



Accreditation Council for Graduate Medical Education

EDITOR'S INTRODUCTION

The Accreditation Council for Graduate Medical Education publishes the **ACGME Bulletin** four times a year. The Bulletin is distributed free of charge to more than 12,000 individuals involved in residency education, and is also available on the ACGME's world wide web site (www.acgme.org) for viewing and printing. The ACGME receives and publishes letters to the editor in the interest of furthering dialogue about accreditation, program quality and matters of general interest in residency education. Inquiries, comments or letters should be addressed to the editor.

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An Array of Initiatives to Improve Resident Education

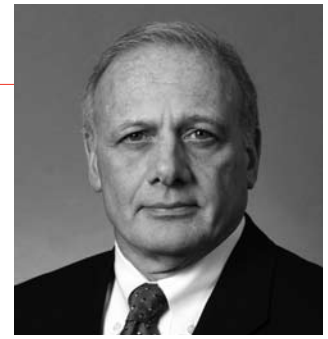
This issue of the *Bulletin* features the “inaugural” column by Thomas Nasca, MD, in his new role as Chief Executive Officer of the ACGME. In this column, he lays out plans for the ACGME to move outcomes-based accreditation forward, to realize the promise of the six competencies. The theme relates to two key concepts of the ACGME Committee on Innovation in the Learning Environment: 1) that accreditation has a role in contributing to improvement and innovation in the learning environment, and that 2) the redesign process should occur “from the ground up” with the full engagement of the resident community.

Change and innovation to improve the learning environment is a thread that runs through this issue of the *Bulletin*. The article about disclosure of errors at the University of Illinois by Dr. Timothy McDonald and colleagues highlights a well-thought response to one of the most difficult matters in health care – dealing with a patient and family after an error or adverse event has occurred. The program of risk management education for residents and fellows at the Medical College of Wisconsin Affiliated Hospitals described in the article by Connelly and Kochar addresses a related area in an innovative way, focusing on the particular needs of individuals in a formal program of education. Another thread that runs through the issue is attentiveness and awareness of the systems in which care and learning occurs. Drs. Prathibha Varkey and Neena Natt from the Mayo Clinic describe an OSCE for assessing systems-based practice and practice based learning and improvement in residents, and Dr. Ginger Boyle and Colleagues present their model for measuring systems-based practice over the three years of a family medicine residency. Dr. Barbara Barzansky's summary of the efforts of the American Medical Association's Initiative to Transform Medical Education shows how a major organization with a stake in medical education analyzes and responds to the call for change in medical education in a systematic and innovative fashion.

We hope that the many high-quality articles on a wide range of topics that comprise this issue will be informative and of use to program directors, designated institutional officials and others, as they contemplate how to improve their local learning environment. These efforts at local-level innovation are invaluable in improving the learning environment. Publicizing this rich array of initiative to improve resident education and the learning environment is done with the intent of offering the readers of the Bulletin ideas and models for adoption and adaptation. This is in keeping with the ACGME's strategic priority of promoting innovation and improvement in the learning environment. ■

The CEO's First Column – The Next Step in the Outcomes-Based Accreditation Project

Thomas J. Nasca, MD, MACP, Chief Executive Officer



Members of the graduate medical education (GME) community have just returned from the ACGME's Annual Educational Conference in Grapevine, Texas, where I was privileged to address about 1,500 attendees for the first time as the leader of the ACGME. We were graced by an outstanding keynote presentation by Ms. Nancy Schlichting, Chief Executive Officer of the Henry Ford Health System. Her dynamic and foresighted leadership and valuing GME and research energized the audience with its commitment to outstanding, community-based health care, and excellence in education and research. It can serve as a model for other future-oriented leaders of our academic medical centers.

In my address to the meeting's attendees, I outlined where I see the ACGME and the GME community moving over the next few years. In short, it is my goal to achieve the promise of outcomes-based accreditation, built on the Competencies championed so ably by David Leach, MD. Intrinsic in this drive to deliver on the ACGME's promises to the educational community is bringing together over the next two to three years a number of seemingly disparate efforts to take GME and the accreditation of its programs to the next level.

Seven years ago the GME community embraced the Competencies, and began the challenging task of elaborating them in each accredited specialty and its subspecialties. The ACGME convened groupings of leaders from the educational community in each specialty, called the Quadrads, and charged them with developing a description of the specialty specific competencies within the six broad domains of clinical competency of all physicians (see *Table 1*). The Quadrads comprised four individuals representing the ABMS member

Board, the Program Directors' Association, the Residency Review Committee and a resident representative.¹ With the Competencies described in each specialty, it was hoped that the community, through decentralized research efforts, would define the tools required to systematically evaluate the Competencies in each discipline, and the ACGME, through its RRCs, would then "harvest" this research to create standards and core methods for evaluating the Competencies in each specialty. In that fashion, each specialty would create the "outcomes" in the competencies desired, and the metrics by which the Review Committee in each specialty would evaluate the effectiveness of each program in assisting their residents in achieving desired educational outcomes.

"A number of our teaching hospitals are safety net institutions, and they have felt tremendous financial pressure. As clinical burdens have increased, faculty time and energy for innovation has been limited."

The past seven years have seen a great deal of turmoil in teaching hospitals across the country. Disruptive events in the teaching environment have included the PATH (Physicians at Teaching Hospitals) audits and the resulting expectation for documented faculty presence during procedures, and additional enhanced documentation requirements on faculty and residents. Both have affected the relationship between faculty and residents, and have had a significant impact on the operation of teaching services. A number of our teaching hospitals are safety net institutions, and they have felt tremendous financial pressure. As clinical burdens have increased, faculty time and energy for innovation has been limited. The majority of our teaching hospitals are feeling the burden of the growing uninsured population, the need to provide service to these patients and the escalating needs of the growing population of elderly in the United States. These and many other factors diverted the efforts of the educational community, and slowed the work of innovation in evaluation of physician competency.

Further, the ACGME was diverted from its course by the controversy and challenge of developing and implementing common limits on resident duty hours across all specialties, prompted by the threat of Federal legislative or regulatory intervention. The resultant turmoil, and at times frustration, over the duty hour limits and their impact on education and

Table 1
ABMS/ACGME Domains of Physician Competency

- Patient Care**
- Medical Knowledge**
- Interpersonal Communication**
- Professionalism**
- Practice-Based Learning and Improvement**
- Systems-Based Practice**

clinical service delivery, preoccupied many in our educational community for the past four years. Indeed, concerns regarding the disparate specialty specific impact on education and preparation for independent practice remain to this day, and must be addressed as we review our duty hour standards over the next few years. This will be the topic of my second column in the *Bulletin*.

Thus, after seven years, the GME community finds itself in relative agreement on the Competencies, recognizing that the surgical and procedural disciplines may develop a seventh, “Operative Competency,” to emphasize the importance of technical competency in these disciplines. However, this agreement has not resulted in operationalizing outcomes in the evaluation of residents and fellows or in the accreditation of programs. Clearly, if we are to move forward, two events must take place to fulfill our promise to each other and the profession. First, we must agree on the “Milestones” of Competency development in each discipline. Second, we must agree on and implement common evaluation tools in each discipline to document our residents’ achievement of these milestones.

Milestones of Competency Development

Establishment of the Milestones of Competency development is not solely the purview of the ACGME or its Review Committees. These Milestones must be co-developed and endorsed by the profession and the educational leaders in each specialty. At the completion of training, the Milestones are the articulation of the level of performance expected at entry into the unsupervised practice in each specialty, and are the levels of clinical competence required to gain eligibility for ABMS certification. At earlier levels, they constitute “developmental” milestones to offer programs and the ACGME assurance that residents and fellows attain appropriate educational goals. The educational community in each of the specialties will define the levels of performance required to be declared “proficient” in the Dreyfus taxonomy introduced by Dr. Leach.² While we will use the common language of the Competencies to organize these graduation milestones, the description and evaluation of the milestones in each discipline will reflect both the rich similarities and differences in their manifestation in each specialty. From these descriptions, each discipline will further define the intermediate Milestones of expected development during the duration of residency or fellowship education.

To this end, we will re-convene the constituents that comprised the Quadrads, expanding them to include the relevant College representation, in a formal process this fall, to define the Milestones in each of the 26 specialties. Many disciplines have been engaged in this process already, and we will enlist their leadership in assisting other specialties to complete this essential task within four months of initiation of the process. We will also ask each group to identify the minimum shared evaluation tools required to document trainee achievement of the Milestones leading to proficiency.

In order to assist the groups in this task, an ACGME Assessment Committee, under the leadership of Steven Clyman, MD and Susan Swing, PhD, will produce a comprehensive, state-of-the-art evaluation of the tools available, and the level of literature support for each tool in evaluation of each of the Competencies. This report, to be completed in September, will provide core tools to all disciplines and provide us with guidelines on the effective use of these tools.

