In this issue of Clinical Infectious Diseases, Grabovsky et al present a statistically rigorous analysis of the relationships between the results of the American Board of Internal Medicine (ABIM) Infectious Disease certifying examination and those of other standardized examinations previously taken by fellows in infectious diseases at various points during their medical careers, including during medical school, residency, and fellowship. The best predictor of good performance on the ABIM certifying examination Infectious Disease was the result of the Infectious Diseases Society of America (IDSA) In-Training Examination (ITE) taken during the second year of fellowship. This result may be unsurprising to some, but without confirmation via a thorough study, the ITE would be open to ongoing doubt and speculation about its usefulness and validity.

The ITE in Infectious Diseases was first given in 2008. Since its inception, its results have been transmitted to the examinees via their fellowship program directors. A broad qualitative bar graph result for each of 10 different subtopics (such as parasitology and infection control) is given, along with a list of the subject matter of each individual question answered incorrectly, an overall examination score, and a chart with percentile ranks for first-year fellows, second-year fellows, and fellows in their third year or higher. In addition to being able to tell their fellows how they compared to their peers throughout the United States, program directors can use the results to help fellows determine their strong and weak areas of knowledge. Another use by fellowship program directors was to satisfy a requirement of the Accreditation Council on Graduate Medical Education (ACGME) for objective evaluations of knowledge. Passing the board certification examination means that physicians have met rigorous standards through intensive study, self-assessment, and evaluation. Board examinations encompass the 6 general competencies established by the ACGME and set the stage for continual professional development through values centered on lifelong learning [1]. Physicians who are board certified demonstrate exceptional expertise in a particular specialty or subspecialty of medical practice [2], and are frequently sought by patients. To maintain good standing, the ACGME requires that at least 80% of an infectious diseases program’s graduates taking the board certification examination in infectious diseases for the first time pass it, averaged over a 5-year period [3], and the
examination is taken by nearly every infectious diseases fellow who graduates from a fellowship program.

Grabovsky et al showed that the results of the ITE Infectious Diseases Examination taken in the second year of fellowship were a better predictor of results on the board certifying examination than the scores on any part of the US Medical Licensing Examinations or the ABIM certifying examination in Internal Medicine. There are several possible explanations for these results, including that the ITE in infectious diseases is simply taken closest in time to the board certifying examination in infectious diseases, or that examinations taken earlier during a medical career assess more general knowledge compared to the ITE. Because correlation does not imply causality, the study does not determine the reason, just that the ITE taken by second-year infectious diseases fellows is the best predictor of performance on the certifying exam. But whether that basis is the design of the ITE or because the test takers are closer to taking the board certification exam, it hardly matters—there is still ample time for fellows to study areas in which they are weak, attend a board review course, take other types of practice examinations, or even to get remedial help within their programs.

There are several areas that are not assessed by any examination, such as attitudes toward and relationships with patients, problem-solving abilities in a clinical setting, technical skills, and ability to interact effectively with other members of a healthcare team. These are assessed by other means, including evaluations, and it is therefore unsurprising that program directors’ evaluations of their fellows’ abilities in all areas, which tended to be very high, had the lowest correlation, by far, with board certifying examination scores.

Correlations of varying degrees for ITE scores with board certifying examination results has been made in other specialties, albeit under different circumstances. These include Anesthesiology (although in a smaller study) [4], Internal Medicine [5], Pediatrics [6], and Family Medicine (the total ITE score correlated, but the scores in specialty sections did not) [7]. In General Surgery, results on the ITE correlated with those of the qualifying (written) exam, which is the first part of board certification in General Surgery, but not with the oral certification, which is the second part [8].

After 5 years of data and experience and a calculated advance judgment that the Infectious Diseases ITE was going to be useful, various stakeholders—including the question writers; the administrators of the IDSA and others who invested a substantial amount of time into its development, design, and execution; the fellowship program directors and others who have spent much effort justifying it to fellows as an objective measure of knowledge; and the fellows who have to take it—should be satisfied to know that it is a valid assessment of knowledge and a useful predictor of performance on the ABIM certifying examination in Infectious Disease.

Note

Potential conflict of interest. Author certifies no potential conflicts of interest.

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