Educational Outcomes Service Group

Evaluating Core Competencies

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FUTURE FOR GME ACCREDITATION
(Lynne Tomasa, PhD)

The ACGME Outcomes Project places emphasis on a program's actual accomplishments by asking the following set of questions:

1. Do the residents achieve the learning objectives identified by the program?
2. What evidence or documentation can the program provide that residents achieve these objectives?
3. Using the data collected, how does the program demonstrate continuous improvement in its educational processes?

In order to answer these questions, programs must first identify specific learning objectives related to each of the ACGME's six general competencies. Programs must enlist faculty participation in the process. The learning objectives must define in clear and concise behavioral terms, what residents are expected to know and do. Sample objectives for Medical Knowledge include:

1. By the end of *Year 1*, residents will be able to independently do procedure X and Y.
2. By the end of *Year 2*, residents will be able to independently do procedure A and receive an attending evaluation of #5 (always performs a specific behavior/competency) in 90 percent of their evaluations.

Once the objectives are defined, programs must use dependable and objective methods of assessing residents' attainment of the competencies identified in the learning objectives. The methods or tools selected must be valid and reliable. Once the appropriate tool is selected, faculty must understand what the anchors mean and recognize the importance of accurately filling out the forms. In addition, faculty must agree on how the data from the tool will be collected, analyzed and ultimately used for resident and program improvement.

The following section will identify some of the various tools included in the ACGME toolbox.

EVALUATING CORE COMPETENCIES
(Craig McClure, MD)

Suggestive list of methods:

1. Direct Observation or Shadowing
2. Standardized Oral Examinations
3. Objective Standardized Exams
4. Simulations and Models
5. Chart-Stimulated Recall
6. Global Rating
7. 360 Degree Evaluation
8. OSCE
9. Portfolios
10. Record Review

The ACGME has left responsibility for implementation and evaluation of core competencies to individual programs to accomplish. Once the characteristics that define competency are known, the selection of assessment methods can occur. An introduction to some methods follows.

Direct Observation or Shadowing: Some version of the faculty member directly observing the behavior of the resident has long been used in a variety of settings and with varying formality and documentation. The Mini-CEX of the American Board of Internal Medicine reflects an effort to provide a systematic definition of competency implemented in a way that provides resident feedback and documentation of that feedback. This method can be very expensive of faculty members' time and without the proper tool can be very subjective, yet has the potential for a rich immediate assessment and feedback of all of the six general competencies coupled with the now mandated documentation of the effort.

Standardized Oral Examinations (SOE): typically requires the resident to review a patient case vignette in the presence of a faculty member and orally present the thought

process involved in collecting history and physical examination information, synthesizing data into a differential diagnosis list and developing an appropriate diagnostic and therapeutic care plan. This technique is more appropriate for measuring patient care, knowledge, interpersonal/ communication skills, and systems based practice, than professionalism or practice-based learning and improvement. Use of faculty time runs high.

Objective Standardized Exam: such as the InTraining Examination, mini-quizzes in preparation for Board exams or computerized modules combining both education and evaluation can be useful for assessing medical knowledge.

Simulations and Models: can be useful in evaluating procedural skills and medical knowledge. While tending to be expensive because of the materials used (cadavers, animal preparations, computer simulations, OSCE's these are valuable when resources support their availability.

Chart-Stimulated Recall (CSR): provides an opportunity for the resident to verbally review the processes involved in patient care, so may provide insight into patient care, medical knowledge, systems-based practice and perhaps practice-based learning. M & M conferences and chart reviews are two settings for this method. A trained examiner questions the resident about the reasoning behind the documented care in the progress note and chart.

Global Rating of Live or Recorded Action: includes the familiar standardized form completed at the end of a block rotation. It requires the observer to judge a general competency as a category rather than evaluating specific behaviors, skills, or tasks. An advantage is that the tool is readily available and can address all six general competencies. Problems include risk of great subjectivity, difficulty discriminating between levels of trainee and reliability even with the same faculty member.

360 Degree Evaluation: is a tool often seen in Human Resource and business settings. In brief, the instrument involves developing surveys appropriate for the array of people in a resident's life: residents, faculty members, nurses, patients, clerical staff members, etc. The 360 Degree is useful for measuring communication/interpersonal and professional qualities. Challenges include developing the surveys, managing the mass of information, and balancing feedback to the resident with the confidentiality needed for valid information.

OSCE: the Objective Structured Clinical Examination provides a direct measure of performance in the doctor-patient encounter. An OSCE is very useful to measure specific clinical skills and requires a significant investment of time and money to develop and administer, making it most cost-effective when a number of residents are examined in a single session.

Portfolios: is a set of materials collected by and about a resident reflecting on clinical performance. One example is the resident file maintained by the Residency Office. The tool can be expanded with copies of videotapes, reflective statements from the resident about progress in learning, an educational plan for what has been learned, is yet to be learned, and how that will occur. Carefully established criteria are important if the portfolio is to be used in comparisons between residents. Some programs find it a way to measure activities otherwise not evaluated; some find the time committed excessive for the return.

Record Review: involves trained staff using standardized coding to abstract information from the written record of patient care, useful for measuring clinical decision-making, documentation, follow-thru in management, appropriate use of resources, etc. Since the note may involve the consensus of consultation with other physicians (e.g., inpatient resident team or attending physician), caution must be used in attributing the diagnostic and therapeutic plans solely to the resident signing the note.

References:

1. http://www.acgme.org/outcome/project/OutIntro_fnl1.htm
2. Swing, SR. Assessing the ACGME general competencies: general considersations and assessment methods. Acad Emerg Med. 2002; 9: 1278-1288