Finally, the ACGME must then find a mechanism for the retrieval of the outcomes information in order to provide uniformly gathered, identical core information to the Review Committees, based on the specialty specific information required for Outcomes- Based Accreditation. To this end, the ACGME’s Learning Portfolio Committee has been in the design phase of a Learning Portfolio to be provided to all ACGME accredited programs. This portfolio will have specialty specific core data elements that will be required of residents and program directors (as recommended by the specialty specific group and required by the Review Committee) and optional elements that will enhance resident learning, but will not be required or viewed by the Review Committee. These elements will be available to the program should they desire to utilize them. Most importantly, this portfolio (both the required and optional portions) will be provided without incremental cost to every program. In this fashion, we will achieve the profession’s goal of accumulation of outcomes-based information for accreditation, assure the public of a national standard for performance in each specialty at entry into the unsupervised practice of medicine, and provide all our institutions with a web-based, nationally developed, specialty specific set of evaluation tools regardless of their institution’s ability to fund these kinds of data systems.

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Other Benefits of the Competency and Outcomes Project

The establishment of a formal project to develop and seek endorsement of the Milestones will bring about an opportunity to discuss topics with our colleagues in undergraduate medical education that have, to date, been difficult to frame. The logical extension of the Outcome project will be to ask the fundamental formative questions (as related to an individual resident). Where do they start (as medical students) in each of the domains of the competencies? If one makes the assumption that medical students graduate with “Advanced Beginner” status in some domains, and “Competent” in others (and perhaps “Novice” in Systems-Based Practice or Operative Skills), more

specific descriptions of the requirements for entry into residency may be possible. Furthermore, rational discussions with our Undergraduate Medical Education colleagues could then be undertaken regarding reasonable expectations in each of these domains.

Perhaps most importantly, development of these Milestones will lead, in my opinion, to systematic evaluation of each entry level resident in order to establish a customized, Individual Educational Plan (IEP) which will permit assessment of the trajectory of growth of each resident. This is not possible, especially during the first year of residency, without an entry level assessment. The opportunities for early identification of learning needs, and prompt preventive remediation, will enhance the quality and effectiveness of our educational programs, and produce higher quality outcomes.

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Summary

In the next few months we will see the reconvening of the key constituencies in each specialty and engagement of the specialties in defining the next phase of the ACGME’s Outcomes-Based Accreditation Project. They will be informed by the work of the ACGME Assessment Committee, and will subsequently drive the final phase of development of the ACGME Learning Portfolio, and the development of outcomes-based Program Requirements by the ACGME Review Committees.

My personal philosophy is to “under promise, and over deliver.” The Outcomes-Based Accreditation Project is an ambitious undertaking, now seven years in process. I recognize that there are barriers to success, but with the good will and active participation of members of our Boards, professional societies, the Review Committees (including their resident members) and the Program Directors, and the outstanding support of the ACGME professional staff, we will bring to fruition the promise of outcomes-based accreditation.

I also recognize that we each stand on the shoulders of giants in medicine. David Leach is counted among those leaders who, by virtue of power of thought and sheer determination, help to transform the profession. As we move into this next phase of development of outcomes, we must never lose sight of the foresight, courage, persistence, and vision of David Leach and the many leaders from across all specialties who participated in bringing the profession to this juncture.

Lest there be any mistaking why the Outcome Project is so important to the profession, and why I decided to leave the deanship at Jefferson to lead this effort, I put forward to you My Personal Vision for Graduate Medical Education in the United States.

I imagine a world in which:

- all the teaching hospitals have a structured approach to the teaching and common evaluation of the competency of each of their residents and fellows
- all of the programs are led by motivated, role model physicians who are prepared to be program directors
- each resident or fellow has the benefit of a high quality, supervised, humanistic clinical educational experience, with customized formative feedback through specialty specific standardized systems
- each resident or fellow demonstrates specialty specific proficiency in each competency prior to graduation, and
- Each resident or fellow is on the path to becoming a Virtuous Physician, who places the needs of his or her patient first.

Each specialty will accomplish this in a slightly different fashion. Each program will make sacrifices to make this a reality. But I believe that all of us who have dedicated our careers to education of the next generation of physicians share this vision.

With each of your help, the Outcome Project will bring us one step closer to this desired future state. Please join us on the journey! ■

¹Swing, S. Assessing the General Competencies: ACGME Work in Progress, <http://www.acgme.org/acWebsite/bulletin/bulletin1102.pdf>, page 6

²Batalden P, Leach D, Swing S, Dreyfus H, Dreyfus S. General competencies and accreditation in graduate medical education. *Health Aff (Millwood)*. 2002 Sep–Oct;21(5):103–11.

“Full Disclosure” and Residency Education

Resident Learning Opportunities within the context of a Comprehensive Program for Responding to Adverse Patient Events

Timothy McDonald, MD, JD, Kelly M. Smith, PhD and David Mayer, MD

Introduction

Physicians strive to do no harm. However, not all will disclose medical errors to their patients. Full disclosure of a medical error is communication between a health care provider and a patient, family members, or the patient’s proxy that acknowledges the occurrence of an error, discusses what happened, and describes the link between the error and outcomes in a manner that is meaningful to the patient.¹ Disclosure is a professional responsibility that is desired by patients, endorsed by ethicists and professional organizations, and increasingly required by regulatory and government bodies.²

Transparency related to unexpected adverse outcomes, including the full disclosure of medical errors, is central to the current patient safety movement. Improving patient outcomes while reducing medical errors depends upon learning from unanticipated outcomes and associated errors. The candid disclosure of unexpected outcomes and providing an appropriate apology for medical errors facilitates learning and foster the improvement process. In addition, from the professionalism perspective, maintaining the ethical imperative of honest and open communication with patients helps maintain trust between provider and patient. If coupled with the appropriate rapid remedy, the properly designed disclosure process maintains that bond and mitigate any damages associated with subsequent litigation, thereby benefiting the health care delivery system as a whole.

Residency programs that ascribe to the foundations of full disclosure are ideally situated to provide training and assessment in all six areas of the ACGME identified competencies:

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

Disclosure is based on the principle that all patients have a right to know the details associated with unexpected outcomes and any mistakes that are made during their care.³ Disclosure of medical errors, and other relevant information following an unexpected adverse event, provides opportunities

for compassionate, professional and patient-centered care; increased learning that translates into safer systems-based practices, and improvements in patient communication skills.

The organizational requirements for each part of the process are quite different. Full disclosure and patient communication programs may be as simple as a hospital establishing requirements for physicians to disclose unexpected outcomes and errors to patients. Training for the physicians may be preferred, but, few training programs exist to help resident physicians learn the skills necessary for such an endeavor. Publications on medical professionalism frequently omit transparency and disclosure of medical error from the curriculum.³ Physicians’ resistance to disclosure has varied, while malpractice defense attorneys have traditionally warned against disclosure and apology, fearing that it could precipitate future law suits.⁴

For full disclosure programs to be effective, they should be combined with ways to provide a remedy. Medical bills may be written off, or actual payouts may be necessary in egregious circumstances. Hospitals’ claims management professionals handle such claims, but rarely do they approach families without a legal notice of claim.

“Physicians’ resistance to disclosure has varied, while malpractice defense attorneys have traditionally warned against disclosure and apology, fearing that it could precipitate future law suits.”

The following elements of a disclosure program, implemented at the University of Illinois Medical Center at Chicago (UIMCC) and the University of Illinois College of Medicine, are integral for the creation of a comprehensive program designed to respond to unexpected adverse events involving patient harm. An analysis of these steps provides learning opportunities for resident physicians to achieve proficiency in various ACGME-required competencies.

- **Reporting:** notifying patient safety/risk management personnel about unexpected adverse events involving patient harm.
- **Investigation:** A rapid, detailed investigation (using standard root cause analysis (RCA) techniques) of the event to determine whether an error(s) was made in the process.
- **Communication:** Creating communication programs for providing ongoing communication with patients and families following an unexpected adverse event without regard to cause of the event.
- **Apology and Remedy:** In the event of an error, providing an apology and an appropriate remedy.
- **Improve:** Linking process improvements identified in the RCA with patient and family involvement.

Reporting

The response to any “unexpected adverse event” begins with a report to the organization’s department charged with managing patient safety or risk management. Reporting can occur in a variety of ways: phone call, written report, on-line messaging, or in person discussion, and can be provided anonymously.

Impact on Residency Programs: Link to the Competencies

From the resident education perspective, web-based learning provides the background, value and methodology for reporting with integrated on-line questions. Descriptions of the investigatory and communication processes that follow such a report should be provided. Competency in the reporting of unexpected adverse events into such a system partially satisfies at least three of the ACGME core competencies: *professionalism, interpersonal and communication skills, and practice-based learning and improvement.*

Early reporting is paramount to a successful adverse event response system. Triggering early quality committee oversight, preservation of data, and early interviews with all providers are all benefits of early notification.

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Another benefit to early reporting is the opportunity to “hold” invoices related to medical services. This provides a first, appropriate remedy to patients who have sustained harm from a medical error. As the Centers for Medicare and Medicaid Services (CMS) begin to roll out their plan to withhold reimbursement for preventable events in October 2008, the necessity grows for organizations to establish processes to investigate unexpected adverse events. The new requirements state that facilities “cannot bill the beneficiary for any charges associated with [any of the eight] hospital-acquired complications.”⁵ Holding bills at the outset of an unexpected adverse event will facilitate this process. As part of becoming competent in *systems-based practice*, residents should learn the financial impact of medical error on the health care system.

