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# ACGMe-Bulletin

ACGME

**Accreditation Council for Graduate Medical Education**

The ACGME e-Bulletin is published several times per year by the ACGME and distributed to individuals in residency education. It is also available from the ACGME Web site at http://www.acgme.org/acWebsite/bulletin-e/ebu_index.asp

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## Enhancements to the Accreditation Process

*Jeanne Heard, MD, PhD, Rebecca Miller, MS, Kathy Malloy, BA*

Over the last 6 months the ACGME has instituted several new electronic enhancements to the information collection process for accreditation, in an effort to streamline information exchange and decrease paperwork burden. The ACGME has communicated these by global e-mails to the GME community and through this issue of the ACGMe-Bulletin. The new features are summarized below.

### New standard format of the letters of notification

In October 2006 the ACGME instituted a new accreditation notification letter for use by all review committees (RCs). The letter contains common sections which are explained in a key located on the Program Director and Coordinator's page of the ACGME website (www.acgme.org).

### More timely notification about accreditation actions

For non-adverse actions and confirmed adverse actions, program directors now receive timely notification via e-mail informing them of accreditation actions (statuses of non-adverse and confirmed adverse actions) within two weeks following a review committee meeting. Designated institutional officials (DIOs) receive copies of all letters, and core program directors are copied on notices for dependent subspecialties. The email contains the following information:

- New Accreditation Status
- Length of Program
- Effective Date
- Information about resident complement (if applicable)
- Decisions (e.g., request for progress report, acknowledgment of progress report)
- New Survey Date (if applicable)

For proposed adverse actions, instead of the email notification, review committee staff will notify the program director by telephone or through a separate email.

### New approach for programs to access accreditation letters

The ACGME will no longer mail hard copies of the letters of notification. Instead, these letters will be posted as PDF documents in the program's password-protected area within the Accreditation Data System (ADS), and are accessible using program and sponsoring institution login information. Within eight weeks following review committee meetings, program directors, DIOs, and core program directors for dependent subspecialties will receive notice that the letter will be posted in ADS the next business day after the notice is received. Program and sponsoring institution staff may then read or print the letter, as needed.

If the action is a proposed adverse action, a copy of the site visitor report and the procedures for proposed adverse actions are posted in ADS, along with the letter. For confirmed adverse actions, the procedures for appeals are posted in ADS along with the letter and indicate that a response should be made in writing through the US mail.

**Notification for applications**

Prior to an application being approved by a review committee, a program does not have access to ADS. For applications that receive an initial accredited status, review committee staff will email an introduction letter with his/her ADS login and password.

When an application is being deferred or the action is a proposed withholding of accreditation, the review committee staff will send the program director an email containing a PDF attachment of the notification letter. The DIO will be notified by email that the letter has been posted in ADS and can access it using his/her login information.

**New feature: responses to citations**

A new feature in ADS allows programs to respond to citations from their most recent accreditation review. Program directors and DIOs can locate their most recent notification letter and the icon "Response to Citations". By clicking on this icon, the program director can view the citations from the most recent notification letter. Programs scheduled for a site visit on or after December 1, 2007 will need to use this feature to prepare an electronic response to citations at the time they prepare the program information form (PIF) for the next accreditation site visit.

The ACGME implemented the "Response to Citations" feature to decrease the paper work burden for program directors and DIOs, by preloading citations from the last accreditation letter, and allowing the program to enter a response. Once fully implemented, the ADS-based response to citations will take the place of the section in the PIF that requests the following: *"list each of the citations, if any, from the notification letter that was sent following the last survey and review of the program and which contain an accreditation action and briefly and concisely describe the steps that have been taken to correct the problem."*

Programs and sponsoring institutions can use this feature at any time during the cycle for internal purposes such as tracking progress on addressing citations and preparing actions plans for the GME Committee. The ACGME will use the "Response to Citations" feature for two purposes:

1. In the immediate process of preparation for the next site visit until the PIFs are rewritten – the program director will provide the latest response to the citations, print it and combine it with the PIF for sending to the site visitor or RC;
2. To provide information when requesting an increase in complement.

Note that the "Response to Citations" feature *cannot be used for progress reports or responses to adverse actions as requested by the review committees.*

**New Common Program Requirements and Program Information Form**

At the February 2007 meeting, the ACGME approved the revised Common Program Requirements. The new Common Program Requirements have been edited and posted on the ACGME Website. They are being incorporated into specialty and sub-specialty requirements and become effective July 1, 2007.

The ACGME is in the process of revising the section of the Program Information Form that pertains to the common program requirements to accurately reflect the new requirements. This will be done by expanding the on-line Part 1 of the PIF. The ACGME will use the new Common PIF for site visits on and after December 1, 2007. The new Common PIF will streamline the process and reduce burden on programs, by having many sections pre-loaded with information provided through the annual ADS updates. Programs scheduled for site visits between July 1, 2007 and November 30, 2007, will need to complete a PIF transition document in addition to the current version of the PIF. The PIF transition document will be available from the RRC page on the ACGME web site by late May.

**Request for temporary and permanent resident complement changes**

Program directors must submit *all* requests for complement changes through ADS. When the program director completes the requested information, the DIO at the sponsoring institution is notified to approve the request. Once the DIO approves the request in ADS, the information is sent to the review committee staff for processing. Staff can approve many requests; however, some specialties require review and approval at the next review committee meeting. The only time the DIO does not electronically approve the increase via ADS is when a request comes at the time of the site visit. In preparing the PIF, the program director must complete the information about the request for a complement change in the electronic PIF. The DIO signifies his/her approval of this request by signing the PIF.

**Annual updates in ADS for dependent subspecialties**

This fall when the next period of annual updates begin, the ACGME will notify via email specialty (core) program directors, as well as the DIO and subspecialty program directors, of the deadlines for the annual updates for the dependent subspecialties.

**Process for communicating program director changes**

All requests for changes in program director (PD) must be submitted through ADS. Staff of all RRCs will *not* accept requests submitted via paper or email. Additionally, DIOs must initiate all changes in program director.

