

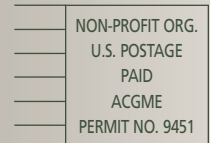


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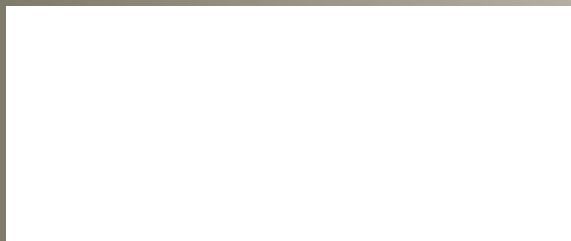
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Ingrid Philibert

EDITOR

David C. Leach, M.D.

CONSULTANT

**515 North State Street,
Suite 2000
Chicago, IL 60610-4322**

Phone: 312/464-4948


FAX: 312/464-4098

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Editor's Introduction:

Ushering in the Second Phase of the Outcome Project

Over the past year, residency education programs prepared for the launching of the use of outcomes in the accreditation of graduate medical education. During Phase 1 of the Outcome Project, termed "forming the initial response," programs were expected to review their approaches to evaluate learning, and to begin to incorporate the competencies into teaching and evaluation practices. Simultaneously, the timetable for the RRCs called for them to develop operational definitions of "compliance" vis a vis programs' use of the general competencies, and provided constructive comments to programs that presented outcome-related information on a voluntary basis. During Phase 1, there were no consequences to the accreditation of programs.

On July 1, 2002, the ACGME and accredited programs and their sponsoring institutions will enter Phase 2 of the ACGME's initiative to use educational outcomes in the accreditation of residency programs. Beginning with this date, programs are expected to provide evidence of learning in all six competencies, and evidence of initial efforts to use competency-focused evaluation tools. RRCs will review the initial information on curricula and assessment methods, and use them in the accreditation of programs. To herald this important moment for accreditation, this special issue of the ACGME Bulletin focuses exclusively on the general competencies, with the intent of highlighting the upcoming change in the accreditation process, and to offer programs targeted articles, practical suggestions, and references and suggestions for where to obtain additional information and advice. 

Steps Toward Assessing the Professional Competence of Residents

Ronald M Epstein, MD

Defining competence

We proposed in a recent article that professional competence is *the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served.*¹ Competence at the residency level assumes a foundation of basic clinical skills, basic scientific knowledge and basic moral development. Residency directors are well aware that poor performance leading to dismissal from residency programs is as often due to lack of integrity, poor motivation and psychological impairment as it is to lack of skill or knowledge.

The article continues: "Competence includes a cognitive function – acquiring and using knowledge to solve real-life problems; an integrative function – using biomedical and psychosocial data in clinical reasoning; a relational function – communicating effectively with patients and colleagues; and an affective/moral function – the emotional awareness, willingness and patience to use these skills judiciously and humanely. Competence depends on habits of mind including attentiveness, critical

curiosity, self-awareness, and presence. Professional competence is developmental, impermanent, and context-dependent."

We have learned a few things about professional competence since Flexner articulated his model of medical

"Competence is not only what you know, but also how you use what you know, and how you acquire new knowledge."

education in the early 20th century. First, competence is not only what you know, but also how you use what you know, and how you acquire new knowledge. Some distinguish between competence (what you know) and capability (how you will perform in the future).²

Second, competence is defined by the context in which physicians practice. The challenges of health care are different now compared with 50 years ago. There is more information to manage, including high- and low-quality information available electronically. Team-based care is more common. Patients in hospital are sicker. There are more choices among treatment options. Economic factors, social disparities and ethical challenges affect a greater proportion of health care decisions.

Third, the definition of competence reflects the changing public expectations of physicians. The public wants doctors who communicate well with patients, work well with other health professionals, have good judgment, are honest and trustworthy, and who continue to learn. Patients want more information about their health than they currently receive from physicians. Some sectors of the population articulate that they want more control over decision-making, whereas other sectors (the elderly, minorities, the poor) prefer more control only if they are educated in how to communicate differently.

Fourth, the "art of medicine" can and should be assessed. Reliable and valid measures of patient-physician communication can predict some health outcomes.³ Professionalism can be assessed reliably and confidentially using peer assessments. Patients can provide information about physician competence that complements information gleaned from other sources. Studies in industry indicate that 360-degree assessment improves morale and performance.

Fifth, assessment drives learning in several ways. Even the most self-directed learners learn differently when they are informed that something is going to be observed or tested. Course directors change their curricula in response to student performance on assessments and course evaluations. Thus, assessment, even in the absence of feedback, is always an educational intervention. Educators should consider what effects the assessment method itself will have on future behavior. Only assessing factual knowledge may give a message that good clinical judgment and interpersonal skills are relatively less important. Only assessing case presentations without direct observation of clinical skills may send a message that reported information is more important than observation. Feedback, in my view, should always accompany assessment.

Sixth, the most powerful forms of learning require the internalization of assessment criteria so that the learner is engaged in a process of self-observation and self-critique. This capacity for mindfulness can then be translated into everyday practice to foster ongoing learning and self-correction.⁴

Finally, assessment expresses values. More than driving learning and curricular change, assessment sets a moral tone for the institution in which the learning occurs. Assessing ethical judgment lets students know that ethics are integral to good medical practice. Thus, assessment is always a moral intervention. Educators should keep in mind that every test conditions future behavior in learners.

Challenges in assessing residents

The ACGME has outlined elements of professional competence and possible means for assessing them.⁵ This is no small challenge. Thirty years of research has provided a strong evidence base for the assessment of core skills at the medical school level, but it is problematic translating these same measures to residency education and beyond.^{6,7}

"....the most powerful forms of learning require the internalization of assessment criteria so that the learner is engaged in a process of self-observation and self-critique."

Simple checklists or factual knowledge questions, whether applied to written tests, clinical simulations using Standardized Patients (SPs), oral examinations or observation of clinical sessions often miss the point. Residency is more about gaining situation-specific judgment and skills than it is about learning basic principles. Efficient and effective clinicians often take shortcuts. The dangers of applying criteria designed for beginning medical students to residency education include not taking the assessment seriously, spending money on tests that provide little useful information and reducing professional judgment to clerical correctness.

Residencies are small-scale enterprises. It is difficult to conduct an anonymous, confidential peer assessment with a program containing 12 residents who have little contact with residents in other specialties. Thus, assessment must be more of an open process. Similarly, creating SP scenarios for a small cadre of trainees is very time-consuming. Faculty depends on residents in a way that we don't depend on medical students. Thus, assessments are embedded in relationships that, ideally, will foster helpful, mutually supportive teamwork. Direct confrontation, therefore, may be difficult.

Next steps

Residency programs within an institution share many common features, common contexts, and a common institutional mission. Thus, assessment programs might be considered at an institutional level, as well as a program-specific level.

Standardized patient assessments. Programs can share SP resources. The same SP trained to portray a young woman with right lower quadrant pain might be used to assess residents in surgery, family medicine, internal medicine, obstetrics/gynecology and emergency medicine, possibly with different assessment criteria. Faculty involvement in SP assessments is more critical at the residency level than for beginning students. An SP can assess whether a student has elicited a Murphy's sign correctly, but only a faculty member can assess whether the interview and physical exam was logical and coherent. Faculty should be asked to assess higher-order reasoning, not the details easily assessed by an SP. SPs can be sent into clinical practices unannounced after getting global permission from the residents. This approach has been used extensively in research, and to a lesser degree in educational interventions. The SP can perform ratings immediately after the visit or upon reviewing the audiotape of the visit.

Peer assessments and 360-degree assessments.

Ramsey has shown that peer assessments are reliable and valid when performed by attending-level physicians, and that similar results are obtained whether or not the index physician chooses those who will be completing the assessment.⁸ The challenge for residency programs is deciding how to handle confidentiality and access to information. At the University of Rochester, we give results of peer assessments directly to medical students, with the encouragement to discuss the results with a faculty advisor. In 360-degree evaluations in industry, the results may not be available to the employee at all – the information is used by superiors to make promotion and termination decisions. In residency education, I believe that a more open approach would be most beneficial, but this requires further study.