Multiple barriers exist to reporting unexpected adverse events. These barriers include the fear of retribution or “shaming” and the assumption nothing will come from reporting the event. Program directors must eradicate the “shame and blame” mentality that plagues many departments and institutions. In addition, appropriate follow-up with care

providers, including resident physicians, with outcomes to investigations, patient interactions and process improvements is essential.

Investigation

Any investigation of an unexpected adverse event that has caused patient harm must employ a tool for facilitating an RCA. This investigation must pursue possible contributory causes of the error, if one has occurred. Appropriate policies and procedures, environment of care, equipment, medication and personnel factors are some of the issues requiring inquiry.

A comprehensive RCA investigation also requires objective content experts from patient care disciplines involved in the error. Conflicts of interest are recognized and mitigated while the investigatory team examines the facts. During these inquiries, the team must decide whether the “standard of care” was breached (either through an error of commission or omission) during delivery of the care in question. The team must also determine whether any breach of care led to patient harm.

As patient care providers within UIMCC, resident physicians are routinely engaged in RCA processes. For purposes of resident education, evaluation and mentoring, residency directors are notified before a resident physician is asked to participate in any investigatory process.

In addition to establishing whether an error caused patient harm, the investigation team identifies process breakdowns and opportunities to improve practices or individual performances. Those overseeing the investigation are ideally situated to ensure that those involved with serious medical errors, the “second victims”, receive emotional support and expert help following adverse events.⁶ This requires personnel trained in process improvement, quality management and “second victim” issues to facilitate the team’s inquiry.

Impact on Residency Program: Learning Opportunities

The experiential learning that accompanies a thorough multidisciplinary RCA of an unexpected adverse event provides an ideal environment for the resident to achieve all six ACGME competencies. Trained observers can assess the competency of resident physicians during these investigations and provide feedback to both program directors and residents. Checklists used during the investigation can address all six areas of competency with particular emphasis on interpersonal communication skills. Program directors are provided with evaluations; de-briefing and reflection occur after all RCA meetings. When indicated, appropriate help is provided to resident physicians who have been involved in an error resulting in harm.

Communication

During an adverse event, appropriate personnel should make attempts to maintain channels of communication and the bond between care providers and patients and their families. Increased attention to communication intends to maintain

trust between patients and others while the adverse event is investigated. At this point, patients and families want to know the following:

1. What happened?
2. Will they be abandoned now that something unexpected has happened?
3. Who is going to care for them or their loved one?
4. Who will their “contact” be on an ongoing basis?
5. How and by whom will the event be investigated?
6. When will someone be able to share further information with them?²⁷

Concurrently, a single point person is designated to communicate regular updates to the patient and family. In the event communication will occur over several days, an appropriate communication hand-off should occur to maintain ongoing constructive contact.

“Trained observers can assess the competency of resident physicians during these investigations and provide feedback to both program directors and residents.”

Impact on Residency Programs: Participation in Disclosure

The communication of “bad news” to patients is a mandatory skill for all resident physicians to master. In the context of a comprehensive error disclosure program, numerous opportunities arise that offer residents the chance to observe and participate in these discussions with patients, families and other care providers.

When a patient communication encounter has taken place, those involved should debrief afterwards and reflect on the positive and negative aspects of the interaction between care providers, including resident physicians and the patient or family. The UIMCC has created a post-communication document that allows members of the communication team to share observations and provide feedback to one another. In addition, follow-up and feedback from the family are also obtained. This documentation is particularly relevant for residency program directors wanting an objective assessment of resident progress in professionalism and **communication skills**. These documents are also valuable for resident reflection and self-improvement efforts.

Apology and Remedy

From the transparency perspective, the investigation seeks to obtain enough information to meet the expectations of patients or families suffering unexpected adverse events. Patients and

their families have specific expectations and needs from the disclosure discussion. If an error has caused the adverse event, patient or family expectations include:

1. an explanation of what happened in lay person terminology, including the error and how the error caused harm;
2. an apology;
3. assurances that high quality care will continue;
4. processes implemented to prevent recurrences;
5. accountability for the error;
6. some remedy or “benevolent gesture.”

Such investigations provide help for the organization to meet patient and family expectations during a “full disclosure.” From the remedy perspective, initial remedies should include a waiver of medical fees attributed to care and management of the consequences of medical error. Media reports are replete with stories of patients or families who have suffered the humiliation of collection agency efforts to extract payment for clear medical errors such as “wrong-site” surgery. Organizations committed to maintaining patient trust and confidence will benefit from a process that avoids such situations.

Other forms of remedy will include waiving patient or family expenses associated with prolonged hospitalization or rehabilitation. Compensation may include lost wages, child care, or ongoing medical expenses. Finally, a comprehensive disclosure program must consider potential compensation for the pain and suffering associated with significant preventable adverse events.

“Patients and their families have specific expectations and needs from the disclosure discussion.”

A few organizations have implemented disclosure initiatives with a compensation component. However, the verdict is still out on the ultimate impact these programs have on the financial burden. The experiences from the Veterans Affairs Hospital in Lexington Kentucky,⁸ the University of Michigan Health System⁹ and COPIC,¹⁰ a physician-directed liability insurer in Colorado, provide some encouragement to the healthcare community regarding the financial viability of a disclosure process. The experience at the UIMCC, while still in the early phases, appears to be paralleling the University of Michigan Health System experience.

Impact on Residency Programs: Learning Opportunities

Once an organization has decided on a transparent process for handling unexpected adverse events, all personnel must be educated and trained. Training must consider all communication scenarios that may follow an unexpected adverse event. These scenarios may include two ends of the spectrum: an event

unrelated to an error or an adverse event associated with a clearly preventable error – a “never” event. The approach to these two ends of the spectrum and all cases in-between are significantly different.⁸

For resident physicians, the use of simulation, standardized patients and role playing to train and assess communications skills competency is well accepted within the medical education community. Checklists that identify different disclosure elements the learner has mastered are useful in the competency process and in reflection and review following the training.¹¹ Videotaping the educational sessions allows educators to reach a broad group of practitioners in an effective manner especially when coupled with the capability of internet-facilitated learning and competency assessment.

The organization’s disclosure curriculum must consider the various levels of providers within that organization and plan accordingly. Longitudinal approaches that incorporate consistent and complementary communication, education and assessment from the most junior health science students to the most senior practitioners facilitate organization-wide culture change and augment the dissemination of consistent messages.

“The candid disclosure of unexpected outcomes and providing an apology for medical errors should facilitate the learning and improvement process. Maintaining the ethical and professional imperative of honest and open communication with patients helps maintain trust between provider and patient.”

It is imperative that resident physicians understand their role in the communication of medical error to patients. A resident’s full disclosure of a medical error that has caused patient harm should only be done, at a minimum, with the knowledge, support and involvement of their supervising attending physician or some other personnel trained to provide such information. Of all the elements of a “full disclosure” program, the communication of a harm-producing error requires the most supervision or oversight. No resident should proceed with such a practice until they have obtained organizational approval and training.

Improvement

Organizations should consider whether to invite patients or families into the improvement process following an adverse event. This can assist in maintaining the bond between patient, family, care provider and hospital. Potential process

improvements identified should contain specific practice changes with measurable quality or safety indicators. This assures measurement of the effectiveness of changes can be audited and analyzed over time. These data are required in order to hold units and individuals accountable for following through on the proposed changes and for collecting follow-up data for analysis in a timely fashion. The true value of transparency rests with the ability of organizations to rapidly learn and make changes from investigation and analysis of these errors.

“Potential process improvements identified should contain specific practice changes with measurable quality or safety indicators. This assures measurement of the effectiveness of changes can be audited and analyzed over time.”

Impact on Residency Programs: Learning Opportunities

Engagement in an organization’s process improvement efforts affords resident physicians an opportunity to achieve competency in *practice-based learning and improvement*. In the first 20 months of implementation of a comprehensive disclosure program, the UIMCC process has produced dozens of patient communication consults with a substantial number of “clear error” discussions. Over two hundred resident physicians have participated in the RCA work and engaged in the creation of over 100 systems-based process improvements.

Learning from mistakes

Those involved in disclosure programs recognize the opportunity to improve on every interaction with patients or families following an unexpected adverse event. Based upon feedback from patients, providers, and resident physicians, common communication mistakes that occur include:

1. Incomplete disclosure
2. Misleading or incomplete information prior to family/patient meeting
3. Failure or difficulty in clearly explaining medical terms and events
4. Not ensuring the “right” persons are present for the discussion
5. Finger-pointing
6. Inadequate cultural sensitivity or foreign language assistance
7. Failing to provide proper follow-up

Conclusion

Transparency related to unexpected adverse outcomes, including full disclosure of medical errors, is central to the patient safety movement. Improving patient outcomes while reducing medical errors depends upon learning from unanticipated outcomes and associated errors. The candid disclosure of unexpected outcomes and providing an apology for medical errors should facilitate the learning and improvement process. Maintaining the ethical and professional imperative of honest and open communication with patients helps maintain trust between provider and patient. Residency programs that ascribe to transparency and full disclosure of medical errors are ideally situated to provide training and assessment in the six ACGME core competencies. ■

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³Advancing Education in Medical Professionalism, ACGME Outcome Project, Enhancing residency education through outcomes assessment. 2004.