To initiate a change in program director, the DIO must log into ADS and under *Program & Resident Information,* select *Initiate PD Change* from the menu on the left. The DIO then clicks on the *Request PD* Change Icon for the appropriate program and is prompted to respond to several questions, including the new program director name, date and term of appointment, phone number, and PD email. The DIO must also verify that the new PD meets the required qualifications and is approved by the GME Committee.

An email which provides the login information will be automatically sent to the new PD when the request is initially submitted by the DIO. The program director must log into ADS to complete professional and certification information as well as other required documentation. The documentation (full or abbreviated curriculum vitae) varies by specialty, but the specific information requirements will be provided within ADS.

After the request is complete and submitted, the new program director is posted in ADS, and the submitted materials are forwarded to the review committee staff. The next business day the new program director will receive a welcome letter containing useful information including password confirmation. The review committees generally review and approve program director changes at their next meeting. The PD and DIO will be informed of any submissions that do not meet the review committee's requirements.

# Call for Abstracts
# ACGME/ABMS 2007 Joint Conference

## Physician Competence:
## From Deconstruction to Reconstruction

A conference on ***Physician Competence: From Deconstruction to Reconstruction,*** co-sponsored by the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS), will be held on September 15–16, 2007 at the Sofitel Chicago O'Hare Hotel in Rosemont, Illinois, with a reception and poster session September 15, 2007 from 6:00–9:00 pm.

The purpose of the poster session is to provide a forum for presentation and discussion of topics related to educating and assessing resident physicians that recognizes and honors the need to both deconstruct the ACGME competencies (in order to assure competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice) as well as reconstruct the ACGME competencies (in order to assure the development of skilled and compassionate physicians whose practice is more than the sum of these parts). Abstracts describing completed or ongoing projects, investigations, or innovative strategies addressing this challenging paradox are invited. Accepted abstracts will be presented on September 15, 2007 from 6:00–9:00 pm during a reception and poster session allowing for extended discussion with attendees.

### Submission Process

Abstracts must be received by the ACGME no later than midnight **July 15, 2007.** Submissions must be sent electronically using the ***Abstract Submission Form*** to **abstracts@acgme.org** and must be sent by the lead author. No substitutions will be accepted. Notification of acceptance for poster presentation will be sent by return email to the "sent" address of the lead author by **July 31, 2007.**

The lead author is responsible for notifying co-authors of the acceptance decision and all subsequent instructions. Display/presentation specifications will be provided at the time of acceptance. Accepted abstracts will be reproduced as part of the conference syllabus.

**All presenters are required to register for the conference.**

## Changes in the Accreditation Site Visit under the New Common PIF

*Ingrid Philibert, MHA, MBA*

In late 2006, the Department of Field Activities began to send an electronic notice alerting the program director and DIO of an upcoming site visit. The e-mail includes the date of the visit, name and contact information for the field representative, and initial relevant information. The e-mail is followed by a letter with detailed instructions for how to prepare for the site visit. The aim of the electronic notice was to give programs more time for PIF preparation and DIO approval of the site visit documents.

Beginning with the implementation of the new PIF in late summer of 2007, selected information to be verified and clarified during the site visit will no longer be requested through the PIF. The aim is to reduce the length of the PIF, and under the process the members of the ACGME Field Staff will review this information during the on-site visit. A new site visit announcement letter to be used for programs on the new Common PIF will include a detailed list of the documents and other information site visitors will verify, and the program requirements that these aspects of the review will address.

More information about the new Common PIF and the changes in the site visit process will be forthcoming in the summer of 2007.

## ACGME Department of Accreditation Committees Launches Educational Initiatives Related to the Competencies

*Julie Jacob, MA*

Pamela Derstine, PhD recently joined the Department of Accreditation Committees to oversee and assist with implementing educational initiatives of the ACGME review committees. The efforts relate to competency-based education and accreditation; another goal is to provide assistance to program directors for meeting ACGME educational requirements.

In her new role, Dr. Derstine will link the work of review committees, ACGME Accreditation Field Staff, and program directors/DIOs to ensure the progress of the ACGME Outcome Project as one of the ACGME's four strategic priorities. Her current responsibilities include: 1) development of RRC members through workshops and common RRC materials such as an RRC Primer (essentials of responses to PIF questions and sample citation language); 2) a Program Director Guide, which will contain suggestions for how to comply with elements of the common program requirements; 3) a Requirements Development Guide (for use by review committees that will offer step-by-step guide for writing new or revised program/institutional requirements and accompanying PIF/IRD questions/items); and 4) specialty-specific curriculum and assessment handbooks, to be ultimately available for all accredited specialties.

Dr. Derstine will work closely with executive directors and review committee Chairs to identify needs and develop effective and efficient approaches to provide assistance, as well as support planning, developing and assessing review committee pilot projects. In addition, she is available to meet with specialty

groups and program directors, provide workshops, and other assistance for education planning. She is a member of the ACGME Learning Portfolio development team and will oversee and coordinate RRC portfolio-related activities, as well as support portfolio implementation by working with individual programs.

Adding to her 10+ years experience in medical education as a teacher, educator, and curriculum and faculty development specialist, Dr. Derstine is completing a Masters in Health Professions Education degree with a focus on portfolio implementation and evaluation in GME. Her contact information is pderstine@acgme.org

## ACGME Educational Conference Features Sessions on Simulation

*Julie Jacob, MA*

"See one, do one, teach one" is the shorthand expression for the traditional way of teaching residents. But now more and more residency programs are changing that way to "See one, practice many times on a simulator, do one, teach one."