Written assessments. In addition to tests of factual knowledge, written (or computer-based) assessments can tap into trainees' thinking processes, ability to use the medical literature and exercise good judgment. The assessment tasks should include assignments that approximate real practice. For example, writing a mock referral letter after an SP case, or a real patient presentation, may be a useful test of communication and reasoning.

Portfolios. Portfolios may include videotapes of real patient encounters, chart notes, referral letters, videotapes of technical procedures and other real-life practice data that will inform the trainee and a faculty advisor about the trainee's accomplishments and weaknesses. This approach has been adopted by the Royal College of General Practice in the United Kingdom, and by other institutions. These lend credibility to assessment programs by allowing trainees to demonstrate what they actually do, not only what they are capable of.

A financial investment is necessary to make assessments work, and reify institutional commitment to quality. The sobering reports from the Institute of Medicine on errors and quality both emphasize the importance of assessment at the institutional and practitioner levels.^{9,10} Legislative actions to implement the IOM's recommendations have resulted in some funding streams to accomplish the broad recommendations that they have made. Institutional commitments will be equally important in achieving these goals.

Sources:

- (1) Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA* 2002; 287(2):226-235.
- (2) Fraser SW, Greenhalgh T. Coping with complexity: educating for capability. *BMJ* 2001; 323:799-803.

- (3) Stewart M, Brown JB, Boon H, Galajda J, Meredith L, Sangster M. Evidence on patient-doctor communication. *Cancer Prevention and Control* 1999; 3(1):25-30.
- (4) Epstein RM. Mindful practice. *JAMA* 1999; 282(9):833-839.
- (5) Accreditation Council for Graduate Medical Education. ACGME Outcome Project. <http://www.acgme.org> . 2000.
- (6) Norman GR, Van Der Vleuten CP, De Graaff E. Pitfalls in the pursuit of objectivity: issues of validity, efficiency and acceptability. *Medical Education* 1991; 25(2):119-126.
- (7) Van Der Vleuten CP, Norman GR, De Graaff E. Pitfalls in the pursuit of objectivity: issues of reliability. *Medical Education* 1991; 25(2):110-118.
- (8) Ramsey PG, Wenrich MD, Carline JD, Inui TS, Larson EB, LoGerfo JP. Use of peer ratings to evaluate physician performance. *JAMA* 1993; 269(13):1655-1660.
- (9) Crossing the Quality Chasm : A New Health System for the 21st Century. Washington, DC: National Academy Press, 2001.
- (10) Kohn LT, Corrigan JM, Donaldson MS. To Err Is Human: Building a Safer Health System. Washington, DC: National Academy Press, 2000.

Dr. Epstein is Associate Professor of Family Medicine and Psychiatry at the University of Rochester School of Medicine and Dentistry. 

Executive Director's Column: **Getting From Here to There**



David C Leach, MD

"We must become the change we want to see." - Gandhi

David Leach, MD

For the past few years the ACGME has been developing an alternative approach to accreditation – an approach based more on educational outcome measures and less on process and structure measures. The new model is now being introduced to the field in a one-year phase entitled "Forming the Initial Response." Both programs and RRCs have been asked to respond to the invitation to be both faithful and creative: faithful to the highest standards of education and creative in crafting better approaches to teach and assess the six general competencies: patient care; medical knowledge; practice-based learning and improvement; interpersonal and communication skills; professionalism; and systems-based practice.

It is said that form is ephemeral and substance is enduring. The change effort inherent in the Outcome Project is designed to strengthen substance and be


malleable towards form. The task before us is to be faithful to the substance of medicine, those elements of our work that have been tested over time, even millennia, as being at the heart of the profession. At the same time we are asked to be malleable toward form, those accidental properties of medicine that may reflect current custom but can be changed without weakening the profession. Four principles arguably constitute the substance of medicine: the six competencies; the continuum of skill development; measurement; and improving our work. All are expressions of relationships: doctor-patient; teacher-student; and all of us with each other as community.

Being clear about substance and form can help parse the resistance to change that we all feel. It helps us distinguish healthy professional homeostasis from the more generalized inertia that resists all change. We all have an obligation to build knowledge about good GME and its linkage to good patient care. Some have described change as a cycle of thawing a frozen position, moving to a new state and refreezing at that new state. However, a more appropriate model is captured in the words of the Society for Organizational Learning (www.sol-ne.org): "we are assessing to learn and learning to assess." Ongoing improvement is never frozen; we seek to approach the truth, but also realize that we will never get to truths so profound that further change will not be needed. Ron Epstein has reminded us that good practice and good education require "mindfulness." The best we can do is to build ongoing individual and community reflection into our work.

Accreditation itself requires "practice-based learning and improvement." This year programs should have initial plans to teach and assess the six general competencies,

"The task before us is to be faithful to the substance of medicine, those elements of our work that have been tested over time, even millennia, as being at the heart of the profession."

and institutions should have a protocol for their internal reviews that incorporates questions regarding the competencies and their assessment. Residents must both "know the rules" of their discipline and have applied the rules in clinical contexts sufficiently complex and diverse that they can function safely without supervision at the time of graduation. Global assessments, focused observational assessment, patient and professional associate assessments of residents, and the development of portfolios supplement classic cognitive examinations as represented by board exams or in-training exams (more information on each of these approaches can be found at www.acgme.org). They are useful in assessing both the "rules" and the "context." Most programs and disciplines are already using some of the suggested evaluation techniques. As programs are reviewed by the RRCs, it is likely that the RRCs will begin to prescribe specific evaluation approaches. Their experiences will be shared with all RRCs and with the field so that the broad community can build knowledge about good GME.

Paul Batalden has said that life cannot be condensed. We form models to help us understand life. All models are limited; some are useful. We apply measurements to the models. To some extent the six general competencies and their assessments represent a model that may be useful. As experience is gained, however, both the model and approaches to its measurement will need to be reassessed and improved. As a community we must constantly seek to discern the truth and follow it wherever it takes us. We must assess to learn and learn to assess; "we must become the change we want to see." 

Institutional Coordination and Collaboration for Implementation of the Competencies

*Michael Petty, PhD, Patricia O'Sullivan, EdD,
Ruth M. Allen, PhD, Jeanne K. Heard, MD PhD*

To facilitate program directors' compliance with the general competencies, the University of Arkansas for Medical Sciences mounted a coordinated effort joining the Associate Dean for Graduate Medical Education (ADGME), the Graduate Medical Education Committee (GMEC), residency program directors and the Office of Educational Development (OED). This article describes how we prepared 47 residency programs to implement the ACGME competencies, what problems we encountered, and the outcomes we have achieved thus far.

In 2000 the ADGME and GMEC Chair provided overviews of the Outcome Project and its goal – to improve the quality of residency training – to the Dean, clinical Department Chairs, program directors and representatives of major participating institutions. These overviews presented the background for the Project, but more importantly, focused on the potential to improve the quality of our graduates and of the training programs. The Dean endorsed supporting the Project. As a result we expanded the resources committed to it. OED recruited additional educational expertise (a PhD educator, a research assistant, and an administrative assistant) to assist the program directors. One department chair hired an educator to support the large core program and four fellowships. The GMEC created a General Competency Subcommittee composed of program directors, educators and residents to advise on all activities.

Based on a needs assessment performed in the fall of 2001, we have:

1. Held two quarterly meetings for program directors, with selected programs illustrating their efforts;
2. Conducted individual consultations with 20 PDs and program coordinators, who have accreditation reviews scheduled between July 1, 2002 and June 30, 2003;
3. Offered four monthly "brown bag" lunches focusing on evaluating the competencies, allowing for the exchange of ideas/concerns among program coordinators and program directors;
4. Summarized over 50 articles on various evaluation methods;
5. Established an e-mail list for program directors to ask questions or share ideas;
6. Hosted a one-day workshop during February 2002, providing protected time for the program directors, program coordinators, and Chief Residents to work with educational experts;
7. Incorporated the competencies into our internal review process and annual resident satisfaction survey to establish a baseline in 2001-02 from which to measure improvement and accomplishments;
8. Facilitated a resident-led group to develop a 360-degree evaluation for use by all programs.

