gme Graduate Medical Education

Bridgeport Hospital
Yale New Haven Health

Evaluation of the ACGME Competencies

Before 2001, there were no uniform standards of evaluating resident-trainees - programs depended mainly upon ad hoc local standards and assessment tools. This lack of uniform inter- and intra-program standards of evaluation led the American Council for Graduate Medical Education (ACGME) and American Board of Medical Specialties to suggest fundamental changes of the methods used to evaluate residents. In Summer 2001, the ACGME mandated that resident-trainees be evaluated in 6 core competencies:

1. Medical Knowledge
2. Patient Care
3. Professionalism
4. Communication Skills
5. Practice-Based Learning
6. Systems-Based Learning

More information describing these competencies and the ACGME is available at: http://www.acgme.org/Outcome. Bridgeport Hospital has embraced this initiative. We believe that medical educators have heretofore done a good job evaluating medical knowledge, but the equally important competencies #2-6 were not well assessed and thus valuable doctoring skills have been left undeveloped. We participated in what promises to be a landmark study, conducted by Yale and the Uniformed Services University, of medical evaluation. We were lucky to be randomized to the intervention arm of this study and thereby benefited from a comprehensive program to improve evaluation of the competencies. Consequently, we have implemented many innovative techniques that are delineated in this section of the website. Luckily we are a small enough program where implementation of such intensive evaluation is possible. Indeed it may seem daunting to be evaluated so comprehensively and frequently. However, we view evaluations as purely constructive exercises - we agree with the ACGME that these efforts will make our trainees better doctors.

We have outlined, in some detail, many of the techniques we use to teach and evaluate the 6 ACGME competencies. This is a "work-in-progress" which we are constantly updating and refining.

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Medical Knowledge

Medical knowledge has been the typical emphasis of residency training programs. There are numerous subjective and objective, time-honored methods of examining trainee's knowledge.

1. American Board of Internal Medicine National In-Service - All residents and interns take the in-service every year. This test is used to define areas of strength and weakness for both trainees and the program. The results are reviewed in conference with each trainee and a plan is put in place to address weaknesses if necessary. This examination gives trainees the unique opportunity to gauge their knowledge (and test-taking skills) relative to the (national) peer group with whom they will be taking the examination.

2. Attending Rounds - Both Teaching and Work Attending Rounds provide a venue for teachers to gauge the knowledge of residents and interns and provide patient-based instruction. Both Teaching and Work Attendings provide monthly written evaluations.

- General Competency Evaluation

3. Conferences (Morning Report) - Residents who are assigned to Ward services and those on sub-specialty hospital rotations attend Morning Reports. Cases are discussed in detail. Faculty members have the opportunity to hear trainees "think aloud" allowing the opportunity to provide substantive feed-back. It also allows an excellent opportunity for residents to teach each other.

4. Clinical Skills Examination - Once each year, all trainees perform a history and physical examination as they are observed by a faculty member. The trainee completes the exercise by presenting the case and his/her assessment and plan for diagnosis and treatment.

- Clinical Skills Examination

5. 6-Competency OSCE - Every other years trainees perform an objective clinical skills evaluation (OSCE) that includes one station devoted to medical knowledge about a "bread-and-butter" medical problem. A case presentation is followed by straight-forward questions that "every internist should know" the answers to.

6. Program Director's Rounds - Once a month a Teaching Attending Rounds is conducted by the Program Director with residents/interns assigned to Wards services. Roughly 1/3 of the session is spent assessing interns' 5-minute presentation skills (that includes demonstration of medical knowledge in outlining assessment/plans), 1/3 to medical reasoning skills and 1/3 in chart-stimulated recall exercises.

