Developing Quality Exam Questions for Meaningful Assessments

Friday, March 11

13:00 – 14:00: Purposes of Assessment
This presentation will provide an overview of the purposes of assessment from the perspectives of both “assessment of learning” and “assessment for learning.” Major goals of assessment for both the basic science and clerkship phases of instruction (e.g., MCQ exams, OSCEs, workplace-based assessments) will be addressed, along with the strengths and weaknesses of commonly used assessment methods.

14:10 – 17:10: Writing MCQs that Test Application of Knowledge
(15-minute break will be held at approximately 15:30)
This workshop focuses on preparing MCQs that assess application of basic science and clinical knowledge in patient care situations, rather than testing just recall of isolated biomedical facts. Major goals will be teaching participants how to recognize, correct and avoid commonly occurring technical flaws in MCQ phrasing; select topics for MCQs that are suitable for course examinations; and to participate effectively in reviewing MCQs. Participants will work in small groups to write/rewrite MCQs that assess application of knowledge for presentation to the full group.

17:10 – 17:30: Question and Answer Session

Saturday, March 12

09:00 – 11:00: Assessing Professionalism with MCQs
This session focuses on writing MCQs for assessment of professionalism and ethics; systems-based practice and patient safety; and interpretation of the medical literature. Participants will discuss appropriate content and share/generate ideas for development of realistic scenarios/dilemmas that can be used as stimulus in traditional MCQ format or with more innovative formats that include video/multimedia. Attendees will have the opportunity to practice writing/reviewing scenarios and option lists in order to gain skills and generate ideas for writing effective MCQs in the future. Several new assessment formats will be presented for participant reaction and discussion.

11:15 – 12:15: Interpretation of Item and Test Statistics
This session provides a practical overview of test and item statistics, including an introduction to generalizability theory, and test statistics used as indicators of the reproducibility (reliability, precision) of score on MCQ exams. Commonly used item statistics (p-values, biserials, Horst statistics, and High/Low summarizing option selection will all be discussed. In small group work, participants will engage in a “key validation” of a hypothetical MCQ exam to identify items that perform aberrantly and should be reviewed by content experts to verify the accuracy of answer keys.

12:15 – 13:15: Lunch

13:15 – 15:00: Designing Score Reports
This session provides an introduction to design of score reports for assessment methods commonly used in medical education, with a focus on reports that provide information concerning strengths and weaknesses of individual trainees. As part of small group work, participants will critique and revise sample score reports and present them to the full group for review. In addition, participants are invited to bring copies of score reports they have seen, developed, or are planning to develop for review by attendees.

15:00 – 15:30: Question and Answer Session