A cadre of program directors aggressively addressed the new competencies, developed specialty-specific objectives, and aligned these with skills required within their specialty with little, if any, consultation. They used materials from their specialty societies and/or colleagues at other institutions. These individuals showcased their

materials at the quarterly program directors' meeting, stimulating the efforts of others. During individual meetings with OED consultants, the program directors realized that current curricula could fulfill requirements and that they could select evaluation tools amenable to their needs. These realizations assuaged many apprehensive attitudes. One specialist came away from the OED consultation stating that he now understood not only how to approach the task, but also how the ACGME Project would benefit residency education. The program directors discovered that for some competencies, adjustments had to be made in teaching and evaluation.

While some program directors may have viewed the Outcome Project as one more educational initiative with minimal support "from above," we have provided some structured time and assistance to focus on the work. During the initial consultation appointments, we introduced program directors to approaches taken by others, provided outlines to assist them and their program coordinators, and reviewed and edited drafts of their work. Follow-up appointments frequently are working sessions. The protected time and collaboration offered by the workshop was welcomed by many program directors.


OED initiated monthly brown bag lunches addressing evaluation tools. To date, we have discussed research papers demonstrating the use of CQI projects to evaluate practice-based learning; chart stimulated recall and oral exams for medical knowledge; the mini-CEX formats and standardized patients to assess patient care; and, the reality of using 360 degree evaluations for professionalism.

With such a multifaceted initiative, success can be judged in many ways. We believe that the short-term success of our efforts will be measured by:

1. Program directors' and coordinators' perceived benefit;
2. Program directors' demonstrated familiarity and confidence in the general competencies;
3. Written plans in place by July 1 for programs undergoing review; and
4. Positive RRC site visit response to the program's/institution's approach toward the competencies.

We continue to have participation in various consultations and offerings, and the seminar rating forms completed by participants after each session indicate an increasing understanding of the ACGME competencies.

In summary, the Outcome Project offers program directors a better understanding of the educational processes involved in resident education and fosters collaboration and development of institution-wide educational experi-

ences and evaluations. With a focus on education and resident performance, we anticipate earlier counseling concerning problem areas, better remediation for programs with recurring areas of deficiency, and more secure decisions about resident advancement and graduation. The collaboration brought about by our involvement in the Project has made all of us more appreciative of the innovation and expertise brought by many individuals in the institution to provide graduate medical education. 

The Intended and Unintended Positive Consequences of Outcome Assessment

Susan Swing, PhD

The ACGME's own writing about the Outcome Project implies that the Project is about changing accreditation by using educational outcome data in accreditation decisions. And to some extent this is true. It represents the Project's long-term goal vis a vis accreditation. The Outcome Project is also about "enhancing residency education through outcome assessment" and "good learning for good health care." The implication of these other goals is that educational outcome assessment can have far-reaching, powerful effects not only on resident learning, but also on the provision of patient care in the larger practice environment. This article discusses the intended and unintended positive consequences of increasing emphasis on outcome assessment during residency education. One intended consequence is the redesign of assessment to better serve learners, learning, and improvement. What follows are a "few simple rules" to guide the redesign.

"Simple Rules"

1. Focus assessment on the specific knowledge, skills, and behaviors that really matter. The general competencies provide a framework, but programs need to fill in the specific details.
2. Use well-defined performance criteria. Performance criteria should be specific enough that residents will have a very clear picture of what performance looks like along a continuum from less to more accomplished. Specific standards should indicate the level of performance expected at different points in the educational process. Whenever possible, criteria should be derived from evidence on what makes a positive difference in the quality of patient care.

3. Base assessment on actual performance or results. In order to know specifically what residents can and cannot do, it simply will be necessary to watch what they do and utilize reliable records of care processes and outcomes and residents' actual work products (e.g. research manuscripts). In turn, results of the assessment should be documented at this same level to minimize distortions and other errors that characterize more global assessment.
4. Involve informed and invested evaluators. Residents' supervisors are undoubtedly the best judges of residents' clinical skills and medical knowledge. However, patients and nurses, peers, and other MD and non-MD professional associates interact with residents in different contexts and situations and from the perspective of their unique roles and capabilities. Their perspectives add relevance, credibility, and scope to the assessment of residents.
5. Integrate assessment with learning. Assessment at the middle and the end of the year or even at the end of a rotation is simply too late and too general to be very helpful. Assessment snapshots conducted regularly can serve as an on-going feedback loop to residents so that they could redouble or refocus their efforts.

Implementation of the rules should result in performance data that is relevant, accurate, precise, and useful (Rules 1, 3, 4, and 5). This information should better inform both faculty and residents what the latter can and cannot do well enough (Rule 2), at a time when there is a greater likelihood that additional educational activities can be engaged in without serious disruption to progress (Rule 5). Furthermore, the redesigned system puts residents in a position to better direct their educational efforts and to self-assess. With any luck, the criteria and process of assessment will be internalized and played out in life-long learning.

Some Unintended Positive Consequences

In addition to its planned effect, the Outcome Project has several unintended consequences that are also beneficial. They are discussed below.

The first is hypothesized to be a reduction of unexplained variations in practice. Identifying performance criteria requires the faculty to explore their own practices, beliefs, and the literature and to have conversations around these issues. This process could illuminate unexplained variation in how care is provided within their own departments and across the specialty and raise awareness that widely variable standards are being used to

judge goodness of performance for the same competencies and medical practices. Unexplained or idiosyncratic variations can complicate residents' learning and contribute to unreliable assessment. In addition, it can confuse patients and cause medical errors. Thus, conversations around Rules 1 and 2 could expose faculty to better ways of doing things with the result of stimulating their own learning and application of desirable practices.


Second, the Outcome Project is contributing to changes in the culture of education and practice. Performance dimensions and criteria communicate what is important. The general competencies double as values, and their assessment could heighten the perceived

importance of areas (e.g., practice- and systems-based improvement of care, teamwork, collaboration, professionalism) considered by key stakeholder groups to be undervalued and under-emphasized. Involving the community of practice in the assessments (Rule 4) could reinforce these values further by inviting commitment via participation and through repeated reminders during regular assessment episodes. In addition, regular assessments with feedback communicate that this process is a part of business as usual. Rather than being an intrusion on professional autonomy, assessment and feedback become a part of daily conversation around what was done, why, and what could be done differently or better. Together, the effect of these events is to create a learning culture focused around a set of values that all point to the shared common purpose of improving patient care.

The third impact of the Outcome Project is that it naturally complements the growing emphasis on outcomes in patient care. The current concern in medical care delivery systems with performance assessment, clinical

"Unexplained or idiosyncratic variations can complicate residents' learning and contribute to unreliable assessment. In addition, it can confuse patients and cause medical errors."

and patient outcomes, and medical errors was stimulated largely by sources external to the systems themselves. Focused, ongoing assessment during residency that holds young physicians accountable for meeting performance standards and producing desired patient outcomes should help both to prepare residents for this feature of the practice environment and to facilitate acceptance of this evolving emphasis. And when this happens, patients emerge as winners.

Whether or not the above are considered positive consequences may depend on the perspective one holds; it is from the perspective of a patient and educator that I write. These positive consequences, whether intended or unintended, will not happen automatically. This particular rendering may be merely fanciful, especially given the current economic situation and productivity pressures on faculty. At the same time, if increasing emphasis on outcome assessment is thoughtfully and seriously undertaken, one step at a time, over time these consequences could be a part of the evolving reality. 

Using Senior Level Residents as Role-playing, Standardized Patients

Dennis Venable, MD

Neatly dressed in a blazer, slacks, and tie, a young adult male approaches another man of similar age sporting shirt, dark hair and a trim goatee. The first man extends his hand and says, "Hello, my name is Kevin Spires. Can I help you?" The other man glances up with a concerned look on his face. He accepts Kevin's outstretched hand in his, and replies in his best falsetto voice, "Hi, I'm Monique, and I think that I have another infection." No, this is not the opening scene of a drama about STD's, transsexualism or homosexuality; rather, it's the start of another "Simulated Patient Management Exercise (SPME)" in the Urology conference room at Louisiana State University Health Sciences Center - Shreveport. Perhaps I should explain further...