The 2007 ACGME Annual Educational Conference featured two sessions on simulation as a teaching tool for residents and as a tool for improving the safety and effectiveness of team-based clinical care. Two researchers from Western Michigan University's Center College of Aviation discussed how they have applied principles of aviation training to create simulator-based practice sessions to help health care teams improve their skills and improve patient safety. William Hamman, MD, PhD, and William Rutherford, MD, explained how they designed a simulation exercise in which teams of health care professionals worked through various patient scenarios using a combination of standardized patients (actors posing as patients) and electronic mannequins. They showed video clips of two health care teams doing a simulated practice session of caring for a patient in need of an emergency caesarean section. After the simulation sessions, which were videotaped, the teams were debriefed on their performance. This addressed various aspects of their performance, including team members' verbal acknowledgements of goals for the patient, assignment of team tasks, and transfer of leadership. The teams were then given suggestions on how to improve their performance.

Drs. Hamman and Rutherford noted that medicine can learn much from the aviation industry, but that there are differences. For example, teams in commercial aviation are mostly stable, while medical teams are fluid, with people constantly joining and leaving the team.

In another conference session, the director of medical education at Riverside Methodist Hospitals in Columbus, Ohio, Pamela Boyers, PhD, discussed Riverside's new simulation center, the Center for Medical Education and Innovation. The center, which opened in June 2005, is large and comprehensive, and contains a virtual hospital, a laboratory skills center, a cardiac and endovascular simulation lab, and a teleconferencing center.

More than 20,000 learners and visitors have used the center since it opened, noted Dr. Boyers, including residents, attending physicians, nurses, and medical students. Learners practice on simulators individually and in teams, and receive feedback on their performance. They also assess their own

performances. Residents who do simulated exercises at the center have more confidence in their skills, said Dr. Boyers, and faculty can more easily observe and assess residents who need to improve their clinical skills.

Following Dr. Boyers' presentation, David Murray, MD, director of the Clinical Simulation Center at Washington University School of Medicine, discussed the use of simulators in the education of anesthesiology residents.

## ACGME Clarifies Policies and Procedures Related to Internal Moonlighting and Internal Medicine Program Requirements for Emergency Department Rotations

*Ingrid Philibert*

The ACGME would like to clarify aspects of the Common Program Requirements relating to internal moonlighting, in response to questions from programs. First, the ACGME affirms that in specialties for which the review committees requires residents to log operative and procedural volumes, procedures performed during internal moonlighting may not be counted toward the operative volume statistics the program used in the accreditation process, since moonlighting is not part of the required program, and the added volume accrues only for residents who volunteer for internal moonlighting.

Second, the ACGME would like to clarify that internal moonlighting must be "actively voluntary," meaning that internal moonlighting opportunities may be advertised by the program and/or sponsoring institution, and residents must actively and completely voluntarily self-select for these experiences. Because internal moonlighting is not a part of the required or elective rotations in the program, it is *not* appropriate to assign an entire second- or third-year cohort to internal moonlighting, and give them the option to "opt out" if they do not wish to moonlight.

An April 2007 update to the Frequently Asked Questions (FAQ) for the common duty hour standards (http://www.acgme.org/acWebsite/dutyHours/dh_faqs.pdf) provides added clarification for the Internal Medicine Program Requirements. Residents rotating on another specialty are under the duty hour limits of the program providing the rotation. Common examples are that family medicine and TY residents in an emergency department rotation must comply with the shorter weekly limit of the Emergency Medicine Program Requirements (72 hours weekly, of which only 60 may be devoted to clinical activities), while Emergency Medicine residents rotating on another specialty are held to the 80 hour weekly limit in the Common Program Requirements.

An exception to this are specialties in which the specialty-specific program requirements include duty hour standards for a particular assignment, such as the Internal Medicine Program Requirements that "during emergency medicine assignments, continuous duty must not exceed 12 hours." This precludes added assignments to conferences and journal clubs that would take a rotating Internal Medicine resident beyond 12 hours during emergency department rotation, although the Emergency Medicine program requirements would permit it.

## Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations GME Enhancements Requests for Proposals

Recently the Veterans Health Administration announced its second round of requests for proposals (RFPs) for added residency positions in the areas of Critical Needs and Emerging Specialties; Identification of New Affiliations and New VA Sites of Care; and Educational Innovation for Internal Medicine, General Surgery and Psychiatry. Program directors and DIOs are reminded that innovations that may deviate from the program requirements must be approved in advance by the respective Residency Review Committee (RRCs). In addition, many RRCs require advance approval of requests for complement increases.

## ACGME to Hold Conference September 8–9, 2007 on Managing the Changes to Achieve Innovation and Improvement in the Learning Environment

On September 8 and 9, 2007, the ACGME will hold its second design conference on the learning environment at the Hotel Sofitel in Rosemont, IL (near O'Hare Airport). It constitutes the second event in a series to contribute to the design of the future learning environment, and will explore the principles of change management for incorporation into efforts to improve and innovate in the settings where residents learn.

The conference is intended for program directors, designated institutional officials, faculty, ACGME review committee members and others with a stake in graduate medical education. It will give this group the opportunity to learn best practices for managing change in the learning environment for adoption and adaptation in programs, sponsoring institutions and the work of the review committees. Sessions will allow attendees to discuss practical approaches for managing change and formulate concrete ideas for how to make changes in the learning environment that promote improvement and innovation.

Sessions will include a panel entitled *Change as a Component of our Daily Work and a Key Role for Educators and Administrators.* Panelists are Brenda Zimmerman, PhD, Frances Westley, PhD, and Michael Quinn Patton, PhD, who co-authored the book *Getting to Maybe.* Other topics include use of a campaign model for change; in situ simulation as a way to promote improvement and stories from the frontlines about managing change. The outcome of the conference will be a set of proceedings that will contribute to the ACGME's ongoing effort to promote innovation and change with the goal of improving the learning environment for residents.

Because of the interactive nature of this conference, registrations will be limited to 200 attendees. Registration materials have been posted in the Meetings and Workshops section of the ACGME's website.