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⁶Wu A. Medical error: the second victim. The doctor who makes mistakes needs help too. *BMJ*. 2000; 320:726–727.

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⁹Clinton HR, Obama B. Making patient safety the centerpiece of medical liability reform. *N Engl J Med* 2006; 354:2205–8.

¹⁰Gallagher TH, Quinn R. What to do with the unanticipated outcome: does apologizing make a difference? How does early resolution impact settlement outcome? In: *Medical liability and health care law seminar*. Phoenix: Defense Research Institute, 2006.

¹¹Fein SP, Hilbourne LH, Spiritus EM, Seymann GB, Keenan CR, Shojania KG, Kagawa-Singer M, Wenger NS. The many faces of error disclosure: a common set of elements and a definition. *J Gen Intern Med*. 2007; 22 (6): 755–761.

An Objective Structured Clinical Examination (OSCE) for the Assessment of Systems Based Practice and Practice Based Learning and Improvement

Prathibha Varkey, MD, MPH, MHPE, Neena Natt, MD, MMEd

In October 2005, an institution-wide Quality Improvement (QI) Program was initiated to assist with the implementation of the Systems Based Practice (SBP) and Practice Based Learning and Improvement (PBLI) Competencies for all of the 115 accredited residency and fellowship programs (1,586 residents and fellows) of the Mayo Clinic School of GME. One of the other objectives of the Program was to research the most effective teaching and assessment methodologies for these competencies. We describe the psychometric properties of an eight-station OSCE designed to assess SBP and PBLI competencies in GME, piloted among nine fellows in preventive medicine and endocrinology.

“The OSCE is an appealing assessment instrument because on one hand it closely reflects a live clinical setting and, on the other hand, may protect against a possible halo effect inherent in end-of-rotation evaluations.”

Why is the OSCE an innovative assessment tool for SBP and PBLI?

The OSCE is an appealing assessment instrument because on one hand it closely reflects a live clinical setting and, on the other hand, may protect against a possible halo effect inherent in end-of-rotation evaluations. This type of authentic environment is critical to assessing non-cognitive skills such as negotiation, problem solving, team collaboration, and root cause analysis necessary for SBP and PBLI.¹ It also allows for the actual demonstration of applied knowledge and skills rather than testing knowledge alone (figure 1). Based on our prior studies, we believe that the opportunity for formative as well as summative feedback makes the OSCE an excellent teaching tool as well.²

By means of this research project, we proposed to answer the following research questions: a) Can OSCE stations be developed for the appropriate assessment of the SBP and PBLI competencies? b) Is the OSCE a valid and reliable tool for the assessment of learners in the competencies of PBLI and SBP?

Figure 1
Levels of Assessment. Adapted from Miller GE³

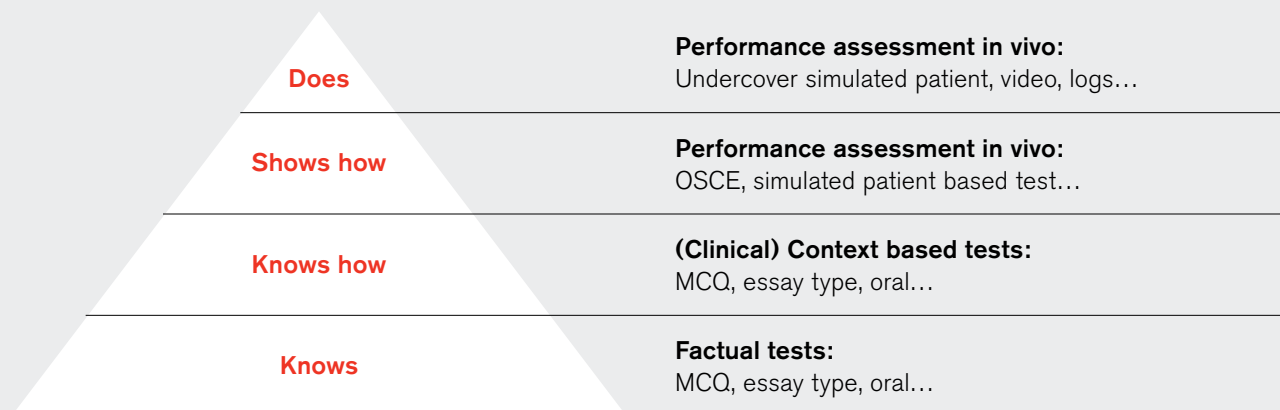


Table 1
OSCE Blueprint and Design

Curriculum Theme	OSCE Station Tasks	Formats (KSA* tested)	Competency
Measurement	Develop measures for Diabetes mellitus Type 2	Short answer – K, S	PBLI
Nolan's Improvement Model	Plan a Nolan's improvement model for a dialysis problem	Short answer – K, S	PBLI
Negotiation	Negotiate with a nurse manager to participate in her unit in a new QI pilot	Interaction with Standardized nurse manager – K, S, A	SBP
Insurance Systems	Construct 15 multiple-choice questions (MCQs)	MCQs – K	SBP
Root Cause Analysis	Establish a root cause analysis for a medication reconciliation case	Short answer – K, S	SBP, PBLI
Team Collaboration	Lead an ACLS team for an unexpected unconscious patient	Simulated scenario with the use of a mannequin and SP (patient relative) – K, S, A	SBP
Evidence Based Medicine	Critical appraisal of literature for effect of calcium therapy for osteoporosis; provide summary of evidence and communicate same to patient	Part A: short answer – K, S Part B: Interaction with Standardized patient – K, S, A	PBLI
Medication Errors	Conduct root cause analysis and communicate prescription error to patient	Interaction with standardized patient and pharmacist	SBP, PBLI

*KSA = Knowledge, Skills, and Attitudes

A mixture of eight written, standardized patient and simulation-based stations were conducted to appropriately test the knowledge, skills and attitudes required for the SBP and PBLI competencies. Members of the OSCE committee created and scripted the stations, based largely on real-life situations that actually occurred during prior improvement projects (See **Table 1**). The cases were reviewed for authenticity by the OSCE committee as well as five institutional content experts. Three faculty experts scored the case using the checklist attached to the cases and the interpersonal skills list when standardized patients were involved. The modified Angoff method was used for standard setting.⁴ Since Global rating scales are considered to have more evidence for validity, these were used as well to assess the performance of the learners in the OSCE stations.

“We plan to develop other OSCE stations pertinent to the two competencies and create a product that could be disseminated, and would be useful to other Program Directors who are interested in implementing OSCEs for assessment of competence in SBP and PBLI.”

Psychometric properties of the OSCE

To gather evidence for the validity of the OSCE scores, we evaluated the five aspects of construct validity.⁵

- The evidence for content and response process validity was excellent.
- For evidence of internal structure, inter-rater reliability was excellent, with reliability coefficients greater than 0.85 for both global competency and checklist scores for the majority of the stations. The inter-rater reliability coefficients for the checklist scores were lower for the negotiation (0.53) and prescription error (0.68) cases, perhaps reflecting the subjectivity of the raters in interpreting certain checklist items such as reaching a mutual agreement for initiating a QI pilot (negotiation station).⁶
- As expected, the inter-station correlation was low (range: -0.62 to 0.99; mean of 0.13) among most stations. This likely reflects case specificity because the different stations assessed different sub-competencies in SBP and PBLI. More stations may have yielded higher correlation in scores.
- Internal consistency for all cases except two had a Cronbach's alpha > 0.61.
- All faculty and fellows agreed or strongly agreed that the OSCE and SPs were realistic. Both groups commented that the stations were realistic and useful as an assessment tool.

Although the OSCE is likely to be more resource intensive than traditional assessment tools, it was feasible to implement an OSCE to test SBP-PBLI competency. The majority of the resources related to developing this particular OSCE were related to time spent in developing and piloting the new stations and implementing them with three raters per station.

Our pilot study provides good evidence for validity, feasibility, and acceptability of an OSCE for the assessment of competency in SBP and PBLI, and lays the foundation for further work in this area. Future studies are needed with a larger sample size and more stations in order to provide a better understanding of the psychometric properties of OSCE scores. We plan to develop other OSCE stations pertinent to the two competencies and create a product that could be disseminated, and would be useful to other Program Directors who are interested in implementing OSCEs for assessment of competence in SBP and PBLI. ■

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The GOFAR Model for Mentoring Resident Development

Jennifer Peel, PhD, Lois Bready, MD, and Robert Nolan, MD

It is widely agreed and well documented that mentoring is a cornerstone of the academic, professional and personal development process, but faculty and residents often lack strong mentor role models.¹⁻⁵ Knowing that mentoring is important, how can we enhance the mentoring skills of our faculty?

