

Responding to the ACGME's Competency Requirements: An Innovative Instrument from the University of Virginia's Neurology Residency

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ABSTRACT

The general competencies mandated by the Accreditation Council for Graduate Medical Education (ACGME) Outcome Project have resulted in new training requirements for most residency programs. To determine the training program changes necessary because of these new standards, the neurology residency program at the University of Virginia developed a simple grid-like instrument that links the objectives for residents' major rotations with the six ACGME general competencies. This instrument, created in 2002, helped the program develop specific training elements related to the general competencies that were identified as missing from the residency. The instrument

was then converted to an evaluation tool that allows attending physicians to assess individual residents' competencies for each objective in all major rotations. The author describes the assessment and evaluation instruments, called Self Assessment and Vital Evaluation (SAVE), and their usefulness in the University of Virginia neurology residency program's initial response to the new standards. She also suggests that these instruments, with some modifications, may be of value to other residency programs.

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The Accreditation Council for Graduate Medical Education (ACGME) developed its Outcome Project in an attempt to increase the focus on competency-based residency, with an emphasis on demonstrated success (outcomes) of training, as opposed to experience based training, with an emphasis on the residency program's potential to educate.¹ This new approach requires that programs demonstrate that each resident has attained the appropriate level of competency in six areas: patient care, medical knowledge, professionalism, systems-based practice, practice-based learning and improvement, and interpersonal and communication skills.

Phase 1 of the program ran from July 2001 until June 2002. During this period, residency programs were asked to assess their curricula and form an initial response to the new requirements. In this article, I describe the initial self-assessment of our neurology residency at the University of Virginia and present the instrument we developed in 2002 that facilitated our adjustment to the new standard. In addition, we later converted the instrument into an evaluation tool that is allowing us to consider the six general competencies at all levels of our neurology residents' training.

THE INSTRUMENT

The director of the neurology residency training program and colleagues at the University of Virginia developed a very simple grid-like instrument as the program's self-assessment tool. It links descriptions of the objectives for each major rotation of the program to each of the six general competencies that the residents should achieve (see Chart 1). Across the top of the grid are the six competencies, and down the left side are the objectives for the specific rotation being evaluated. The competencies that were determined to be most central to a given objective were given an X. For

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Chart 1

Goals and Objectives of the Neurological Intensive Care Unit	Core Competencies					
	Patient Care	Medical Knowledge	Practice-Based Learning/Improvement	Interpersonal & Communication Skills	Professionalism	Systems-Based Practice
The goal of this rotation is for residents to learn how to care for critically ill patients with neurological disease who are in the intensive care setting. The objectives are given below. Residents should:						
Obtain a neurological history and exam	X	X		X		
Diagnose and treat neurological disease	X	X	X			
Participate in patient social planning	X			X	X	X
Communicate with and educate patients/families, including discussions of end-of-life issues	X	X		X	X	X
Develop awareness of cost effectiveness of diagnostic studies and treatments and resource limitations in health care		X	X			X
Develop awareness of ethical issues related to patient care	X	X		X	X	
Assess rehabilitation potential for neurological patients	X	X				X
Demonstrate professionalism and good interpersonal skills among patients, families, and all members of the health care team	X			X	X	X
Develop technical skills necessary to perform neurological procedures and standard ICU procedures	X	X				
Identify and describe neuroradiographic findings	X	X	X			
Develop a knowledge base about major neurological diseases that require critical care		X	X			
Developing a knowledge base about major psychiatric diseases that may be present in the critically ill patient		X	X			
Use computerized and noncomputerized information systems to facilitate patient care and the development of techniques for lifelong learning	X		X			X
Identify and access support health care services and mechanisms that improve patient care and patient quality of life	X					X
Demonstrate teamwork				X	X	X
Demonstrate skills in end-of-life care and withdrawal of support	X	X		X	X	
Teach medical students and junior residents		X	X	X	X	

*The Department of Neurology developed this grid to aid in its self-assessment to prepare to add new necessary training and evaluation components to the residency program. Each X indicates the identification of that general competency as key to the objective listed to the left of the X. The chart above shows the grid as used in one of the program's rotations in the neurological intensive care unit.

example, for the objective “Obtain a neurological history and exam,” we determined that patient care, medical knowledge, and interpersonal communication skills captured the key components of that objective.

A second form, the evaluation form, was developed by blocking out the competencies that were not as imperative to a given objective (the ones not marked with an X in the self-assessment tool; see Chart 2). The spaces that remained