Several traditional evaluation techniques have been utilized at Louisiana State University Health Sciences Center in Shreveport to monitor the educational progress of Urology Residents. However, we were dissatisfied with the evaluation and documentation of certain areas of clinical competence related to direct doctor-patient interactions as well as a more formal method to assess cognitive reasoning skills and clinical judgment.

The ACGME Outcome Project reinforced our goal of improving resident competencies and the tools we use to assess them.

"Simulated" or standardized patients (SPs) have proven to be valuable tools for assessing clinical skills acquisition at both the medical student clerkship and residency levels.¹ Since training and compensation for services of a pool of non-physician SPs is estimated to cost between \$400 - \$540 per examination,² many smaller clinical programs such as ours lack adequate institutional financial support to pay for these evaluation techniques. We believed that senior-level residents could easily and inexpensively be trained in role-playing situations to mimic actual teaching cases selected from the affiliated training institutions. Efforts could be made to present, over time, a broad variety of simulated cases characteristic of a typical Urology practice. Our project set out to accomplish this goal.

A resident unfamiliar with the details of the actual SPME case serves as simulated treating urologist, obtaining a history and indicating what specific physical findings should be checked. The resident playing the role of the SP relays the requested details of the simulated patient's history and describes the physical findings sought. After developing and listing the differential diagnosis, the urologist "orders" diagnostic tests/procedures or imaging studies. Values of requested laboratory tests are reported; any endoscopic findings are either described or viewed on video or by digital still picture; and the films from any requested imaging studies are reviewed and interpreted. The resident-as-treating-urologist then makes a diagnosis, discusses the diagnosis and management options available with the simulated patient--including risk/benefit/cost ratios, and makes recommendations for management.

At any point during the SPME when the resident experiences uncertainty in the diagnosis or optimal management to recommend, s/he can call for a temporary interruption of the encounter. This interruption permits the resident either to (1) obtain a "second opinion" consultation from a peer in the audience [in the case of doubt, or error, in diagnosis] or (2) access reference textbooks, journals, or electronic search media [for review of treatment options or summary of treatment results] to assist in the discussion with the simulated patient regarding treatment options and recommendations. These interruptions serve to reinforce the residents' experiences with a number of ACGME competencies, including systems-based practice and practice-based learning and improvement.³

Finally, peers and teaching faculty in the audience pose additional questions in an oral exam-type forum to probe the reasoning for requests of particular clinical findings, interpretation of the results, and treatment recommendations. The latter Q/A session assesses clinical decision-making and application of medical knowledge. Detailed checklists and subjective global evaluation forms are completed by both faculty and peers and are tabulated and summarized; the SP also completes a modified "patient" satisfaction form as additional feedback on communication skills and perception of degree of participatory decision-making. An anonymous summary of the peer and faculty evaluation is later provided to the examinee - with opportunity for response/feedback. Copies of the summary evaluations are maintained in the training files of each resident, and the results will be trended for performance improvement opportunities.

Even those few residents initially skeptical of the role-playing requirements and artificial testing environment have found the sessions to be both educational and even entertaining at times.

We decided to utilize both detailed checklists and subjective global rating forms to record examiners' impressions of the resident-SP encounters. Future modifications to our survey instruments may occur as comparison data between the two formats is analyzed and further experience is gained. Possible effects of inter-rater variability are minimized by multiple, sequential testing of residents on different dates and by utilizing a wide variety and complexity of

simulated cases.⁴ Improvement in performance scores of individual residents and between residents at different levels of training will be trended longitudinally.

Thus far, faculty and resident acceptance of the educational format has been good. Even those few residents initially skeptical of the role-playing requirements and artificial testing environment have found the sessions

to be both educational and even entertaining at times. Despite the apparent visual awkwardness and potential inhibition of such physician-simulated patient encounters (i.e., occurring in the setting of a conference room with peers and instructors present in the audience), serious role-playing successfully mimics the important aspects of the physician-patient relationship and permits reasonable and informative assessment of the resident's communication and clinical decision-making skills. As an added bonus, the process alone will likely result in the residents and faculty learning more and communicating better.

Sources:

1. Barrows HS and Abrahamson S. The programmed patient: a technique for appraising student performance in clinical neurology. *Journal of Medical Education* 1964; 39: 802-805.
2. Stillman P, Swanson D, Regan MB, Philbin MM, Nelson V, Ebert T, Ley B, Parrino T, Shorey J, Stillman A, Alpert E, Caslowitz J, Clive D, Florek J, Hamolsky M, Hatem C, Kizirian J, Kopelman R, Levenson D, Levenson G, McCue J, Pohl H, Schiffman F, Schwartz J, Thane M, and Wolf M. Assessment of clinical skills of residents utilizing standardized patients. *Annals of Internal Medicine* 1991; 114:393-401.
3. Noel G, Herbers JE, Caplow M et al. How well do Internal Medicine faculty members evaluate the clinical skills of residents? *Annals of Internal Medicine* 1992; 117: 757-65.
4. Norcini JJ, Blank LL, Arnold GK and Kimball HR. The mini-CEX (clinical evaluation exercise): a preliminary investigation. *Annals of Internal Medicine* 1995; 123: 795-799.

Dr. Venable is the director of the residency program in Urology at the Louisiana State University Health Sciences Center, Shreveport. 

Progress on Proposals Focusing on Outcome Assessment - A Few Highlights

Kathleen Holt, PhD, Deirdre Lynch, RhD, Patricia Surdyk, PhD

When the ACGME initiated its Request for Proposals (RFP) 2000 Project, the primary goal was to foster excellence in GME by identifying and supporting successful approaches and innovations conceived by programs and institutions. The Residency Review and Institutional Review Committees approved 43 out of the 66 proposals originally submitted. Most of these proposals are now in the implementation phase, with information about their impact emerging as the projects are nearing completion.

A number of the proposals addressed teaching and evaluating the general competencies of the ACGME's Outcome Project. Kathleen Holt, PhD, Deirdre Lynch,

RhD, and Patricia Surdyk, PhD of the ACGME Research Department, recently spoke to several project directors who reflected on the progress that had been made to date in developing the innovative practices outlined in their RFPs. The directors also commented on faculty and resident reactions to implementing new programs. Their conversations are summarized below.

The Washington University Simulation Center: Using clinical Simulation for Teaching and Assessment - An Interview with David Murray, MD

Teaching and assessing the clinical skills needed to manage life-threatening situations is an important goal of health care education. The Washington University Clinical Simulation Center serves as a low risk and high fidelity setting to provide education in diagnosis and management of crisis situations. More than 100 general surgery, emergency medicine, pediatric and anesthesiology residents have participated in acute care training at the Center, which serves also as an educational resource for fellows, medical students and other health care providers.

Deirdre Lynch, RhD: How has the Clinical Simulation Center been received at your institution?

David Murray, MD: The simulation experience seems to have been very valuable for those making the transition from medical student to resident. Residents have reported that simulation training has helped them to deal with crisis situations, especially situations that occur during call in the middle of the night. While many residents feel confident in addressing cardiovascular crises, few have practical airway management skills. In particular, residents have told me that their simulation experiences have helped them make decisions about how to evaluate and manage hypoxic patients or patients with obstructed airways.

Faculty has volunteered to come through the Center to test their clinical skills. They have commented on the rewarding aspects of moving the learning process along and seeing rapid progression of skills. Although involvement is time intensive, faculty feel good about and enjoy their teaching commitment. We have run various nursing and paramedic programs through the Center. Many of these participants have indicated enhanced confidence in addressing crisis situations.


DL: Tell me how you overcame any obstacles to developing and implementing the Clinical Simulation Center.