The goal of developing a mentoring model is to introduce residency program directors and other faculty to a system (process, tools and skills) for mentoring residents that they can use for faculty development at their institutions. The GOFAR Mentoring Model consists of the following: Goal setting, Observation, Feedback, Appraisal, Reinforcement and Coaching (Figure 1). Training around the GOFAR model emphasizes that mentoring is much more than just performance appraisal.

The Model (Process)

Goal-Setting. Goals drive learner performance and development. Training focused on the importance of goal-setting, the component behavioral objectives and a tool for establishing desired learner performance by clarifying expectations.

Observation. Observation is critical to determining the current performance of a learner. Training highlights the limitations of observers and provides a strategy for describing and documenting behavior.

Feedback. Feedback to learners is important for their development. Training focuses on the importance, value and nature of effective feedback and offers strategies to help improve the ability to deliver valuable feedback to learners.

“The “Feedback Sandwich” is introduced as a tool to enhance the Feedback part of the GOFAR process.”

Assessment/Appraisal. Assessment is the benchmark for performance and development. Training focuses on assessment biases, strategies for overcoming them and suggestions for structuring an appraisal meeting and composing written feedback.

Reinforcement. Reinforcement is essential for desired performance to continue and for undesired behavior to change. Training focuses on the Law of Effect⁶ and the steps in shaping behavior.

Coaching. Coaching is the process improvement loop between feedback and observation. Training emphasizes skills acquisition in probing, listening and non-verbal communication.

The Tools.

Along with the GOFAR model, training includes the presentation of tools to enhance the mentoring process. For example, “Personal Learning Plans”⁷ are introduced to use during the Goals step of the process. The “Feedback Sandwich”⁸ is introduced as a tool to enhance the Feedback part of the GOFAR process. Learner Portfolios and the RIME⁹ (reporter, interpreter, manager, educator) scheme are suggested as tools to use during the Assessment step of the mentoring process. A four step process for diagnosing and shaping behavior (Figure 2) is suggested as a tool for the Reinforcement part of the mentoring process.

The Skills

Some of the specific skills introduced during GOFAR training include writing behavioral objectives, analyzing performance gaps, providing feedback and shaping behavior. Specifically, strategies are discussed for overcoming the actor/observer bias¹⁰ in diagnosing performance gaps. Participants also practice writing behavioral objectives, crafting written learner feedback, conducting a verbal feedback session and diagnosing and shaping behavior.

Figure 1
The GOFAR Mentoring Model

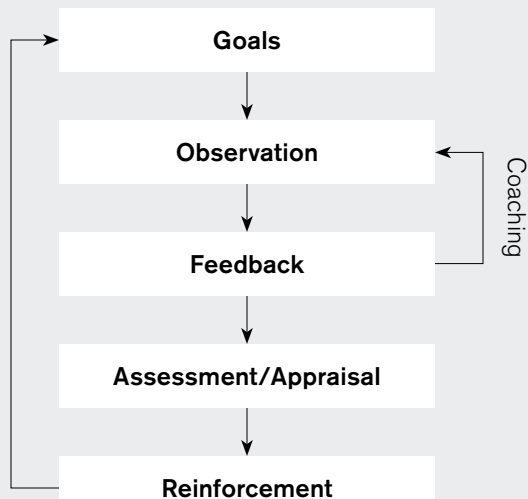


Figure 2

The 4 D's of Diagnosing and Shaping Behavior

1. **Describe** the problematic behavior
2. **Determine** how behavior is rewarded or punished
3. **Design** and implement a plan to change the behavior
4. **Do follow-up assessment**

GOFAR Training and Participant Feedback

GOFAR Mentoring training has occurred in a variety of settings. The model has been used as a framework for a 12-part faculty development series in Anesthesiology. GOFAR has been part of other university-wide career and leadership development activities. It has also been used as an outline for faculty development activities in Physical Medicine & Rehabilitation and Obstetrics & Gynecology. In addition, an intensive, 1½ day GOFAR training has been developed and delivered to mentors in the Army Dental Corps.

“Participants also practice writing behavioral objectives, crafting written learner feedback, conducting a verbal feedback session and diagnosing and shaping behavior”

Feedback in all venues has been extremely positive. Col. Hunter R. Clouse, DDS, MHA, Director, Army Dental Corps, Fort Campbell, KY states, “The GOFAR process has enabled us to set more specific, measurable objectives that we can then use to achieve our desired outcomes: outstanding dental clinicians and army dental officers.” J. Jeffrey Andrews, MD, Professor and Chair, Department of Anesthesiology, UT Health Science Center at San Antonio says, “I’m so pleased that my teaching faculty and I have had the opportunity to work with the GOFAR model of mentoring. We have found it easy to remember and easy to use – and it works with the whole spectrum of people that we teach, from medical students through senior faculty. I’m a real fan of this model!” ■

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Systems-Based Practice Metric: An Objective Measure of the Village

Ginger Boyle, MD, Robert McDonald, MD, Anthony Geraci, MD

Systems-based practice (SBP) has been compared to the saying “It takes a village to raise a child.” For this ACGME competency, “It takes the residency program, hospital system, and community to train a resident.” ACGME standards for SBP state “Residents are expected to work effectively in various health care delivery settings and systems, coordinate patient care within the health care system, incorporate considerations of cost-containment and risk-benefit analysis in patient care, advocate for quality patient care and optimal patient care systems, and work in inter-professional teams to enhance patient safety and care quality.”

At the Spartanburg Family Medicine Residency Program in Spartanburg, South Carolina, one of the tools we have developed to evaluate and measure this competency is the “Systems-Based Practice Metric”. This metric documents nine elements of SBP encountered throughout the three year residency training and the accumulated points for completion of each. Borrowing from the previously published work of Palermo we developed this scorecard method of tracking and thus evaluating our residents’ progress in SBP.¹

The metric was developed initially as part of our program’s efforts to create a longitudinal SBP curriculum. Key elements of this curriculum were identified and prioritized during one of our semi-annual faculty retreats. The guidelines for completing each task were broken down by post-graduate year; relative weights were assigned to each task and minimum requirements and benchmark goals were set, shown in **Table 1**.

“If a resident’s score falls below the benchmark for the year the resident must discuss this with the program director and it is included in their year end letter.”

Four times each year, (July, October, January and April), our residents meet with their advisors. Documentation of the residents’ status with each element is provided by our program coordinator, associate program director’s assistant, and coordinator of the practice management rotation. Advisors complete the metric by tabulating the scores based on the

relative weight of each element. The resident and their advisor discuss the score during the quarterly evaluation. Educational guidelines for completion of delinquent elements are set and monitored over the next quarter.

The scores are tallied during the April evaluation, and incorporated into both the annual performance review with the program director in May and the program’s annual competency retreat that follows. If a resident’s score falls below the benchmark for the year the resident must discuss this with the program director and it is included in their year end letter. Residents whose scores remain below the benchmark at the end of three years are told they will receive a rating of unsatisfactory in SBP on the final verification of training form. The implications of this on eligibility to sit for the ABFP board certification examination are also discussed.

Since implementation of this tool, we have received feedback from both metric users and residents to improve the metric. These changes included moving one of the tools to the Practice-based Learning and Improvement advancement form and replacing another with an assessment of each resident’s coding audit, performed on outpatient continuity clinic visits. At least half of our systems-based practice curriculum occurs during the PMG rotation. Creating a longitudinal SBP curriculum expands the importance of this competency beyond the basic requirements for practice management education. This metric provides the program with objective criteria and scores for evaluating one of the more complex and subjective ACGME competencies throughout each resident’s training. ■

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Table 1
System-Based Practice Metric

Criteria	Explanation	Oct	Jan	Apr	Jul	Max	Benchmark Per Year	Total
1. Nursing Home Visits*	Nursing Home visits to continuity nursing home patients. 5 points/visit. At least 4 per year.					0	PGY1 = 0	
						20	PGY2 = 20	
						20	PGY3 = 20	
2. House Calls*	House Calls to continuity or discharged inpatients. 5 points/visit.					0	PGY1 = 0	
						10	PGY2 = 10	
						10	PGY3 = 10	
3. Hospital Committee Meetings	Attendance at Hospital Committee Meetings. 2 points/meeting. At least 2 per year.					4	PGY1 = 0	
						16	PGY2 = 8	
						8	PGY3 = 4	
4. CFM Patient Acceptance Committee during Behavioral Science	Attendance at meeting. 2 points/meeting. Meets once a week at lunch.					0	PGY1 = 0	
						16	PGY2 = 12	
						0	PGY3 = 0	
5. Attendance at multidisciplinary care meetings (HMS D/C Planning, Hospice House, NH)	Meetings on any hospital or CFM service, with completion of meeting report form. 5 points for each meeting. Forms to be turned in quarterly for review.					5	PGY1 = 0	
						20	PGY2 = 10	
						20	PGY3 = 5	
6. Chart Audit of CFM Visits by RPN Coders	> 75% score on chart audit (done once per year); 5 points for >75%; 3 points for 50-74%; 1 point for <50%					5	PGY1 = 1	
						5	PGY2 = 3	
						5	PGY3 = 5	
7. Return on Investment Project for new office procedure/staff*	Completion of project during PGY 2 PMG rotation and PGY 3 PMG elective 10 points.					0	PGY1 = 0	
						10	PGY2 = 10	
						10	PGY3 = 0	
8. Community Visits observation/learning	Girls' Home, Boys' Home, Charles Lea, Home Health Nurse rounds. 2 points/visit. BS/CM rotations PGY 2 but can occur at anytime while a resident.					0	PGY1 = 0	
						8	PGY2 = 4	
						0	PGY3 = 0	
9. Volunteer Activities	St. Luke's Free Clinic, Sports physicals, Miracle Hill, Soup Kitchen, religious mission activities, etc. 1 point per activity					2	PGY1 = 0	
						4	PGY2 = 0	
						6	PGY3 = 0	
Annual Total Points	PGY 1					16	16	
	PGY 2					109	109	
	PGY 3					79	79	

*required
 Shaded boxes not applicable

The American Medical Association's Initiative to Transform Medical Education

Barbara Barzansky, PhD

Many quantitative measures, such as the academic qualifications of the increasing number of applicants and the test performance of physicians-in-training, indicate that US medical education is doing well. There are reasons, however, for concern about the process and product of the medical education system. For example, a number of recent national reports point to inadequacies in physicians' preparation to practice in the evolving health care system, including meeting increased expectations for safety, quality, and teamwork.