## Topical Digest for the *ACGME Bulletin* and *e-Bulletin* as a Resource for Programs and Institutions

As a resource for programs and institutions, the ACGME has published a digest of topics covered in the articles in the *ACGME Bulletins* published since 2000 and the *e-Bulletin* since its inception in 2004. The articles are sorted by topic, such as limits on duty hours, the competencies and innovative responses by programs and institutions. They are arranged in reverse chronological order, with the most recent articles first. The digest includes the abstracts for the posters from the ACGME Educational Conferences that have been published in the *Bulletin* and *e-Bulletin*. The digest can be found at http://www.acgme.org/acWebsite/bulletin/digest05_07.pdf

## Winning Posters from the 2007 ACGME Educational Conference

From March 1 to 4, the ACGME held its 2007 Annual Educational Conference, attended by more than 1,000 program directors, designated institutional officials and program coordinators. The Marvin Dunn Poster Session featured a large number of informative, high quality posters. Based on review by a panel of judges, selected posters were invited to make an oral presentation during a dedicated session. The abstracts for these posters are shown below (with exception of the poster *Integrating Clinical Practice, Quality Improvement, and the ACGME Competencies into the Morbidity and Mortality Conference – Results of the 2005–2006 Academic Year* by Julie Stausmire et al, which was published in the December 2006 issue of the *e-Bulletin*).

### When to Cut? Using an Objective Structured Clinical Examination to Evaluate Surgical Decision-Making

*Christine B. Franzese, MD, University of Mississippi Medical Center Department of Otolaryngology*

***Purpose:*** To create an OSCE (Objective Structured Clinical Examination) specifically tailored to surgical residents that utilizes surgical case scenarios appropriate for the experience level of the residents and that can evaluate if residents understand the indications for a specific surgery, identify when those indications are met, and make the appropriate decision to proceed with an operation.

***Methods:*** The Surgical OSCE consisted of two case scenarios: a Junior case created for Post-Graduate Year (PGY) 2–3 level residents and a Senior case created for PGY 4–5 level residents. The Surgical OSCE was used to evaluate four Senior residents and four Junior residents in the Otolaryngology Department. The Junior case consisted of a straightforward scenario involving a patient referred for evaluation of chronic sinusitis who had received maximal medical treatment. The Senior case consisted of a patient referred for evaluation of hoarseness, complicated by unrecognized potential airway obstruction. "Patients" were instructed not to encourage residents that they needed surgery, but, that if surgery was recommended to them, to be willing to consent to surgery. Prior to the OSCE, residents were instructed to proceed as if they had all the capabilities of the ENT clinic, including the ability to order labwork, radiologic studies, and surgical scheduling. DVD recordings were made of each patient encounter and

reviewed by two separate faculty member experienced in that particular surgery. Faculty evaluated residents on whether surgical indications were elicited by history, if certain physical examination findings or radiologic findings were recognized, if residents made the correct diagnosis, and if residents made the decision not only proceed with surgery, but also the correct surgery.

***Results:*** Seniors (100%) were better at obtaining needed surgical information and indications through history than Juniors (50%), although both 100% of senior and junior residents found all applicable physical examination findings. All residents asked about prior treatment by another physician, but only 50% of Juniors asked about outside medical records. Seniors were also more willing to make the decision to proceed with surgery (100%) while no Juniors actually scheduled any surgery. Half of Juniors discussed possible surgery with the patient, while the other half only mentioned it as a possibility in passing. Reasons for this ranged from failure to elicit that patient had already had a Sinus Computed Tomography (CT) Scan, failure to elicit complete prior medical management, and lack of surety in proceeding with surgery. All seniors recommended the appropriate surgery to proceed with to the patient, but only 75% correctly identified the acute nature of the case and need for emergent intervention. Results of evaluations were reviewed with each resident individually.

***Conclusions:*** The Surgical OSCE was successful in evaluating resident surgical decision-making. Juniors were not as capable as Seniors in eliciting surgical indications and in "making the jump" to proceed with surgery. These results were used by our faculty to work with Juniors on surgical history-taking and decision-making. These results were also useful in identifying Seniors who could recognize an emergency situation.

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**Changing Culture from the Floor Up: Reinventing Definitions of Good Teaching through Direct Observation of Resident Rounds**

*Krista Hirschmann PhD[1], Martha Regan-Smith, MD, EdD[2], Sandra Yaich[1], William Iobst MD[1]*

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***Purpose:*** In an institution-wide effort to take inventory of the current teaching culture at Lehigh Valley Hospital, and promote the parallel processes of learner-centered teaching of patient-centered care, we a conducted series of direct observations of teaching contexts across departments. While the data collected provided a snapshot of departmental teaching strengths and weaknesses, the observations also served as an opportunity to stimulate reflection among faculty and begin a collective dialogue about what teaching skills should be considered *core teaching competencies.* Thus, the direct observation intervention not only served to collect data, but also stimulated new definitions of good teaching through individual contact with the faculty. Thus, observations provided the first step toward enhancing educational culture at LVH by creating shared meaning regarding teaching skills.

***Methods:*** We employed two educational consultants to do ethnographic qualitative research regarding the teaching culture. In addition to their field notes, they developed an observation feedback sheet in order to document specific skills sets. The three major groupings of skills were: Learner-Centered teaching, Patient-Centered Care, and Microskills. In order to garner buy-in and acceptance of their presence on the floor, the consultants used an appreciative inquiry model to frame open-ended feedback. This model

involved 1) documenting behavior as objectively as possible 2) reinforcing behavior that had a positive impact on the learner or patient 3) posing questions to prompt self-reflection about less desirable behaviors, rather than critiquing it outright.

***Results:*** On an organizational level, the direct observation program stimulated conversation among program directors, chairs, educational administrators, and faculty regarding the need for increased attention to institution-wide faculty development. Critical incidents included participants recognizing the value in promoting core teaching skills, unobserved faculty requesting observation, and observed faculty requesting repeat observations. In addition, the Institutional Review Committee's notification letter commended that it, "recognizes the Institution's exemplary efforts to improve graduate medical education (GME). Two endeavors are especially noteworthy namely … the direct observation of faculty for improvement of teaching skills. The latter, in particular, addresses a recognized critical need on the part of all programs and institution for faculty development, especially in addressing ACGME general competencies."