DM: There were two main obstacles; financing the Center and finding space for it. The hospital and medical school have been committed to supporting the Center and they provided adequate capital resources to create it. In terms of operating expenses, these have been defrayed partially by educational activities. For example, we run the ACLS program out of the Center. It is a partnership operation that benefits the medical school and hospital. A single department could not fully utilize a simulation center, but many departments can benefit from a centralized one. In terms of space, we were able to obtain space from the hospital. In summary, the concept of the simulation lab as being an educational center has been key to obtaining and sustaining support for it.

DL: As you implemented the simulations, did anything unexpected occur?

DM: The initiative has increased faculty interest in assessment issues. After their experience at the Center, a number of faculty members were surprised at the differences between their clinical impressions of learners and learners' actual performance with the mannequin and they are interested in further study of these issues. The simulation lab seems to offer a more rigorous approach to assessment.

DL: From your perspective, what is the relevance of the Clinical Simulation Center to the Outcome Project?

DM: The Center addresses the procedural aspects of patient care. I believe that high fidelity clinical simulations are the best way to teach the skills needed to perform high-risk medical procedures. In terms of patient safety, many errors occur during such procedures and simulation allows learners to practice and improve these skills. In addition, the simulation lab gives teachers a chance to see what learners would do if they were on their own and it gives learners a chance to do something by themselves. 

Improving Resident Reporting Skills Using A Dictation OSCE at the Indiana University School of Medicine's Department of Radiology - An Interview with Kenneth B. Williamson, PhD

Communication problems negatively impact patient outcomes. One source of these errors can be transactions between radiologists and referring physicians, particularly in imaging requests and reports of findings. The Dictation Objective Structured Clinical Exam (OSCE) developed by the Department of Radiology at Indiana University School of Medicine seeks to address this

problem area in two phases. First, the OSCE identifies and applies criteria to assess the quality of reports along a continuum of expertise represented across levels of resident training. Second, the OSCE focuses efforts to improve the reporting of first-year residents through use of constructive feedback.

Patricia Surdyk, PhD: *What prompted the development of your project?*

Kenneth Williamson, PhD: Residents reported that they receive little or no feedback on their dictated reports, unless of course they had really "messed up" and that they would much prefer ongoing, constructive feedback. This situation along with faculty complaints about poor reporting skills is what prompted the project. The OSCE offers a systematic way of evaluating reporting skills and, eventually, providing case-specific feedback.

PS: *Has the development of the OSCE proceeded according to plan?*

KW: Yes, for the most part. Our group first selected 20 cases with obvious findings and had our residents and several faculty members dictate reports. We were amazed at the richness and variability in the data, although it made scoring the reports more difficult than anticipated. We are still working on this problem. Our next study increases the number of cases and the range of diseases, strengthens the scoring criteria, and adds validation data from referring physicians and staff evaluations.

PS: *How has the OSCE had an impact on the curriculum?*

KW: The OSCE helped us identify the need for rotation-specific skills. In response, we increased orientation for residents starting the program (i.e., in radiology, PGY-2 residents) from one to three full days. Two complete days of orientation now consist of faculty-led rotation-specific sessions that model typical reports and cases expected in a particular rotation; residents practice these skills in "hot-seat fashion", as the faculty point out salient features of particular studies. The OSCE itself has become a required component of the curriculum for residents at all levels of training.


PS: *The extension of orientation time represents a considerable change for the program and seems to represent an acceptance of the OSCE. Has this been the case?*

KW: Some of the initial reluctance on the part of faculty, which was related to their giving up a full day, decreased considerably as faculty perceived improved

performance by residents earlier in the program. We have had excellent support from our department, particularly the residency program director, Dr. Valerie Jackson and the department head, Dr. Mervyn Cohen. Senior residents tell us that they wish they had received the same orientation program.

Resident reaction to the OSCE itself has been mixed. Some have considered it a waste of time. In the first administration, residents began discussing the cases amongst themselves, so there was some subject contamination. We have since changed the testing procedures to reduce that problem. I think that, as we continue to collect data and develop specific behavioral descriptions of skills at different levels of performance, we will likewise develop a culture that encourages the formative evaluation experience represented by the OSCE.

PS: *What relationship do you perceive between the Reporting OSCE and the ACGME Outcome Project?*

KW: Performance-based assessment as exemplified in the Reporting OSCE is a key to determining educational outcomes. Faculty has already noted improvements in resident performance as a result of the expanded orientation program. Communication Skills, Practice-based Learning and Improvement, and Systems-based Practice are the competencies addressed through this project. 

Enhancing Cultural Competency in the Department of Pediatrics at Maimonides Medical Center - An Interview with Lisa Altshuler, PhD

Kathleen Holt, PhD: *Please describe your project for our readers.*

Lisa Altshuler, PhD: The Department of Pediatrics at Maimonides Medical Center has developed an Objective Structured Clinical Exam (OSCE) to assess second year residents' ability to manage ethnically diverse patients. In the six OSCE stations, (which include exploring a Chinese mother's use of traditional remedies and discussing suspicions of child abuse with an Orthodox Jewish family) residents must explore patients' and families' beliefs regarding illness and treatment and negotiate a mutually acceptable plan of action.

KH: *How has the project been received at the Medical Center?*

LA: The faculty has been very interested in the work, as has the staff. In fact, staff members have come up to me in the hall and asked if they can become involved. I think the OSCE gives them the opportunity to be creative in their work, to look at patients in a new way.

We were very surprised, however, that our residents didn't immediately see this as valuable. I think they may have been concerned about their performance and uncertain about how they would be evaluated. The resistance was natural; residents here deal with cultural diversity every day; it is built into their experience working in this neighborhood in Brooklyn. Their first thought may have been, "Wait, I already know how to do this."

KH: *How did you deal with this?*

LA: We have worked hard to create a trusting atmosphere. To address the residents' concerns, the tasks were made very specific (so evaluation was tied to the specific skills) and the general topics were introduced in a conceptual framework. We also have added a workshop in which we address different dimensions of culture. In one session recently, residents began talking about all the problems patients create, how they show up late for appointments and are demanding. After this group had gone through the OSCE it was so rewarding to see the light bulb go off for the residents: "Patients behave this way because their world is different from mine."

KH: *Were there other things you didn't expect?*


LA: We were not prepared for the complexity. We were clear about what specific skills we wanted residents to acquire, but realized we needed to examine our own perceptions of how we, the committee, thought of the "ideal" physician/patient interaction in specific situations. The numerous discussions that resulted helped us build a better OSCE.

KH: *With such a large, interdepartmental project, how did you find the resources and time to make the project work?*

LA: Money was not a major concern, as the Chair of the Department has supported the cost of the actors' time. As for time, we are fortunate to have a core group of very committed people (which includes a nurse practitioner, a genetic counselor, and several psychologists) who make time for the project because it is the essence of what we do. The scenarios are all from our real work.

KH: *How do you think this project is related to the ACGME's Outcome Project?*

LA: The skills we teach certainly fit into the Interpersonal and Communication Skills, Patient Care, and System-Based Practice competencies. But, it is more than just these skills fitting onto a checklist. We are evaluating the components used to assess residents and using the evaluation to change the program. This OSCE is really

about strengthening our teaching and giving our residents the best education we can. 

The University of Maryland's Approach to Competency-based Medical Education

Carol Carraccio, MD, Robert Englander, MD

Through an academic administrative unit grant from the Bureau of Health Professions, the Departments of Pediatrics, Medicine, and Family Medicine at the University of Maryland School of Medicine have established a collaborative program for primary care education. The focus of this initiative is to create a competency-based educational program that spans both the disciplines and the continuum from undergraduate through graduate medical education. Our first task was a review of the literature on competency-based education. This review elucidated the four-step process to implementing a competency-based curriculum: defining the competencies, setting thresholds, assessing competence, and evaluating the implementation process. Our approach to the four steps is outlined below.

Step I, phase 1: Defining the broad professional general competencies. This task was completed by the Accreditation Council for Graduate Medical Education (ACGME), resulting in the identification of six competencies. Step I, phase 2: Refining the discipline-specific language. This task was addressed by "specialty quads," appointed by the ACGME. They consisted of a program director, a member of the RRC, a representative of the Board, and a resident.