In recognition of the need expressed by many to comprehensively review and strategically revise the training of physicians, the American Medical Association (AMA) Initiative to Transform Medical Education (ITME) began in 2005. ITME took as a goal to promote excellence in patient care by implementing reform in the medical education and training system across the continuum, from premedical preparation and medical school admission through continuing physician professional development.

Throughout, ITME activities have been guided by the principle that transformation in medical education must include, but not be limited to, changes in what is taught and where and how teaching occurs. To be successful, change must also take into account factors in the learning environment, such

“To be successful, change must also take into account factors in the learning environment, such as the attitudes and values displayed by trainees' supervisors and peers, as well as organizational and national policies and regulations.”

as the attitudes and values displayed by trainees' supervisors and peers, as well as organizational and national policies and regulations. These include such things as faculty reward systems, policies for medical education financing, and accreditation, certification and licensure requirements.

To appropriately change the product of the medical education system, that is, the practicing physician, it will be necessary to make targeted changes in all phases of the

educational continuum. Previous efforts to “reform” medical education have not had this as a focus. There are, however, promising developments, for example, the diffusion of the ACGME/ABMS competencies into medical schools and the continuing professional development (education) of physicians.

From its beginnings in 2005, ITME has been a collaborative effort, bringing together individuals from a number of stakeholder groups to share their perspectives and pool their expertise. Participants in ITME activities have been medical school and residency program administrators and faculty, representatives from medical education organizations, practicing physicians, payers and purchasers, members and staff of accreditation, certification, and licensure organizations, medical students and residents, representatives from consumer groups and the public, medical education researchers and policymakers from the federal government and the states.

“Phase 2 (2006–2007) developed general recommendations for change in the medical education system to address the gaps, identified barriers to be overcome to implement the changes, and prioritized the stakeholder groups whose participation would be necessary to overcome the barriers and to bring change about.”

Phase 1 of ITME (2005–2006) identified current strengths in the preparation of physicians, as well as gaps and opportunities for improvement in physicians' ability to interact with patients, function effectively and efficiently in their own health care organizations and in the health care system, and act as caring professionals in society. Phase 2 (2006–2007) developed general recommendations for change in the medical education system to address the gaps, identified barriers to be overcome to implement the changes, and prioritized the stakeholder groups whose participation would be necessary to overcome the barriers and to bring change about. A copy of the Phase 1–2 ITME report is available on the web site of the AMA Council on Medical Education (<http://www.ama-assn.org/go/councilmeded>).

Phase 3 (2007–2010) consists of more focused work in developing strategies for change. The first area for attention is the medical education learning environment. This has been recognized by many as key to the professional development of medical students and residents. As such, it is a priority for both the Liaison Committee on Medical Education, the accrediting body for MD educational programs, and the ACGME.

The ACGME, through its Committee on Innovation in the Learning Environment, has approached the issue as an opportunity for experimentation in individual residency

programs and institutions, with a goal of identifying and then disseminating best practices. ITME began its work in this area with an invitational conference in December 2007 that aimed to: (1) develop a comprehensive definition of the medical education learning environment; (2) identify specific factors in the learning environment that affect learner knowledge, skills, attitudes, values, and behaviors; (3) create recommendations for change and develop implementation strategies to mitigate negative and enhance positive factors. The conference was informed by a comprehensive review of the literature on the learning environment drawing from many disciplines including medical education, sociology, anthropology, psychology and other health professions. As part of strategy development, meeting participants identified additional research that needs to be done to both support implementation of change and to assess its outcomes.

One finding is that meaningful change in the learning environment for residents and medical students would require changes in both the formal/planned curriculum and in the “hidden/informal” curriculum (the lessons conveyed by teachers, supervisors, and other role models by their expressed attitudes and behaviors). In turn, both the formal and informal curriculum is influenced by such things as organizational policies and national regulations (such as accreditation standards). Change in all these areas must occur in a coordinated and coherent way for the learning environment to appropriately contribute to desired outcomes in trainees.

A final report with ITME recommendations for change in the learning environment will be available in April 2008. ■

A Risk Management Program for Residents at the Medical College of Wisconsin Affiliated Hospitals

Barbara A. Connelly, RN, MĴ, Mahendr S. Kochar, MD, MS, MBA

Summary

The Medical College of Wisconsin Affiliated Hospitals, Inc. (MCWAH) is an accredited graduate medical education (GME) sponsoring institution that employs nearly 800 residents and fellows. In 2005, MCWAH initiated a clinical risk management program for the graduate medical learners to reduce its liability from claims and lawsuits by integrating education on risk reduction and risk avoidance into GME training. Additionally this program provides consultation services and support for the residents and fellows when medical errors occur and they are named in lawsuits. Although less than three years old, the program has gained strong approval from the program directors and the residents and has demonstrated financial benefits.

“Generally the Risk Manager meets with residents/fellows in each training program for one hour, twice each year. This provides two distinct opportunities. First, smaller groups foster discussion and interactive learning. Second, it promotes the use of consultative services as the residents become familiar with the Risk Manager.”

While all risk management programs in healthcare settings address loss prevention, claims management and risk financing,¹ a comprehensive clinical risk program for GME provides opportunities to influence life-long practice patterns of physicians by educating residents and fellows on risk avoidance, risk reduction and patient safety. Risk avoidance and risk reduction are the foundation of clinical risk management and primarily focus on the behavior and practice of individual physicians. On the other hand, patient safety initiatives generally focus on changing the culture of healthcare and designing work flow and health care systems so that patient care can be delivered in a safer environment. A clinical risk management program and institutional efforts to promote patient safety are both critical elements in reducing physician liability from medical malpractice. This article highlights the components of MCWAH’s clinical risk management program.

Table 1

Core Risk Management Presentations

1. Risk Management Introduction and Overview

This module is given at orientation. It highlights the functions of MCWAH's Risk Management Program and how and when to contact the Risk Manager. Includes 1–2 scenarios targeted at audiences that are intended to raise awareness of risk exposure.

2. The Physician – Patient Relationship

This module highlights the benefits of a good physician-patient relationship from a risk reduction perspective; including barriers to developing relationships and tips on communication. Also discusses terminating the physician-patient relationship and handling other special circumstances.

3. Informed Consent ~ Informed Refusal

This module reviews the historical development of the Informed Consent doctrine and Wisconsin statutes and case law. It includes a discussion on when informed consent is required, what should be included in the conversation, informed refusal, and how to document. It also covers other consent theories such as emergency consent, implied consent and consent to treat the impaired or incompetent patient.

4. Consent for Minors

This module reviews the Informed Consent doctrine and Wisconsin statutes and case law as it specifically applies to minors. It includes a discussion on when informed consent is required, what should be included in the dialogue, informed refusal, and how to document. There is a focus on consent for minors in special circumstances such as abuse, sexually transmitted diseases, abortion, and family planning and the legal theory that underpins these issues.

5. Disclosure of Unintended Outcomes

This module provides an overview of the evolution of disclosure since 2001. It covers the initial impact of the Joint Commission's Patient Safety Standards, the psychological and legal barriers to open communication, and models used by MCWAH organizations to address the issue of disclosure. It is intended as a basic review of the skills required to communicate effectively with patients and families after an unexpected result.

6. Medical Record Documentation

This module reviews the clinical and legal purposes of written medical records. It covers the basics of good clinical documentation and how to document occurrences and unanticipated outcomes. Includes recommendations on documenting conflicting opinions and other communication challenges amongst the care delivery team.

7. An Overview of the Civil Legal System

This module reviews the civil legal system, including Wisconsin's statutes of limitation, steps in medical malpractice litigation, establishing the standard of care, mandatory reporting to the National Practitioner Data Bank, and statutory immunity.

8. Depositions

This module reviews the adversarial process used during the discovery phase of a medical malpractice lawsuit to find and gather information relevant to the legal case. It includes excerpts from a mock trial presented on the campus. Conducting a mock deposition with a fact case from a particular specialty is an option.