- Evaluation of Medical Record-Keeping and Chart-Stimulated Recall Exercise

7. Rotation-Specific Portfolios - On several rotations (Hematology-Oncology, Infectious Disease, Geriatrics), residents keep a portfolio of their experience. In these rotations (Heme-Onc and Geriatrics are non-elective), residents must seek exposure to patients with a number of listed "core" diseases. They describe the patient in their portfolio then use the patient's case as an opportunity to read about the disease and record seminal facts about clinical facts, diagnosis, prognosis and therapies. This guided study "homework" maximizes the likelihood that they will learn about essential disease processes that are sub-specialty specific, chosen by Section Chiefs.

- Hematology-Oncology Portfolio
- Infectious Disease Portfolio

8. Board Review Course - Conducted by the Chief Resident with the aid of subspecialty Chiefs, this is a monthly after-hours conference in which one MKSAP subject area is reviewed through discussion of questions/answers from post-tests.

Patient Care

Patient care has always been an area emphasized in evaluation of trainees. Various "rounds" are predicated on the opportunity of senior teachers to share information and also to observe trainees caring for patients.

1. Attending Work Rounds - Daily rounds on the teaching services (wards and intensive care units) provide opportunities for attending physicians to observe the quality of patient care provided by trainees. These are assessed through the standard end-of-month evaluation process.

- General Competency Evaluation

2. Teaching Attending Rounds - Trainees present 1-2 cases each session then go to the bedside with the Teaching Attending to focus on one domain of performance. In some instances, a trainee is chosen to interview the patient with the group observing. The Teaching Attending then models optimal techniques for the entire team and later provides the "tested" trainee with oral and written feed-back. Similarly, if patients have excellent physical examination findings, a trainee might be asked to perform a focused examination with the team in attendance. In this manner, every-day patient care skills can be "fine-tuned" by senior teachers.

3. Program Director's Rounds - Once each month, the Program Director meets with trainees assigned to the Ward services to examine their oral presentation and medical reasoning skills and examine documentation in chart-stimulated recall exercises.

- Evaluation of Medical Record-Keeping and Chart-Stimulated Recall Exercise

4. Practice-based Learning Exercises - A program instituted by Dr. Paramanathan in our clinics, each resident performs a review of his/her own medical records for documentation of interventions/measures that are proven to enhance patient outcomes for a number of illnesses. Examples include screening for the 8 elements of diabetes longitudinal care and maintenance of comprehensive problem lists in the ambulatory record. Trainees examine medical records of 5 of their patients for these elements using the attached worksheets. They repeat the exercise after 6 months to determine the degree to which they learned from their previous performance.

Diabetes Management Checklist

- Resident Self Evaluation - Diabetes

Comprehensive Problem Checklist
This system provides real-time evaluation of the quality of patient care in the chosen areas. Each year, new evidence-based measures will be added to the areas of assessment.

- Resident Self Evaluation - Problem List

5. 6-Competency OSCE - This exam, testing all 6 domains of medical competency, is given every other year to all trainees. A Boards-style case is presented at one the stations of the objective clinical skills evaluation (OSCE). The trainees then answer a series of questions that examine the care that would be provided to the hypothetical case.

Professionalism

An excellent description of what constitutes medical professionalism was published by the American College of Physicians and serves as the centerpiece of our program's attempt to teach and evaluate this domain of performance. The article is sent to all trainees twice/year and concepts are discussed in noon conferences/housestaff meetings on a regular, ongoing basis.

1. ABIM position paper - This is a succinct description of medical professionalism.

- Professionalism Article

2. Program Director's Memoranda - Reminders of various elements of the ABIM document are mailed to trainees and discussed at housestaff meetings.

- Professionalism Memo

3. Evaluation of Professionalism - 360 degrees: Teaching and Work Rounds Attending Physicians (General Competency Evaluation), nurses (Nurse Evaluation of Resident), discharge planners (Discharge Planning Evaluation) and patients (ABIM Patient Satisfaction Questionnaire) provide substantive feedback.

4. Clinical Skills Examination (CEX) - The full clinical skills exam conducted once yearly for all trainees, and focused, mini-CEX's also examine professional demeanor and therapeutic relationships at the bedside.