***Conclusions:*** Using direct observation techniques proved useful on several levels. While resource intensive, direct observation of clinical teaching skills with feedback was accepted by the faculty, facilitated discussion within our institution regarding core clinical teaching skills, and created opportunity for directed faculty development opportunities. Furthermore, using direct observation as a starting point for seeding conversation and prompting reflection, rather than as a critical assessment tool, helped gain buy-in at all levels, and prime the organization for further changes within the educational culture.

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**Implementation of an Education Program Dramatically Increases Utilization of Ultrasound Guidance for Central Venous Catheter Placement**

*Kristen M. Parker MD, Renae Stafford MD, Robert Mendes MD, Bruce A. Cairns MD, University of North Carolina, Chapel Hill, NC 27599-7211*

***Purpose:*** Approximately 15 million central venous catheters (CVC) are placed annually in United States hospitals. Placement of these catheters is traditionally taught during residency training using an anatomic landmark technique. Acute complications from catheter placement are as high as 10%. Ultrasound (US) guidance has been shown in randomized controlled trials to reduce complications compared to placement by anatomic landmarks. The Agency for Healthcare Research and Quality (AHRQ) recommended US guidance for CVC placement in 2001, in order to improve patient safety. Inexperienced learners are thought to benefit the most from this technology. Surveys of residents and critical care attending physicians indicate that only 10–60% of all CVCs are placed using US guidance. At our teaching institution, we introduced US guidance for placement of CVCs in the burn intensive care unit (ICU) using a see-one, do-one, teach-one model and found our usage to be no more than 10%. We hypothesized that the introduction of a formal educational program to teach US-guided CVC placement during the burn ICU rotation will increase use of this technique.

***Methods:*** The study design is a prospective cohort study of junior residents during their one-month rotation in the burn ICU at a teaching institution in the 2006–2007 academic year. Each resident received a formal educational program at the beginning of their rotation, including didactic information, one-on-one instruction by a vascular surgery interventional attending, and one month of supervised CVC

placement during their burn surgery rotation. All CVC placements in the burn ICU during the study period were included in the study. The primary outcome was resident's choice of technique for catheter placement. The frequency of US guidance versus anatomic landmark technique for this cohort was compared to a comparable resident cohort from a prior year in which the traditional see-one, do-one, teach-one model was used for education.

***Results:*** 122 CVCs were placed by 15 residents in the first three months of the study. The use of US guidance over anatomic landmark technique by residents increased from 10% in the control cohort to 63% in the cohort who received the formal educational program. Preferred site for catheter placement changed, with anatomic landmark-guided subclavian vein catheter placement 47% in the control cohort and US-guided internal jugular vein catheter placement 48% in the educational cohort. In the educational cohort, the number of venipuncture attempts was reduced with US guidance vs. landmark technique (1.6 vs. 1.9), consistent with published literature. Mechanical complication rates (pneumothorax, hematoma, vessel laceration) were not statistically significant.

***Conclusions:*** While US guidance appears to be superior to landmark technique for placement of CVCs to improve patient safety, actual practice usage of this technology does not appear to meet AHRQ recommended guidelines. Barriers to implementation of this technology exist beyond access to equipment. We found that adopting new technology is a complex process that requires behavioral change, but begins with education. Implementing a formal educational program for junior residents can improve use of this technology. We recommend all resident trainees who place CVCs be trained in US-guided technique.

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**Integrated Feedback-Curriculum Process is Associated with General Competency Acquisition**

*Earl J. Reisdorff, MD[1]; Sheri Clarke, MPA[1]; William Donohue, PhD[2]; Colin Baker, MA[3]; William Murray, BSEd[4]*

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***Purpose:*** Valid evaluation systems must demonstrate the ability to differentiate between groups having varied levels of expertise. Moreover, it is reasonable to assume that in a residency program, there will be progressive acquisition of the general competencies. We sought to create a valid evaluation system that captured both differences between training levels as well as progressive acquisition of the General Competencies.

***Methods:*** This was a prospective, observational, multi-center, cross sectional study approved by the Institutional Research and Review Board that compared general competency acquisition using a previously validated 85-item inventory using a 1–10 scoring system that correlates to a Dreyfus-Dreyfus scale. Resident scores (PGY 1 to PGY3) from the autumn of 2006 were used. Based on performance, the resident was given a "custom-designed" curriculum that correlated to his or her level of proficiency. Thus, the feedback process was linked to an educational curriculum. We compared mean scores (ANOVA) and calculated 95% confidence intervals. An $\partial$ of $<.05$ was significant.

***Results:*** There were 734 completed evaluations (n = PGY1 349; PGY2 142; and PGY3 243). The competency scores were as follows:

- *Patient Care:*
  PGY1 5.98 (95%CI 5.78-6.18); PGY2 7.16 (95%CI 6.91-7.42); PGY3 8.07 (95%CI 7.90-8.24)
- *Medical Knowledge:*
  PGY1 6.11 (95%CI 5.91-6.32); PGY2 7.23 (95%CI 6.98-7.47); PGY3 8.05 (95%CI 7.87-8.23)
- *Practice-based Learning Improvement:*
  PGY1 5.40 (95%CI 5.19-5.61); PGY2 6.40 (95%CI 6.10-6.71); PGY3 7.52 (95%CI 7.30-7.74)
- *Interpersonal and Communication Skills:*
  PGY1 6.54 (95%CI 6.33-6.75); PGY2 7.21 (95%CI 6.93-7.49); PGY3 7.96 (95%CI 7.77-8.15)
- *Professionalism:*
  PGY1 6.91 (95%CI 6.71-7.12); PGY2 7.68 (95%CI 7.42-7.94); PGY3 8.27 (95%CI 8.09-8.44)
- *Systems-based Practice:*
  PGY1 5.07 (95%CI 4.87-5.27); PGY2 6.28 (6.01-6.55); PGY3 7.17 (95%CI 6.96-7.37).