Our work began with Step I, phase 3: Defining the benchmarks. These benchmarks are measurable indicators of the knowledge, skill or attitudinal aspects of an individual competency that, in the aggregate, comprise each of the six competencies. This step/phase was accomplished through a collaborative process involving the three departments. Competencies and benchmarks were created for students, which paralleled those for residents, in an effort to span the educational continuum.

Step II, phase 1: Setting thresholds. As phase 1 of Step II, we held a focus group meeting with the Program Directors' Committee of the American Board of Pediatrics. With input from experts, we arrived at three types of thresholds that defined our benchmarks: 1) the percent time that a behavior was demonstrated; 2) the ability to demonstrate the behavior based on the acuity

or complexity of the task or patient; and 3) a simple absent/present dichotomy for the given benchmark. The latter was reserved for aspects of professionalism and communication, such as honesty and respect, that were not felt to be experience-dependent.

"The barriers we have encountered to date have been limited time and resources, and limited understanding of trainees and faculty regarding the essence of this paradigm shift."

In phase 2 of Step II, we applied one of the three definitions of a threshold to each benchmark under each competency. We have just embarked on phase 3 of Step II, gaining consensus on the appropriate threshold level for each benchmark based on level of training. The membership of

the Association of Pediatric Program Directors has been asked to respond on an individual basis. We also conducted a seminar at the ACGME workshop "Mastering the Accreditation Process" and used this opportunity to gather group consensus on the thresholds.

Step III is to identify and/or create the set of tools necessary to evaluate competence within the framework of our newly created curriculum. A web-based evaluation portfolio for each resident is our goal. As phase 1 of Step III, we revised all of the goals and objectives for our curriculum to reflect a competency-based approach to learning. In conjunction with curriculum development, we created a series of rotation specific evaluations that measure the benchmarks outlined for the given clinical experience. Phase 2 of Step III provides the greatest challenge to date, that is, to create the evaluation portfolio. This portfolio will include some well-established tools such as the In-Training Examination for Medical Knowledge. In addition, we are working to create, validate, and test the reliability of new tools to evaluate competence, such as a 360-degree evaluation for Interpersonal and Communication Skills. Another task will be to define the criteria for submission of evidence for the attainment of competence in areas such as Practice-based Learning and Systems-based Practice. The criteria for reviewers to judge the evidence will also

need to be defined and inter-rater reliability will need to be tested.

Step IV will be the comprehensive evaluation of the paradigm shift to competency-based education. The ultimate goal will be to assess and increase the competence of physicians by measuring their patient care outcomes. This step will require the concerted and coordinated effort of all the specialties under the auspices of the ACGME.


The barriers we have encountered to date have been limited time and resources, and limited understanding of trainees and faculty regarding the essence of this paradigm shift. The collaborative structure of our endeavors has helped us to address both the time and resource issues. A team approach has increased our efficiency. To address the issue of limited understanding, within our own department we have asked each division to identify an educational liaison. Using a "train the trainers" model, these early adopters have been incorporated into the process by taking part in the curriculum development for their respective divisions. Each will now take responsibility for facilitating change within his/her own division.

Despite the challenges, we are already experiencing some positive outcomes. The process itself has raised our consciousness about the curriculum matters and assessment tools in general and has also motivated us to address education across the continuum. Critical to the success of competency-based education during residency training will be priming medical students to become self-directed learners prior to entering graduate training programs.

Recognizing the scope of what needs to be accomplished, we have partnered with another pediatric department in the city to provide a faculty development program in the spring, much of which will be dedicated to competency-based education. The intra-insti-

"The process itself has raised our consciousness about curriculum matters and assessment tools in general, and has also motivated us to address education across the continuum."

tutional as well as the inter-institutional networking has been a great bonus for all involved.

Dr. Carraccio is Professor of Pediatrics and Associate Chair for Education, Department of Pediatrics at the University of Maryland School of Medicine. Dr. Englander is Assistant Professor of Pediatrics and Associate Director of Residency Training at the University of Connecticut School of Medicine. 

What Is New at

[WWW.acgme.org/Outcome?](http://www.acgme.org/Outcome?)

New resources on the Outcome Project link within the ACGME website provide additional help for those involved in developing curricula and assessment tools for the competencies.

RSVP

"Recognize Success Via Implementation" is a showcase for works-in-progress. The projects included at this link are examples of activities currently in use to teach and assess the general competencies. The project descriptions are submitted directly by the program or institution. Contact persons are listed for each project so that educators can communicate directly with each other about the activities described in each submission. These examples are designed to stimulate ideas for further development by the GME community and across the continuum of medical education. Submission criteria are located at this site as well. RSVPs will be updated on a regular basis and prior submissions will be archived for easy access.

The success of this link depends on YOU! Have you RSVP-ed yet?


Other Helpful Links

We have included links to other websites where users can find helpful ideas about the competencies, whether as background information, teaching strategies, or assessment tools and related activities. Look for "Other Useful Links" in the "Forum" section at www.acgme.org/outcome/forum.

If you have identified "other useful links" that have been helpful in your efforts specifically related to the six general competencies, please forward your suggestions to Kathleen Holt, PhD, kholt@acgme.org.

Recommendations from the Outcome Project "Think Tank"

The Think Tank is an ad hoc group of both present and former RRC members. Their goal is to develop practical recommendations for the assessment of

each competency. The Think Tank's first set of recommendations focuses on Interpersonal and Communication Skills and can be found at the "Think Tank" link on the Outcome Project home page. These recommendations outline the characteristics of a well-conceived system of evaluating this competency. Note that Think Tank recommendations are not requirements; however, they represent a practical approach to achieving success in implementing a well-structured curriculum based on research and educational experience. 

Academic Medicine Responds to Education and Assessment Using the General Competencies: A Collection of Outcome-Related Products and Tools

A number of medical education organizations, specialty boards, and specialty societies have undertaken projects that concentrate on teaching and/or assessing the general competencies. Beginning with this special issue and in upcoming editions of the Bulletin, we will highlight some of these efforts.

The American Board of Internal Medicine (ABIM)

A copy of The Portfolio for Internal Medicine Residency Programs was distributed in late summer 2001 for use by program directors in Internal Medicine. This packet, conceptualized as a work-in-progress by the Internal Medicine community (ABIM, ACP-ASIM, APDIM, APM, ASP and SGIM), offers a variety of suggestions for teaching and assessing the competencies in residency programs. Example forms to be used by residents for self-assessment are also included.

The Mini-CEX (Clinical Evaluation Exercise) is a streamlined form and format that focuses on clinical skills assessments of residents during training. The format targets a range of skills that represent specific components of the general competencies. These skill sets include medical interviewing, physical examination, humanistic qualities and professionalism, clinical judgment, counseling skills, organization and efficiency, and overall clinical competence. The Mini-CEX includes easy to use forms in duplicate to insure immediate feedback, and documentation and a rating scale along with suggestions for implementation.

The jointly sponsored ABIM Foundation/ACP-ASIM Foundation/European Federation of Internal Medicine -

Medical Professionalism Project is a collaborative effort designed to raise the concept of professionalism within the consciousness of internal medicine, both in North America and Europe. The web site, www.professionalism.org, includes an annotated bibliography that provides excellent background information for those involved in teaching various aspects of professionalism. The site (which can be reached through a link on the ACGME Competencies & Outcome Assessment link) also includes "The Charter on Medical Professionalism" which was published simultaneously in *Annals of Internal Medicine* (February 5, 2002) and *Lancet* (February 9, 2002). This Charter raises consciousness regarding the meaning of medical professionalism and can be used to create the kind of activity surrounding professionalism that should find its roots in medical education.

The American College of Surgeons (ACS)

A major component of the College's comprehensive vision for education includes development of models for teaching and assessing the general competencies that can be implemented across the surgical specialties. According to Ajit Sachdeva, MD, Director of the newly established Division of Education, groundwork for this effort is underway and there are plans to convene working groups to address each of the competencies. Innovative education models will be developed to address Interpersonal and Communication Skills, Practice-based Learning and Improvement, Professionalism, and Systems-based Practice.

