explained by the improving quality of family medicine trainees recruited into training programs during this time period. Further investigation should explore the impact of each of these factors on examination performance.

To see this article online, please go to: http://jabfm.org/content/ 30/5/570.full.

References

1. Falcone JL, Middleton DB. Performance on the American Board of Family Medicine certification

- examination by country of medical training. J Am Board Fam Med 2013;26:78-81.
- 2. Falcone JL, Middleton DB. Pass rates on the American Board of Family Medicine certification exam by residency location and size. J Am Board Fam Med 2013;26:453-9.
- 3. O'Neill TR, Li Z, Peabody MR, et al. The predictive validity of ABFM's in-training examination. Fam Med 2015;47:349-56.
- 4. Peterson LE, Blackburn B, King MR. Completing self-assessment modules during residency is associated with better certification exam results. Fam Med 2014;46:597-602.