For all comparisons, ANOVA $p<.001$.

***Conclusions:*** The evaluation results show progressively higher scores as the level of training advances. Moreover, there is no overlap of the confidence intervals, thus demonstrating a substantial ability to discriminate between groups. Linking a curriculum to the feedback process might be contributing to the acquisition of the general competencies. Though this cause-and-effect is uncertain, there is clearly an association between providing a customized level-based curriculum with higher competency evaluation scores.

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**Effective and Efficient Collection of Data for Phase III Outcomes Using an Electronic Program Management System**

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***Purpose:*** To develop an electronic program management system to effectively and efficiently collect competency measurement data for Phase III Outcomes by:

1. Developing a relational database application within an overall electronic management system to collect competency data to meet Phase III requirements, while
2. Maximizing the use of common office management tools including software applications and web-based technologies, and
3. Improving the overall program administrative management.

***Methods:*** Our program has implemented an administrative management system that utilizes common office technologies including Microsoft Office Suite applications (Word, Excel, Access and PowerPoint), secured and unsecured Internet websites using HTML programming and the Electronic Residency Application System (ERAS). The system is developed around a core Access-based database of residency

and fellowship program data with the import and export of selected records to other application packages such as MS Excel or Word, Internet or intranet websites and (ERAS). This forms the basis for a data retrieval system that is flexible in its ability to provided customized objective outcome reports for assessing program performance to meet Phase III requirements. While meeting its primary objective, the system also streamlines our administrative operations which provides for a more effective allocation of resources.

***Results:*** More information is collected electronically to provide a broad range of customize reports; e.g. performance evaluation summaries, compliance reports, and tracking training trends for program improvement.

1. Cost savings of maximizing the use of existing resources vs. investment in new applications.
2. Improved response returns from faculty and staff.

***Conclusions:*** One of the most common concerns expressed by program directors about the Outcome Project is how the information collected from revised measurement tools will be managed. No matter how much data are collected, there is little value if it is not easily accessible for interpretation.

We have used readily available electronic office management products and tools to not only collect the data but to maximize the administrative management of our program. This process has allowed our program to keep pace with the explosion of data needs required by not only the ACGME but other regulatory agencies. Because the tools we use are commonly available to any program, they can be adapted to the individual needs of the program. Each program needs to address the common concerns of a "paperless" system – data security, purchase of software and hardware to support the system, addressing the issues of change with users, and training for the program manager.

As we enter Phase III of the Outcome Project, the electronic management of program information will be an effective and efficient method for not only collecting data but producing the information needed to identify program improvement opportunities.

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**Does a Practice-Patterns and Evidence-Based Autopsy Curriculum Improve Outcomes?**

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*([1]University of Miami Leonard M. Miller School of Medicine, [2]Mount Sinai Medical Center/University of Miami, Departments of Medical Education and Pathology, Miami Beach)*

***Purpose:*** Autopsies are an invaluable tool in medical education. Studies show autopsies consistently reveal major discrepancies between clinical and autopsy diagnosis in 30–40% of cases, and raise suspicion index of commonly missed diagnoses, subsequently leading to improved patient care. Despite their usefulness, autopsy rates have declined from 50% (1940s) to 10% (1980s). We developed a practice-pattern and evidence-based autopsy curriculum for Internal Medicine (IM) and Surgical residents to determine its effect on patient outcomes.

***Methods:*** We retrospectively reviewed a series of 223 consecutive autopsies from a large urban teaching hospital. Primary outcome measure: Most common major/minor missed autopsy diagnoses. Based on this, we developed a practice-pattern and evidence-based autopsy curriculum for IM/Surgical residents. Secondary outcome measures: Effect of educational intervention on autopsy rate, rate of missed diagnoses, and medical knowledge. We lectured in a morning report format with the facilitation/moderation teaching style. A tablet-PC was utilized with four PowerPoint slides summarizing the data. Pre-intervention testing

was performed via wireless audience response system asking multiple-choice questions (MCQ). Slides were printed and given to residents in a "pocket card" format. Follow-up questionnaires, sent via web-based survey/database program, assessed medical knowledge, quality of lecture style, and topic usefulness. We then prospectively collected six months of consecutive autopsies (n=31) in order to determine the effect of the educational intervention on autopsy rate and rate of missed diagnoses.

***Results:*** Pre-Intervention major disagreement in diagnosis: 13 cases (5.8%). Additional/ unexpected findings: 169 cases (75.8%). Findings that would have changed patient management if known: 20 cases (9.0%). Of unexpected findings, infections were most commonly missed: 112 cases (50.2%), followed by malignancies (15.2%). Broncho-pneumonia was the most common infection (27.4% of all autopsies). Most common major missed diagnoses: Intracapillary glomerulosclerosis (9.9%), acute myocardial infarction (9.0%), pulmonary embolism (7.6%), and gastrointestinal ulcers/erosions (7.2%). One month post-curriculum implementation, autopsy rate increased from 7.1% to 9.7% (Chi-square .69, p=NS). Six months post-implementation, autopsy rate declined to 5.1% (DF=2, Chi-square 2.67, p=NS), major disagreement in diagnosis increased to 6.5% (Chi-square 0.02, p=NS), additional/unexpected findings increased to 93.5% (Chi-square 4.99, $p \leq 0.05$). Medical knowledge (as evidenced by aggregate percent correct on MCQ) increased from 33% (n=51) pre-intervention to 84.6% (n=23) post-intervention. Resident evaluations showed that 86% of residents felt this was a valuable learning experience, 39% strongly agreed they would be more likely to ask for autopsies on their patients, and 35% strongly agreed the intervention would increase autopsy rate.

