

Performance-Based Assessment Summary Report

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Background

The current ABP multiple-choice examination provides a valid and reliable assessment of a test taker's medical knowledge. The exam is more limited, however, in assessing how that knowledge is applied in practice. There are additional skills, such as procedures, communication, and teamwork, which are not well-suited to multiple-choice questions. Performance-based assessments offer the possibility of assessing these skills, either during training in a learning environment or for the purpose of a summative assessment. Methods focusing on the assessment of clinical skills have been around for more than 50 years in medical school training programs. In 2004, the NBME integrated a clinical skills (CS) component to its Step 2 examination using standardized patients. This session considered whether the ABP should invest effort and resources in development of performance-based assessments.

Key Points from Presentation

Dr. John Boulet provided an overview of how performance-based assessments (or simulations) can be used to both educate and assess health professionals, noting that some things cannot be measured with a multiple-choice examination. He defined simulation as a broad technique, not a specific technology, which can approximate actual situations to help with performance in real world tasks with the ultimate goal of improving patient outcomes. To use effectively, it is important to define the skills to be taught and measured and to choose the most relevant simulation for those skills. He briefly discussed some of the various types of performance-based assessments typically used in medicine, such as the standardized patient or mannequin. He provided examples of organizations currently using performance-based assessments as an integral part of their assessment program, including the National Board of Medical Examiners, the National Board of Osteopathic Medical Examiners, the Medical College of Canada, the Royal College of Physicians and Surgeons of Canada, and some ABMS member boards. He also warned of the measurement issues regarding reliability as there are far fewer data points than multiple-choice examinations and also issues with rater reliability, making training of raters and standardized patients critically important.

Key Points from Breakout Session

Follow up discussion emphasized the role of performance-based assessment in driving learning. Further, it was felt if gaps were identified either in an individual or group's performance, these could be addressed in a simulated setting. Other advantages include improved patient safety by allowing the practice of skills, increased experience in infrequently encountered situations or complex environments, and complementing actual clinical experience. Performance-based assessments could also be used selectively with learners who had gaps identified through other methods, such as workplace assessment. Disadvantages included psychometrics, cost, and logistical issues. Additionally, it was noted that evaluation apprehension needed to be addressed.

Conclusions

If the ABP elected to pursue the implementation of performance-based assessments, it would need to decide which competencies to measure by first learning where there are gaps in pediatricians' skills and where this type of assessment is best utilized. Procedural competency might be more applicable to some of the pediatric subspecialties, whereas communication skills or teamwork may apply more broadly to all pediatricians. There was some question as to whether the ABP might be duplicating efforts, as some pediatricians might already be participating in performance-based assessment through their institutions or other certification programs (e.g. Pediatric Advanced Life Support). Finally, it was noted that if the ABP is able to get reliable measures of actual patient outcomes, performance-based assessments may be less relevant for summative decisions and more important as a formative experience. Ultimately, the group felt that although the use of simulations is important, particularly in training, the ABP should not pursue this as a high priority as part of its current assessment program.