It is envisioned that many of these models could be effectively implemented across the surgical specialties. Medical Knowledge and Patient Care tend to be more content-specific, and would ideally need to be addressed by each of the surgical specialties. The ACS has already identified skill competencies for first-year surgery residents in its publication, "Prerequisites for Graduate Surgical Education: A Guide for Medical Students and PGY1 Surgical Residents." Plans exist to revise this document within the context of the general competencies. Another major activity centers on the College's "Ethics Curriculum for Residents," which should be ready for pilot testing by the end of this calendar year and will be a critical element in the teaching of

In recent discussions with program directors, Dr. Sachdeva stressed that implementation of the competencies and their assessment is not as difficult as it might seem.


Professionalism to surgery trainees. In recent discussions with program directors, Dr. Sachdeva stressed that implementation of the competencies and their assessment is not as difficult as it might seem. He is a strong proponent of the fact that many elements of the competencies are already addressed, though not necessarily identified as such, in much existing surgical resident training.

The Association of American Medical Colleges (AAMC)

The Graduate Medical Education Core Curriculum published in December 2000 represents five domains of learning that were identified by the AAMC's Core Curriculum Working Group. Each of the domains is presented with a goal and suggested learning objectives for curriculum development. Correlations between the domains and the ACGME competencies are provided on pages 14-15 of the monograph. The AAMC "Core Curriculum" is a practical starting point for those educators

interested in how the meaning of each of the competencies can be expanded and subsequently incorporated into residency curricula.

Professionalism across the continuum of medical education has been the focus of the Group on Educational Affairs (GEA) for the last several years. Each section of the GEA, i.e., the Undergraduate (UGME), Graduate (GME), and Continuing (CME), has contributed to an expanded definition of Professionalism through development of reference lists and a number of interactive group sessions held during the AAMC's Annual Meeting and GEA regional meetings. The UGME section has included its bibliography at www.aamc.org/members/gea/ugmesection/ugmeevaluations.htm. A draft report on the GEA activities related to Professionalism is expected in spring 2002.

The Report of the Task Force on Financial Conflicts of Interest in Clinical Research recently published by the AAMC has a direct bearing on GME. The principles outlined in the report could be used as components of the Professionalism curriculum of residency programs and as indicators of institutional commitment to ethical conduct of clinical research. 

Winning Posters from the 2002 ACGME Mastering Workshop

In the past several years, the ACGME held a poster session on innovation in graduate medical education as part of its annual Mastering Workshop. The posters for 2002 focused on the general competencies. Below are the three winners, and a special Judges' Award from the workshop recently held in Chicago with a record attendance of nearly 700 individuals.

1st Place:

Teaching Practice-Based Learning and Improvement, Interpersonal and Communication Skills, and Systems-Based Practice with a Senior Resident Seminar and Team Project Model

*Fredrick Edwards, MD; Keith Frey, MD, MBA;
R. Scott Gorman, MD, Mayo Clinic Scottsdale*

The poster describes one approach to teaching three of the core competencies, while enhancing the quality of patient care within the model family practice center in a family practice residency. Senior family practice residents become competent in managing the care of chronic disease through a seminar and team project model. The residents design and implement a disease management practice guideline for a common chronic illness.

The "Collaborative Care" curriculum was designed during our involvement in a Robert Wood Johnson sponsored grant entitled "Partnerships for Quality Education (PQE)." The curriculum is a 12-month senior resident class project in which one evidenced-based clinical guideline is designed, implemented, and evaluated in our residency practice. The third year residency class selects the disease, develops the clinical guideline, leads its implementation, and guides the evaluation process. Select faculty members serve as mentors and coach the resident class through each phase of the project. Specific educational objectives were developed for each content area: evidence-based medicine, clinical guideline development, continuous quality improvement, and team leadership. A series of seminars were designed and presented during the project year to provide "just-in-time" learning for the key content and skills required for each step in the project. By working together to develop the practice guideline, working with nurses and allied health staff to implement the guideline, and using an electronic patient database to review the effectiveness of the project to improve patient outcomes, the resident team gains competence in the areas of practice-based learning and improve-

ment, interpersonal and communication skills, and system-based practices.

The curriculum was evaluated using a survey of the six senior residents at the end of the project year, just prior to graduation. The level of resident confidence in each content area addressed was measured and demonstrated improvement. From the initial resident feedback, this educational model seems to establish a high level of physician confidence in the skills addressed and their utility for future practice.

2nd Place:

360-Degree Feedback Survey to Assess Overall Competency in Cardiothoracic Surgery Fellowship Programs

*Robert Higgins, MD, Jessica Bridges, Neri Cohen, MD, PhD, Mary Alice O'Donnell, PhD, James Burke, PhD;
Virginia Commonwealth University, Medical College of Virginia Hospitals, Richmond, Virginia*

Methods to assess the six competency categories outlined by the ACGME are essential to allow residency programs to develop reproducible evaluation of their educational curriculum. Current tools to evaluate competencies are insufficient to perform these tasks particularly in sub-specialty disciplines. The comprehensive 360 degree Assessment Tool was developed by the program director and the Workplace Initiatives Program with the goals of facilitating self-awareness, providing more accurate measures of actual performance and facilitating clarity about expectations. Competencies assessed were those of leadership of a patient care team, overall medical knowledge, interpersonal and communication skills, professionalism, systems-based and practice-based learning, integrity and overall patient care. The 46-item survey was distributed to ten evaluators for each resident including supervisors, peers and direct report/support staffs. The program director determined who would evaluate each resident. The surveys were then returned to the Workplace Initiatives Program for evaluation and correlation. A comprehensive report was provided to the program director, which provided overall and individual assessment of performance on the survey. Summaries of comments from open-ended questions were included and an executive summary of performance highlighting areas of excellence and areas for improvement with goals and recommendations. The program director and the Workplace Initiatives professionals reviewed the findings with each resident individually. The feedback survey has been conducted yearly to assess progress in areas of development. In conclusion, we believe that the 360 degree Assessment Tool provided

valuable feedback for residents in the subspecialty field of Cardiothoracic Surgery and will ultimately enhance their emotional intelligence and capabilities as healthcare providers. It also provides our program with a reproducible, quantifiable tool to assess these competencies in the residents and the program.

3rd Place:

Rating Physician Interpersonal Skills: Do Patients and Physicians See Eye-to-Eye?

David S. Tulskey, PhD^{1,2}, Scott R. Millis, PhD, ABPP^{1,2}, Sudesh Sheela Jain, MD^{1,2}, Mary Eyles, PhD, MeD, RN,² Scott F. Nadler, DO^{1,2}, Patrick M. Foye, MD^{1,2}, Elie Elovic, MD^{1,2}, Joel A. DeLisa, MD, MS^{1,2} ¹Kessler Medical Rehabilitation Research and Education Corporation, ²University of Medicine and Dentistry-New Jersey Medical School

Objective: To determine the level of agreement between standardized patient rating of physician and physician self-rating of physician interpersonal and communication skills, and level of agreement between faculty observer and standardized patient rating of resident physicians interpersonal skills. **Design:** Objective structured clinical examination (OSCE). **Setting:** Residency program in physical medicine and rehabilitation. **Subjects:** 25 resident physicians. **Main Outcome Measure:** 9-item rating scale assessing communication (score range 9 to 45). **Intervention:** Residents conducted a 10-minute interview of a standardized patient (SP) to obtain a history. Resident, SP, and faculty observer rated the resident immediately following the interview using the same rating form. Observer monitored the interview via video.

Results: There was a low level of agreement between how the SP rated physicians' interpersonal skills and resident self-rating of physician skill (Lin's concordance coefficient, $r_c = .11$, $p = .58$). Conversely, there was a statistically significant degree of agreement between SP and faculty observer ratings of resident physician skill ($r_c = .50$, $p = .006$). **Conclusions:** Resident physicians may have significant difficulty in accurately assessing how well they communicate with patients. Conversely, standardized patients and faculty observers may have insight into interpersonal skills about which resident physicians are unaware. Physician behavior judged to be important by the SP included eye contact, presenting a plan, warmth, giving enough time for patient to talk, asking questions based on patient's responses, and conveying interest.