***Conclusions:*** A practice-pattern and evidence-based autopsy curriculum improves medical knowledge and autopsy rates immediately post-intervention, although results did not meet statistical significance. However, after six-months of follow-up, autopsy rates declined and both major disagreements in diagnosis and additional/unexpected findings increased. Further study is ongoing to determine whether this focused teaching intervention will improve missed autopsy diagnoses, a surrogate marker for improved patient care. Limitations of the study include inability to present the curriculum to private physicians and physicians with patients not being cared for by residents, as these physicians are also responsible for the autopsy rate and rates of missed diagnoses.

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**Changing the Approach to Resident Education in Geriatric Emergency Medicine: Assessment of a New Geriatric Chief Complaint-Based Curriculum**

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***Purpose:*** For most emergency medicine residency programs, the didactic educational format follows the Model of the Clinical Practice of Emergency Medicine (EM) – a framework based on general chief complaints and organ system pathology[1]. Aside from elder abuse, this model does not include geriatric specific chief complaints. A chief complaint based curriculum allows for contextual learning that may lead to more rapid integration of new information into patient care and increased retention of new medical knowledge – a more focused age-specific chief complaint curriculum may further enhance resident education. We hypothesized that a geriatric chief complaint based didactic curriculum would improve residents' patient care of elderly patients in the emergency department (ED).

***Methods:*** For patients 65 years of age or greater, we determined the most frequent chief complaints encountered in the ED over a one year period. A geriatric chief complaint curriculum consisting of one hour presentations addressing each of the most frequent chief complaints was then developed and presented by Geriatric and EM faculty members as an additional component of the scheduled didactic curriculum. A pre- and post curriculum implementation chart review assessed each residents documentation of key components derived from clinical practice guidelines and geriatric EM reviews as follows: differential diagnosis/patient evaluation considers atypical presentations of common diseases, determination of baseline function, chronic care facility/caregiver communication, cognitive assessment, and assessment of polypharmacy. Each resident ($n = 18$) received five pre- and post-implementation chart reviews performed by a single reviewer. 95% confidence intervals for pre- and post-implementation chart review measures were calculated and statistical significance was determined by one-tailed z-test for two proportions ($p \leq 0.05$).

***Results:*** For the selected chief complaint of falls, differential diagnosis/patient evaluation considers atypical presentations of common diseases was documented on 36.67% pre-implementation (95% CI: 26.71–46.63) and 50.00% of post-implementation charts (39.67–60.33). Determination of baseline function was documented on 57.78% (47.58–67.98) and 75.56% (66.68–84.44) of pre- and post implementation charts, respectively. Chronic care facility/caregiver communication occurred on 45.56% (35.27–55.85) of pre-implementation charts and 65.56% (55.74–75.38) of post-implementation charts. Documentation of cognitive assessment was noted on 46.67% (36.36–56.98) and 74.44% (65.43–83.45) of pre- and post-implementation charts, respectively. An assessment of polypharmacy was documented on 73.33% (64.19–82.47) of pre-implementation charts and 90.00% (83.80–96.20) of post-implementation charts. All of the five measures for the chief complaint of falls demonstrated statistically significant improvement. For the chief complaint of abdominal pain, chronic care facility/caregiver communication, cognitive assessment, and assessment of polypharmacy demonstrated statistically significant improvement in documentation of the measures, while differential diagnosis/patient evaluation considers atypical presentations of common diseases and determination of baseline function were not significantly different. For weakness, differential diagnosis/patient evaluation considers atypical presentations of common diseases, chronic care facility/caregiver communication, and cognitive assessment demonstrated statistically significant improvement while determination of baseline function and assessment of polypharmacy were not significantly improved from the pre-implementation measurements.

***Conclusions:*** A geriatric chief complaint based curriculum improved EM residents' approach to the care of elderly patients in the ED compared to a non-age specific chief complaint based curriculum.

[1]*2005 EM Model Review Task Force. 2005 Model of the Clinical Practice of Emergency Medicine, http://www.acgme.org/acWebsite/RRC_110/110_clinModel.pdf*

# Selected Other Posters from the 2007 ACGME Educational Conference

**Enhancing Effectiveness and Usefulness of the Internal Review Document and Committee**

*Martie Parsley, PhD, Daniel Giang, MD, Loma Linda University Medical Center, Loma Linda*

***Purpose:***

1. Improve the effectiveness of institutional oversight of Graduate Medical Education;
2. Structure a collegial approach to facilitate educational improvement at the institutional level;
3. Minimize the disruption to residents' and physicians' work, while increasing their contributions to the IRR process;
4. Cross-validate data of faculty, residents' and program director's perceptions of the state of program for thorough program review;
5. Increase validity of Internal Residency Review (IRR) Report by having report document as center of discussion at IRRC meeting;
6. Assure accuracy of interpretation of IRR report;
7. Gather detailed information about the program under review to assess its compliance to ACGME regulations, institutional requirements, and educational standards;
8. Provide a mechanism for new program directors' and coordinators' orientation;
9. Educate faculty and residents on the role of ACGME in the accreditation process.

***Methods:*** During review of our protocol for the IRR, we recognized the potential for strengthening GMEC in several areas by redesigning the format, distribution and collection procedures, and composition of the IRRCs. Procedures used:

- Thoroughly reviewed ACGME requirements for IRRCs and IRR reports;
- Listed and categorized ACGME institutional requirements and responsibilities;
- Listed and categorized reviewed program's RCC requirements;
- Listed and categorized LLUMC's institutional educational goals and objectives and specifics for program under review;
- Designed electronic formats to accommodate the above and includes additional material such as ACGME's Resident Survey;
- Survey and LLUMC's annual Resident/Program survey; piloted format and questions;
- Designed a comprehensive document that pulls together surveys, interviews, and additional required data that is produced for discussion at the IRRC to increase efficiency and effectiveness.

***Results:*** IRRC members as well as the program under review have found both the process and the reports more beneficial. Participation in the process is now seen as educational, which new program directors have especially seen as important in their orientation. The web-based survey has increased efficiency in receiving information from the interviewers and program directors, allows easy calculation of quantitative data for reports and easy access for GMEC and IRRC members. Internal Reviews are easily tailored for individual programs by including the specific ACGME previous concerns and citations, results of ACGME Resident survey, LLUMC's annual Resident/Program survey results, as well as the program's specific RRC requirements.