- Clinical Skills Examination

5. 6-Competency OSCE - Every other year, trainees perform an objective skills evaluation at 6 stations (one for each competency). The professionalism station includes case-based scenarios that gauge various concepts reviewed in the ABIM position paper.

6. "Odds and Ends" - Since timely medical record-keeping, attendance at educational conferences and contributions to the community beyond routine resident responsibilities, these areas are tracked (through examination of delinquent medical records lists, departmental attendance records and the residents' portfolio).

- Portfolio General

7. Cultural Curriculum - Dr. Beata Skudlarska has been pivotal in identifying the unique problems encountered by foreign medical graduates as they enter a new culture and new medical system. She has created a dynamic, interactive curriculum to address issues from how to open a checking account and get a driver's license to intercultural differences in the doctor-patient relationship and medical ethics.

Communication Skills

Clear, compassionate communication is a critical skill for physicians to master. To assess your ability to communicate with patients, physicians and other health professionals, our trainees are assessed regularly through the 360 degree evaluation system, focused conferences, and observed trainee-patient interactions.

1. Patients

- ABIM Patient Satisfaction Questionnaire

2. Attending physicians - in Work and Teaching Attending Rounds - and fellow houseofficers

- General Competency Evaluation

3. Nurses

- Nurse Evaluation of Resident

4. Other Allied Healthcare Personnel

- Discharge Planning Evaluation

5. 6-Competency OSCE - Every other year interns and residents perform 6-Competency objective structured clinical examination ("OSCE") one station of which is a "trained patient" who assesses communication skills.

6. Clinical Skills Examination (CEX) - All interns' and residents' communication skills are assessed yearly, when they perform an observed complete history and physical on an inpatient (Full clinical skills examination or "CEX"), every other year by a "trained patient" in our 6-Competency objective structured clinical examination ("OSCE") and on Teaching Attending Rounds when they are asked to obtain a brief history and/or perform a focused physical examination.

- Clinical Skills Examination

7. Attending Rounds - Teaching attendings go to the bedside of at least one patient each session with their team to either interview and/or examine patients. During these bedside visits, one trainee is selected to perform a clinical skill (history-taking or focused examination) with the team and attending observing (="mini-CEX"). The Teaching attending then models optimal performance and provides verbal and written (using subsets of the full CEX form) feedback to the trainee.

Teaching and Work Rounds Attendings require that trainees demonstrate BOTH complete case presentations and mastery of the "5-minute" presentation. Both Teaching Attendings and Work Rounds Attendings are also encouraged to examine regularly written documentation for completeness and accuracy. Trainees are given "feedback" about the assessments. Also during "Program Director's Rounds" once a month, the Program Director reviews written documentation and provides both verbal and written feedback.

- Evaluation of Medical Record
- Evaluation of Medical Record-Keeping and Chart-Stimulated Recall Exercise

One Teaching Attending Rounds each month is conducted by the Program Director wherein 1/3 of the session is dedicated to mastery of the "5-minute" presentation, 1/3 to systematic (Beysian) medical reasoning, and the final 1/3 to appropriate, comprehensive medical documentation (through records reviews).

8. Conferences (Morning Reports) - Residents present cases at every Morning Report and are given direct and immediate feedback regarding their oral presentation skills.

Practice-Based Learning

Practice-based learning includes ability of physicians to use information systems to maximize patient care and the degree to which we are able to learn from past cases and/or our errors.

1. Continuity Clinic Records Reviews - A program instituted by Dr. Paramanathan in our clinics, each resident performs a review of his/her own medical records for documentation of interventions/measures that are proven to enhance patient outcomes for a number of illnesses. Examples include screening for the 8 elements of diabetes longitudinal care and maintenance of comprehensive problem lists in the ambulatory record. Trainees examine medical records of 5 of their patients for these elements using the attached worksheets. They repeat the exercise after 6 months to determine the degree to which they learned from their previous performance.