9. Regulatory Compliance

This module reviews regulations related to patient care including the Emergency Medical Treatment and Active Labor Act (EMTALA), confidentiality and mandatory reporting requirements.

10. Risk Management Issues in the Primary Care Physician's Office

This module covers some basic risk management aspects of physician office practice including understanding professional liability insurance, contracting tips, basic quality control measures in the clinic, evaluating scheduling and test tracking methods, and working with paraprofessional and non-professional staff.

11. Understanding Professional Liability Insurance

This module reviews both Occurrence and Claims-made professional liability insurance products and when an extended reporting endorsement is needed. It also reviews the Wisconsin Injured Patients and Families Compensation Fund and its purpose as an excess insurance product.

12. Avoiding and Managing Liability

This module is a general overview of the type of liability physicians can be exposed to such as medical malpractice, informed consent, employer liability, breach of contract, regulatory compliance and general guidance on avoiding liability. It is customized for each specialty.

The Medical College of Wisconsin Affiliated Hospitals, Inc. (MCWAH) is accredited by the Accreditation Council for Graduate Medical Education (ACGME) to sponsor GME. It is a consortium of the Medical College of Wisconsin and ten healthcare institutions located in and near Milwaukee, Wisconsin. MCWAH employs nearly 800 residents and fellows in 102 different GME programs. Program Directors from the Medical College of Wisconsin are responsible for the curriculum of each program, and the faculty and attending physicians at each affiliated hospital supervise residents' and fellows' clinical work.

“Studies have shown that residents involved in medical errors that injure patients significantly increase their stress, which can result in decreased quality of life, depression and burnout.”

Goals of MCWAH's Clinical Risk Management Program for Residents and Fellows

In February 2005, MCWAH hired a risk manager to develop a risk management program specifically for residents and fellows. The primary goals are to reduce the organization's risk exposure by teaching the learners about risk avoidance and risk reduction, and to provide support to residents and fellows in situations where they have made medical errors or when they are involved in a medical malpractice case.

Education of Residents on Risk Avoidance

At the beginning of each year, the Risk Manager addresses all incoming residents and fellows at orientation to give an overview of MCWAH's risk management program and to provide them with contact information. Throughout the academic year, the director of each of MCWAH's residency and fellowship program assures that the Risk Manager is given time with his or her program's learners. Generally the Risk Manager meets with residents/fellows in each training program for one hour, twice each year. This provides two distinct opportunities. First, smaller groups foster discussion and interactive learning. Second, it promotes the use of consultative services as the residents become familiar with the Risk Manager. Because training programs are at least three years long, the risk presentations are rotated on a three-year cycle within each program's curriculum to avoid duplication and redundancy.

The Risk Manager has developed presentations on risk related topics that are customized for each program so that they are more meaningful; in addition, presentations on other topics are developed upon request. The presentations emphasize risk avoidance and risk reduction so that the learners can use that

knowledge during their training at MCWAH and throughout their professional career. Preparing for depositions and medical malpractice trials are also discussed. The presentations are didactic, but also include case studies so that the residents and fellows may apply the theory learned. **Table 1** gives a brief description of the 12 core risk management presentations.

Consultative Services

Studies have shown that residents involved in medical errors that injure patients significantly increase their stress, which can result in decreased quality of life, depression and burnout.² Additionally, physicians involved in errors have reported that they do not feel supported by their hospitals and healthcare systems.³ From the onset of a serious event or the start of a medical malpractice lawsuit, the MCWAH Risk Manager provides support to the residents and fellows involved. From the first contact forward, the residents discuss the situational facts and have the opportunity to talk about their fears and concerns. They are given guidance and assured that they will be supported whether it involves managing emotions, having a disclosure conversation with a patient or a program director, or facing a legal action. Furthermore, the Risk Manager accompanies residents and fellows to their depositions and attends medical malpractice trials in which the residents are named defendants. Consultative services are also extended to former residents and fellows that are named in medical malpractice cases related to their practice during training.

In addition to situations involving patient injury and liability, residents and fellows frequently bring questions and concerns to the MCWAH Risk Manager about other matters such as testifying in court as a treating physician, dealing with violent encounters in the workplace, reporting quality of care issues and moonlighting.

“They are given guidance and assured that they will be supported whether it involves managing emotions, having a disclosure conversation with a patient or a program director, or facing a legal action.”

Risk Identification and Analysis

Resident education and clinical practice takes place within the MCWAH member institutions, therefore, the notification about adverse events, medical errors and near misses to MCWAH is dependant on good communication between the residents and fellows and the MCWAH Risk Manager, program directors, MCW faculty and the administrators within each of the affiliated hospitals. This communication is also essential in establishing and maintaining collegial relationships. Learners

are expected and encouraged to work with the quality and risk department at each facility where they train to promote safe patient care. The exchange of information, and the early identification of adverse events and quality issues, provides opportunities for the training programs to address practice issues and implement quality improvement measures to reduce risk exposure and promote safe care of patients.

Management of Malpractice Claims and Lawsuits

The Risk Manager is responsible for analyzing claims and lawsuits, identifying loss prevention opportunities, maintaining the claims files and overseeing the litigation management and settlement process. This oversight includes collaboration with the insurance carrier and assisting the defense attorney as needed. Claims are analyzed by types of claims and by programs to identify if there are any trends.

Evaluation of MCWAH's Clinical Risk Management Program

It is important to continuously evaluate and assess any program to determine if its goals are being met and if it is adding value to the organization. The MCWAH Risk Manager regularly reports to MCWAH's Executive Director on risk activity and the status of claims and lawsuits. Additionally, she provides an annual report to the MCWAH's Board of Directors on claims

and lawsuits and risk management educational activities. Measures of performance include 1) learners' evaluation of the risk management education, and 2) the number of claims and lawsuits, indemnity payments and expenses.

As described above, the MCWAH Risk Manager meets with its residency and adult fellowship programs at least twice each year to discuss risk related topics. The residents and fellows are asked to complete a standardized evaluation after each presentation. From July 2006 to June 2007, 268 evaluations were completed and analyzed. It should be noted that the

“The residents’ positive evaluations strongly demonstrate that they value information on risk avoidance, risk reduction and the civil litigation process and view this information as pertinent to their professional education and training.”

internal medicine, emergency medicine and general surgery programs used their own unique evaluation tool, therefore, those results were not included in this analysis, however those evaluations also showed similar results.

The evaluation form has two sections. In the first section the residents and fellows evaluate whether the content of the risk presentations are applicable to the ACGME's general competencies. The choices included each of the six competencies and an additional choice of “none.” The analysis of the residents and fellows perception of how risk management presentations correlate with the ACGME's competencies is shown in **Table 2**.

In the second section, the residents and fellows were asked to rate the content and presentation style on a 5-point Likert scale (1 = “strongly disagree” to 5 = “strongly agree”). Of the 268 evaluations, 247 forms had the second section completed. **Table 3** lists the average score assessing the relevancy and quality of risk management presentations.

The residents' positive evaluations strongly demonstrate that they value information on risk avoidance, risk reduction and the civil litigation process and view this information as pertinent to their professional education and training. The ultimate measure of a risk management program lies in the analysis of its claims and lawsuits. While data and analysis of changes or trends since the implementation of MCWAH's risk management program in February 2005 cannot be fully analyzed for several years because of the statutes of limitation and slow pace of the legal process, over the last three years MCWAH has seen a decrease in the number of claims and lawsuits filed and there has been a 32% reduction in its professional liability premium.

Table 2
Residents' and Fellows' Perception of the Correlation of Risk Management Information to the ACGME Competencies

Competency	Times Selected (n=268)	Percent
Patient Care	218	81%
Professionalism	209	78%
Medical Knowledge	76	28%
System-Based Practice	165	62%
Practice-Based Learning	141	53%
Communication	217	81%
None	1	

Table 3

Evaluation of Risk Management Presentations for Relevancy to Physician Training and for the Quality of the Presentations

Evaluation Questions	Average Score on a 5-point scale* (n=247)
1. The information presented is relevant to my work	4.74
2. The information was organized and delivered in a clear, understandable way	4.63
3. The presenter was friendly, energetic and kept the interest of the group	4.56
4. I would recommend this presentation to my colleagues	4.53
5. The goals and objectives were met	4.57

*1 = Strongly Disagree 5 = Strongly Agree

Conclusion

Although relatively new, the clinical risk management program at MCWAH has demonstrated value. Risk management has created a footprint for residents' and fellows' education on risk avoidance and risk reduction, and they have demonstrated their appreciation of risk management presentations through their positive evaluations and by their active engagement and participation during discussions. This knowledge should help the trainees enhance best practice, encourage safe practice and help them avoid liability throughout their professional careers. Additionally, learning to seek consultation and support from risk management will serve them well in their professional lives.

As an organization MCWAH is also benefiting from its risk management program. It is enjoying a financial benefit through the reduction in its claims, lawsuits and malpractice insurance premiums. ■

¹Carroll R. ed. Risk Management Handbook for Health Care Organizations: The Essentials. San Francisco, CA: Josey-Bass 2006.