Judges Award:

Clinical Skills Verification Process for First-Year Residents

Madelyn Pollock MD, Diane Dougherty PhD, Clare Hawkins MD, MS, San Jacinto Family Practice Education Foundation

Doctors entering graduate medical education arrive with a variable exposure to certain clinical skills and procedures. Faculty members often mistakenly assume a certain standard of proficiency when residents describe having done a

Doctors entering graduate medical education arrive with a variable exposure to certain clinical skills and procedures. Faculty members often mistakenly assume a certain standard of proficiency when residents describe having done a clinical examination.

clinical examination. In an effort to standardize our clinical precepting and provide quality-control in our patient assessments we have adopted a clinical skills verification procedure. This is in keeping with the implementation of the ACGME competency in patient care.

For five years, our program has required incoming residents to review a written description of each of 36 clinical examinations (i.e., chest exam, cardiac exam, knee exam, pap test). When residents are in clinic, they can have a preceptor directly observe one of these examinations on a specific patient or using a "volunteer" and then have faculty verify that it was done correctly in writing. After six months of residency the director meets with each resident and requires them to perform five randomly chosen physical examinations as a test of competency.

This procedure has provided benefit to the program, its residents and our patients. Faculty are more likely to directly observe a resident's competency and residents provide greater attention to detail for these procedures.



Editor's Column:

Accreditation Using Educational Outcomes: What to Expect When You Are Expecting ...A Site Visit

Ingrid Philibert

During my third pregnancy I did not need to read "What to Expect When You are Expecting" (Arlene Eisenberg et al., Workman Publishing, 1996). I had a fairly good idea what would happen. Still, the book on my shelf reminded me how much I had appreciated having that pragmatic guide before the birth of my first child – when I did not know what to expect. Similar to that then-valued resource, the intent of this piece is to offer some very basic insights into what to expect if your program is scheduled for a site visit after July 1, 2002, the date when the ACGME and accredited programs will enter Phase 2 of the Outcome Project. Unlike the pregnancy guide, this short piece can neither provide comprehensive information nor answer the specific questions many programs will have. For both, you are encouraged to contact your RRC staff, the ACGME's department of Research or the Department of Field Activities. The basics of what to expect during a site visit are discussed below.

Collecting and Presenting the Information

With the start of Phase 2, the ACGME will look for the use of educational outcomes as it reviews programs and sponsoring institutions. Collection and presentation of this information will not differ significantly from the other data collected and used in the accreditation process. The program information form (PIF) will continue to be the focus of the site visit, and will incorporate data on the general competencies. Because the updating of all PIFs to incorporate a section on the general competencies has not been completed to date, a special addendum will be used for programs scheduled for the coming months. The form designed by the ACGME research

department initially will contain the information related to curriculum issues and the evaluation of residents. It will, among other aspects, collect information on (1) the methods used to assess resident learning and performance; (2) the general competencies evaluated with each of these methods; (3) the type and frequency of assessment and who performs it; (4) whether scoring criteria are made available to evaluators; (5) whether the institution uses objective standards for determining acceptable performance; and (6) how assessment results are used in promotion and progress decisions, and how they are used in making enhancements to the curriculum. Beginning May 2002, the form will be available on the ACGME web site (<http://www.acgme.org>) under the Outcome Project page. Programs with a scheduled site visit will be instructed in their announcement letter to download the form and complete it. Program directors of programs not scheduled for a site visit may also want to review the form and familiarize themselves with the information that will be collected. In the coming months, the information in this addendum will be incorporated into the individual PIFs as they are updated, and programs will provide this information directly in the PIF.

"Collection and presentation of this information will not differ significantly from the other data collected and used in the accreditation process."

Verification and Clarification During the Site Visit

The Outcome Project will require programs to provide evidence of learning in all six competencies, use progressively more dependable measurement tools, as well as evidence of efforts to use the competencies in evaluating their residents. Verification and clarification of outcome information during the site visit will use a process virtually identical to what is used for the other data in the PIF. ACGME site visitors will confirm that the general

competencies are used in the education of residents, by reviewing this information with the program director, looking for evidence in resident evaluations, and confirming the use of the competencies with residents and faculty (verification). Site visitors will also explore instances of missing and ambiguous information related to the general competencies (clarification).

Over the past two years, the ACGME has prepared its accreditation field representatives for the implementa-


tion of the Outcome Project. This has included provision of detailed information about the Project, meetings between the field staff and the ACGME research staff who leads the Outcome Project, small groups of field surveyors convened to address data collection and provision of information to programs, and other related activities. These efforts will continue over the coming months. Planned activities include a debriefing meeting on the first months of the information collection process related to the general competencies in the autumn of 2002. Similar efforts are occurring for the RRCs, including the work of the Outcome Project "Think Tank" comprising current and former RRC members who are deliberating on how information on the competencies will be used by the RRCs.

Concurrently, the ACGME is making further enhancements to its web-based resource center, with a growing toolbox for the Outcome Project that contains examples of 360 degree evaluations, chart-stimulated recall, resident portfolios, global ratings and survey forms and other tools with demonstrated reliability and validity. The Council is also continuing its efforts to build a comprehensive support network for the Outcome Project, including convening interest groups, dissemination of "best practices," and communication and information-sharing related to the general competencies, as was done in this special issue of the ACGME Bulletin.

Perspective for the Coming Years

The objective for Phase 2 is to sharpen the focus and definition of the Outcome Project. Emphasis on the general competencies in resident education represents an innovation in the accreditation process. A stated goal for Phase 2 and beyond involves the RRCs reviewing and revising the accreditation requirements to reflect changed expectations. Ultimately, a future fully implemented Outcome Project will involve programs providing information on the competencies directly to the ACGME, potentially on an annual basis or in some other way de-coupled from the site visit. In the early years of the Project, the review of this information will continue to occur in conjunction with the site visit. In a mature implementation of the Outcome Project, it can also be envisioned that outcome information may replace other elements of the information collection process for accreditation. Such a streamlined process may represent another future benefit of the use of outcomes.

In closing, if your program has a site visit scheduled early in the 2002-03 academic year, you should expect your surveyor and RRC to look for early evidence of the use of outcome data in resident education and evalua-

tion at the program level. As you prepare for that visit, we hope that this article will offer a modest amount of guidance and comfort, similar to that resource for mothers-to-be. Unlike the book, the article cannot answer your specific, technical questions. That calls for the experts on the RRC teams and the ACGME's research department. 

What is New in the AMA "Green Book"

Fred Lenhoff

The new 2002-2003 edition of the Graduate Medical Education Directory (GMED) or "Green Book," is now available from the American Medical Association (AMA). It contains 7,769 ACGME-accredited programs in 27 specialties and 80 subspecialties. This is an increase of 195 total programs and 18 specialties/subspecialties with accredited programs compared to the 1997-1998 edition.

The GMED also includes:

1. 212 ABMS Board-approved combined specialty programs in 14 areas
2. 1,680 GME teaching institutions
3. ACGME Institutional Requirements and Program Requirements for 113 specialties/subspecialties
4. ABMS board certification requirements
5. A glossary of commonly used GME terms
6. A specialty/subspecialty taxonomy detailing program length and whether prior GME is required.

Also available is the GMED Companion: An Insider's Guide to Selecting a Residency Program, which offers key data on more than 4,000 specialty programs, displayed in a grid format for easy comparison between programs. Data include such variables as average hours of duty per week, maximum hours of consecutive duty, most taxing call schedule and duration, and availability of moonlighting. In addition, the GMED Companion includes updated information on state medical licensure, information on hospitalist and women's health residency/fellowship programs, and a list of accredited GME programs in Canada.

To order either publication, call the AMA at 1-800-621-8335.

Fred Lenhoff is the Editor of the American Medical Association's Graduate Medical Education Directory. 