Diabetes Management Checklist

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Comprehensive Problem Checklist
This system provides real-time evaluation of the quality of patient care in the chosen areas. Each year, new evidence-based measures will be added to the areas of assessment.

- Resident Self Evaluation - Problem List

2. Attending Rounds - During daily Work and Teaching Attending Rounds, attending physicians note the degree to which trainees learn from previous cases and whether they use the medical literature to inform patient care.

- General Competency Evaluation

3. The 6-Competency OSCE - Every other year, trainees perform an objective structured clinical examination (OSCE) comprised of 6 stations (one for each ACGME competency). The station for practice-based learning examines ability to access the medical literature to inform care of a patient case.

4. Quality-Assurance/Errors Management – In a program, since learning from medical errors is also an important facet of practice-based learning, a PGY-2 module includes 3 sessions spent at hospital quality management meetings, reading several chapters from the Institute of Medicine work on improving quality and reducing errors, and completion of a short quiz. These materials can be obtained in the Department of Medicine Program Director's office.

5. Regular Conferences (Morning Report, CPC) - In addition, Morning Report, which occurs every weekday, begins with a review of deaths and the degree to which medical decision-making and/or errors contributed. New cases are also "Q-A'ed" in similar fashion. Each month, at the Case Presentation Conference (CPC), the clinical course of a recently deceased patient is presented and discussed emphasizing medical decision-making and errors that may have contributed to death. A full-time Yale pathologist presents the (gross and microscopic) autopsy findings to examine the degree to which pre-mortem diagnoses are reflected in the post-mortem findings.

6. Journal Club and Scientific Methods Lecture Series - Each year, a series of lectures, for all residents, reviews scientific methods, statistical techniques and how to examine the validity of a published medical study. These skills are then practiced in monthly journal clubs and in smaller "break-out sessions" with a faculty member (once or twice/year

- Critical Review of Literature

Systems-Based Learning

This domain of medical performance includes the degree to which trainees utilize various medical/social systems to complement care of patients' organic problems. It also examines the degree to which they use resources appropriately and efficiently, functioning in a way to enhance the quality of care of their patients (and the system as a whole).

1. Discharge Planning Rounds - All interns on the Wards services meet with discharge planners twice each week to discuss disposition issues on their panel of in-patients. In this manner, they are educated about outpatient services, and how to actuate them for their patients to optimize the chances of success upon discharge. The program emphasizes that physicians must provide more than just care of organic problems. Rather they must learn to integrate knowledge of each patients' diseases and enhance their outpatient milieu and follow-up care to reduce the likelihood of recurrent hospitalizations. Behavior modification modalities and multi-disciplinary interventions arranged prior to discharge are reviewed and emphasized. Trainees are evaluated by the discharge planners/social workers regarding their facility in dealing with these issues.

- Discharge Planning Evaluation

2. Quality-Assurance/Errors Management - Trainees must learn that they are part of a much bigger healthcare system that monitors quality of care and medical errors. Accordingly, a combined practice- and systems-based learning exercise is performed by PGY-2's, and includes 3 sessions spent at hospital quality management meetings. Trainees read several chapters from the Institute of Medicine work on improving quality and reducing errors, and complete a short quiz. These materials can be obtained in the Department of Medicine Program Director's office. Trainees have learned real lessons from these sessions - some of have gone on to report their own errors or errors they have witnessed to enhance the quality of care of patients.

3. Errors-Management Exercise - All trainees are encouraged to identify one error they have either witnessed or made themselves. They should research the error in the medical literature, examine its "root cause" and devise a solution to be refined and implemented by hospital quality officials.

4. Systems-based Learning Curriculum - Dr. Robert Bernasek has spear-headed an effort to create a curriculum to include: a. office management skills, b. billing codes, c. use of protocols to maximize outcomes, minimize costs, d. efficient use of hospital resources. Although the curriculum is still in development, it is rapidly being integrated into Morning Report Discussions and noon conference lectures.