Chart 2

Example of the Evaluation Instrument to Assess Residents' Competencies, the Neurology Residency Program, University of Virginia School of Medicine, 2003*						
Resident Name: Date:						
Demonstration of Competency in the Inpatient 6 Central Ward and Night Float Rotation						
The objectives of the rotation (below) address many of the required resident competencies. Please evaluate the resident's performance for each objective as it pertains to the core competencies by placing a						
+ (plus sign) if resident demonstrated competency, - (minus sign) if resident did not meet competency or needs improvement, ++ (double plus sign) if the resident exceeded the competency, or N/A if not applicable or N/A if not applicable or not assessed (should be rarely used).						
<i>Did the resident demonstrate competency in:</i>						
Obtaining a neurological history and exam						
Diagnosing and treating neurological disease						
Participating in patient discharge and social planning						
Communicating with and educating patients and families in a compassionate, honest, and professional manner						
Understanding awareness of cost effectiveness of diagnostic studies and treatments and resource limitations in health care						
Developing awareness of ethical issues as relate to patient care and professionalism						
Assessing rehabilitation potential for neurological and psychiatric patients						
Demonstrating professionalism and good interpersonal communication skills amongst patients, families, and members of the health care team						
Developing technical skills to do neurological procedures						
Identifying and describing neuroradiographic findings						
Developing a knowledge base about major neurological diseases that require inpatient care						
Developing a knowledge base about major psychiatric diseases that can mimic neurological disease						
Using computerized and noncomputerized information systems to facilitate patient care and lifelong learning technique development						
Identifying and accessing support health care services and mechanisms that improve patient care and patient quality of life						
Demonstrating teamwork						
Teaching interns and students						
Offering and providing clinical research options to patients						
Critically reviewing own patient care performance and knowledge base under supervision						
Developing and demonstrate skills in end of life care						
Comments:						
_____ Attending Signature						
						_____ Program Director/Chair Review

*The residency program of the Department of Neurology developed this grid to help program physicians evaluate residents' competencies. Each open space on the grid indicates that the general competency listed above that space is key to the rotation objective listed to the left of the space (see also Chart 1). The evaluator is asked to fill in all the open spaces for each objective, using the symbols shown in the top left of the form. The specific grid shown above is for use in evaluating a resident in an inpatient ward and night float rotation.

reflected the specific competencies that should be evaluated for each of the objectives listed. For example, for the same objective mentioned previously, "Obtain a neurological history and exam," an attending physician would have to grade the resident's level of competency in patient care, medical knowledge, and interpersonal skills. It would be possible for a resident to obtain excellent information from the patient that would allow the correct patient-care decisions and would demonstrate excellent medical knowledge (resulting in high scores in each), but if the resident was rude to the patient in the process or in other ways ineffective in his or her communication, the resident could be graded with a low score in interpersonal and communication skills.

USING THE INSTRUMENTS

Regarding the self-assessment instrument, four major rotations were used for the first-year neurology residents: inpatient wards (and night float), inpatient and outpatient epilepsy, neurological intensive care unit, and neurology outpatient unit. Four major rotations were identified for the second-year neurology residents: adult consults, neurology outpatient unit, neurological intensive care unit, and inpatient and outpatient pediatric neurology. Three rotations were identified for the most senior neurology residents: adult neurology inpatient ward senior, inpatient and outpatient psychiatry, and neurology outpatient unit. For each major rotation, the individual objectives of the rotation (previously developed) were crossed with the six competencies (see Chart 1).

The identification of the competencies in each rotation allowed us to capture components of the training that were already a focus of the program (e.g., patient care, ethics). Evaluation strategies were then developed based on that information. Development of new evaluation forms that included assessment of the competencies already being taught followed (e.g., ethical decision making, health care resource utilization). In addition, competencies that were not being covered in individual rotations were identified. New training programs and methods of evaluating those competencies were then developed (e.g., end-of-life care).

Other residency programs at our institution adopted the grid and modified the content to reflect the objectives of their major rotations. Several programs found the modified grid very useful for organizing their planned response to the new general competencies.

We then converted the instrument into the competency evaluation form (see Chart 2). Attending physicians score residents as meeting the competency (indicated with a + sign), not meeting the competency or needing improvement (indicated with a - sign), or exceeding the competency for

their level of training (indicated with a ++ sign). These evaluation forms were initiated in July 2003.

After a 30-minute training session with the faculty, the Self-Assessment and Vital Evaluation (SAVE) replaced the previous 24-category checklist evaluation (with four performance choices for each) for the major rotations. Faculty participation has been excellent. The detail of the comments has improved as the faculty appear to be considering a broader range of training components. The completed evaluations have provided the director with more specific information on the strengths and weaknesses of individual residents. Preliminary feedback suggests that the SAVE form consistently takes longer to fill out than did the previous form and that several attendings would prefer to evaluate all six competencies for all objectives.

BENEFITS OF THE INSTRUMENTS

The two instruments, which as a pair are called Self-Assessment and Vital Evaluation (SAVE), have been extremely useful for the University of Virginia's neurology residency program to form an initial response to the ACGME Outcome Project, to initiate programmatic changes to meet the new standards, and to help in the evaluation of residents.

The main intent of this article is to share information on the simple grid-like self-assessment instrument that can make it easier for programs to consider the role of the general competencies for each training objective. With some modifications, it may be of use to residency programs in other specialties as well. Such an instrument may help identify ongoing teaching in areas emphasized by the competencies and allow the development of methods to assess those competencies. It may also guide program development for areas not currently emphasized or evaluated. Conversion of this instrument to a competency-based, objective-specific evaluation instrument such as the one described here may also be useful to some programs.

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REFERENCE

1. The ACGME Outcome Project (<http://www.acgme.org/outcome/>). Accessed 27 August 2003.