²Waterman A.D, Garbutt J., et.al. The emotional impact of medical errors on practicing physicians in the United States and Canada. Jt. Comm. J Quality and Patient Safety: 33(8) 2007: 467-476.

³West C.P., et. Al., Association of perceived medical errors with resident distress and empathy: A longitudinal study. JAMA 296 (9) 2006: 1071-1078.

RRC/IRC Update

ACGME Approves Program Requirements for Hospice and Palliative Medicine and Pediatric Hepatology

At its February 2008 Meeting, the ACGME approved Program Requirements for the new subspecialty of Hospice and Palliative Medicine. This new multi-disciplinary subspecialty will be open to graduates of core programs in Anesthesiology, Emergency Medicine, Family Medicine, Internal Medicine, Neurology, Obstetrics and Gynecology, Pediatrics, Physical Medicine and Rehabilitation, Psychiatry, Radiation Oncology, and Surgery. Accreditation functions for the new specialty will be performed by the Residency Review Committee for Family Medicine. The ACGME also approved program requirements for the Pediatric Transplant Hepatology, as a new subspecialty of Pediatrics. The new requirements for both new subspecialties became effective February 12, 2008.

ACGME Approves Revisions to the Program Requirements for Neuromuscular Medicine, Sports Medicine, Sleep Medicine and Vascular Surgery

The ACGME also approved revisions to the program requirements for three multi-disciplinary subspecialties: Neuromuscular (Neurology and Physical Medicine and Rehabilitation), Sports Medicine (Emergency Medicine, Family Medicine, Pediatrics, Physical Medicine and Rehabilitation) and Sleep Medicine (Internal Medicine, Neurology, Otolaryngology, Pediatrics and Psychiatry). The revisions for the subspecialty requirements for Neuromuscular Medicine, Sports Medicine and Sleep Medicine became effective April 12, 2008.

The ACGME also approved revisions to the Program Requirements for Vascular Surgery, which will become effective July 1, 2008.

Other News from the February 2008 ACGME Meeting

Strategic Initiatives Committee Plans Two Roundtable Sessions to Explore Patient and Family Centered Care in Teaching Settings

At its February 2008 meeting, the Strategic Initiatives Committee continued its work of looking at patient and family centered care (PFCC) in the learning environment. Karen Holbrook, PhD, Chair, announced the Strategic Initiatives Committee is sponsoring two roundtable meetings in April and June 2008. Each will convene PFCC experts and educators. One of these roundtables will primarily focus on efforts at the level of the residency program; the second will explore the concept of PFCC with a focus on sponsoring institutions. The roundtables will explore models for creating a patient-centered environment that optimizes resident learning. The deliberations for the two round tables will be used to develop topics and sessions for a "design conference" on PFCC, planned for in early 2009. Dr. Holbrook noted that proceedings and a paper addressing patient centered care issues are expected to result from these efforts.

Report on Institute of Medicine Consensus Committee on Resident Physician Work Hours and Patient Safety

Thomas Nasca, MD, MACP and Ingrid Philibert updated the Board of Directors on the deliberations on a consensus committee convened by the Institute of Medicine (IOM) to study work hours for physicians in graduate medical education programs. The charge to the committee directed it to aggregate and analyze existing information on work hours for resident physicians and their effect on patient and resident safety and education.

"They noted that their presentation would focus on the systems to ensure that residents providing care for patients consistently are well-rested and well-supervised, and on the benefits of this to patient safety, and resident learning and well-being."

The committee had its first meeting in December 2007, and Dr. Nasca and Ms. Philibert noted they are scheduled to summarize the ACGME standards and efforts to promote compliance at the committee's March 4, 2008 meeting. The ACGME presentation would focus on the systems to ensure that residents providing care for patients consistently are well-rested and well-supervised, and on the benefits of this to patient safety, and resident learning and well-being. Planned efforts to achieve this may require focus on additional factors such as resident work load and supervision, and may include requirements that are sensitive to differences among specialties and between first-year residents and advanced learners nearing entry into practice.

In addition to the March 4 meeting the IOM committee will meet in May and June of 2008. The final report will be released in early 2009.

ACGME Endorses the Recommendations of Working Group on Common Requirements for One-Year Fellowship Programs

The ACGME endorsed the recommendations of a Working Group to develop more streamlined requirements and an accreditation process for programs that educate advanced learners in one-year fellowships. The next step entails sharing the proposed requirements with the Residency Review Committees to solicit their interest in using the streamlined requirements and accreditation process for their one-year fellowship programs. ■

ACGME Holds Town Hall Meeting on the Comprehensive Review of USMLE

Ingrid Philibert

A town hall meeting at the March 2008 ACGME Annual Educational Conference solicited the perspectives of program directors and designated institutional officials on the work of the Committee to Evaluate the USMLE (United States Medical Licensure Examination) Program. The National Board of Medical Examiners (NBME), Federation of State Medical Boards and Educational Commission on Foreign Medical Graduates, who collectively are responsible for USMLE, appointed the Committee to conduct a comprehensive review to determine if the current form and structure meet the aims of the exam. USMLE is the pathway to medical licensure for graduates of LCME-accredited medical schools, and international medical graduates.

Update on USMLE Revisions

Ruth Hoppe, MD, Associate Dean Emeritus, Michigan State University College of Human Medicine, and a member of the committee exploring the redesign of the exam, and Peter Scoles, MD, Senior Vice President for Assessment Programs at the NBME, updated attendees on the process of redesigning the exam. They indicated that items in the exam are reviewed and adapted to current clinical contexts on an ongoing basis. However, the present three-step design is more than twenty years old. The presenters noted that to inform the revision process, data has been gathered from a wide range of sources, including several town hall meetings like that held at the ACGME Educational Conference.

The presenters summarized themes emerging from the ongoing review process, including the proposal for a two-gateway examination process to coincide with transition from undergraduate medical education to supervised practice, and from residency into independent practice, with each exam incorporating basic science and clinical sections. The representatives for the USMLE revision process emphasized that conversations about revisions to USMLE are sensitive to the fact that while it is primarily a licensure examination, it has other uses, and the organizations co-sponsoring the exam believe that valid secondary uses should be supported so long as they do not compromise the exam's primary purpose. A critical secondary use of the data from USMLE is to make residency interview and selection decisions.

Comments from Program Director and DIO Constituents

Three reactors followed the update on the USMLE revision process. Karen Devaney, MD, Surgery Program Director at Oregon Health & Science University and Robin Dibner, MD,

Internal Medicine Program Director at Lenox Hill Hospital, provided the perspective of program directors. Lois L. Bready, MD, Designated Institutional Official at the University of Texas Health Sciences Center at San Antonio, and Chair of the Residency Review Committee for Anesthesiology, provided the perspective of a DIO. In addition to the comments from the reactors, prior to the town hall, attendees had the opportunity to submit comments and questions about the revisions and the presenters summarized common themes and responded to frequent questions.

Constituent comments highlighted that many thought a written examination may not be the optimal format to address a number of the general competencies, particularly interpersonal and communication skills and professionalism. Dr. Scoles responded that expanded clinical skills testing is being discussed under the proposed new exam format. Questions also addressed the timing of the first gateway exam and the availability of the results for the residency interview and selection decisions. A particular concern was participants' perception that if the reporting of results from the first gateway exam would move into the fourth year of medical school. Attendees commented that this may leave programs and residents without available nationally-normed performance data to be used in the residency application process, and it may result in programs selecting applicants who are subsequently not able to pass the examination.

“A critical secondary use of the data from USMLE is to make residency interview and selection decisions.”

Questions also addressed whether the exams would be pass/fail or whether scores would be available, with comments on the utility of exam scores in making selection decision involving international medical graduates.

Overall, participants' comments suggested they viewed the review of USMLE as a positive step, but wanted to ensure that the redesign took into consideration the needs of program directors who have become accustomed to the availability of useful information from the current USMLE for decisions about whom to interview and for the actual resident selection process. ■

The editor would like to acknowledge Dr. Scoles' contribution to this summary, and the thoughtful comments received from many program directors and DIOs. The summary of comments and questions about the redesign of USMLE was shared with the NBME.

Editor's Introduction

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The CEO's First Column

The Next Step in the Outcomes-Based Accreditation Project

Thomas J. Nasca, MD, MACP

"Full Disclosure" and Residency Education

Timothy McDonald, MD, JD, Kelly M. Smith, PhD and David Mayer, MD

An Objective Structured Clinical Examination (OSCE) for the assessment of Systems Based Practice and Practice Based Learning and Improvement

Prathibha Varkey, MD, MPH, MHPE, Neena Natt, MD, MMEd

The GOFAR Model for Mentoring Resident Development

Jennifer Peel, PhD, Lois Bready, MD, and Robert Nolan, MD

Systems-Based Practice Metric: An Objective Measure of the Village

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A Risk Management Program for Residents at the Medical College of Wisconsin Affiliated Hospitals

Barbara A. Connelly, RN, MEd, Mahendr S. Kochar, MD, MS, MBA

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ACGME Holds Town Hall Meeting on the Comprehensive Review of USMLE

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