***Conclusions:*** This is unquestionably a dynamic project – evolving from an open-ended set of questions for the Program Director to respond to, as well as a similar set of questions given to the designated faculty and resident interviewers to a full on-line electronic survey program that is tailored for the program under review. Recent additional steps include in person interviews with Program Directors and coordinators and the DIO and Graduate Medical Educator and including a program coordinator on the IRRC to interview the coordinator of the program under review. This emphasizes the role of the coordinator we highlight in the residency programs and, we have found, provides an environment much more conducive to a "team" approach to residency program administration and education. This also recognizes the professional status of our coordinators.

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**Interim Analysis of American Headache Society Objective Simulated Clinical Computer Encounters for Assessing the ACGME Competencies**

*David J. Capobianco, MD[1]; David W. Dodick, MD[2]; Jonathan Gladstone, MD[2]; Elizabeth Loder, MD[3]; R. Allan Purdy, MD[4]; Nabih Ramadan, MD[5]; Stephen Silberstein, MD[6]; Lisa Bance[7]*

*([1]Mayo Clinic Department of Neurology, Jacksonville FL 32224; [2]Gladstone Headache Clinic; [3]John R. Graham Headache Center; [4]Queen Elizabeth II Health Science Center; [5]Rosalind Franklin University of Medicine; [6]Jefferson Headache Center; [7]RedActive Inc.)*

***Purpose:*** Develop an interactive Consequence-Based Learning System (CBL) meeting the objectives of the ACGME's Outcome Project and providing quantitative outcomes that improve resident and program performance. The BETA Phase of the Neurology Residents' Program was introduced October 1, 2005. This innovative curriculum was designed to meet the requirements of the Outcome Project by using Objective Simulated Clinical Computerized Encounters (OSCCE) with patients presenting with headache. Nine graduate medical education (GME) programs participated in the program. Residents completed the OSCCE's, including PGY-2, PGY-3, and PGY-4 level residents.

***Methods:*** Each case includes a group of specific learning objectives that guide the case scenario. Each case is structured as units that divide the case into practice areas, (e.g., history taking, physical examination). Each case is supported by key decision points that serve to evaluate learner needs and performance. Decision points are evaluated using a range of four levels. The resident receives feedback regardless of their level of achievement. Feedback corresponds to ACGME competencies.

***Results:***

- *Thunderclap Headache*
  Medical Knowledge – 24% demonstrated effective attainment of competency
  Patient Care – 49% demonstrated effective attainment of competency

- *Cluster Headache*
  Medical Knowledge – 52% demonstrated effective attainment of competency
  Patient Care – 60% demonstrated effective attainment of competency
- *Episodic Migraine*
  Medical Knowledge – 59% demonstrated effective attainment of competency
  Patient Care – 67% demonstrated effective attainment of competency
- *CADASIL*
  Medical Knowledge – 61% demonstrated effective attainment of competency
  Patient Care – 55% demonstrated effective attainment of competency

***Conclusions:*** The BETA phase effectively identified learning gaps with neurology residents. Residents who participated in the program reported a very positive learning experience. Qualitative and quantitative outcomes measuring achievement in each of the six ACGME core competencies are being developed. This program will be offered free to all neurology resident GME programs in January 2007.

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**Residents Can Change Healthcare with the Proper Tools: Lessons from Using the Healthcare Matrix**

*Doris Quinn PhD, Vanderbilt University Medical Center, Nashville*

***Purpose:***

1. How residents and faculty change usual learning environments (M&M and case presentations) to a focused improvement forum using the Healthcare Matrix. Whether care is safe, timely, effective, efficient, equitable or patient-centered (IOM aims) is juxtaposed against the ACGME Core competencies. When care is assessed in this manner, ALL the competencies become very relevant to the outcomes of care.
2. Using publicly reported measures of quality (mortality, pneumonia, AMI, CHF) makes the case for why residents, as front line providers, have an important role in improving outcomes of care while demonstrating the value of system-based practice and practice based learning and improvement.

We will present the work of internal medicine residents who have: a) utilized the Matrix to assess the care of their patients (and show how multiple matrices provide data to improve care and education): b) select two external measures of quality (pneumonia and coronary artery disease) to demonstrate how residents use system-based practice and practice based learning and improvement to impact care.

***Methods:*** Residents learn to use the Matrix to assess care of one of their patients during a 16 hour class that occurs during their ambulatory rotation. These matrices when aggregated provide meaningful data about the care of patients in medicine and whether the residents understand the competencies. Then as a group, they choose a publicly reported measure and complete one or many matrices for this patient population. This becomes the basis for their improvement project. They flowchart the process, identify issues (cause and effect diagram), interview other care providers to learn more about the process, and select one or more improvements to try or recommend. If time permits them do a PDSA (improvement) themselves or the next class may continue the project (such as pneumonia where ED and medicine residents are leading the effort while collaborating with nurses and supported by senior physicians leaders).

***Results:*** To date the residents have impacted the care of patients with pneumonia (from ED or clinic visit to administration of antibiotics), coronary disease (including care of pts with diabetes), instituting TIME OUT process for medical procedures, and many others. Public measures from CMS, JCAHO, Leapfrog are utilized in the assessment.

***Conclusions:*** When the ACGME competencies are combined with the IOM aims and used to assess and improve care of patients in "real time", learning the competencies becomes the way residents think of patient care, and not a burden or add on. This process allows residents, who are the most knowledgeable about workarounds and flaws in the system, to use their experience to improve care. Residents, faculty, the institution and most important the patient benefit. The real test is whether residents see this as a "project" for ACGME or a way of life for them as leaders of improvement. We have enough comments from former residents that the latter may be true!

| Care of Patient(s) with… | | | | | | |
|---|---|---|---|---|---|---|
| IOM / ACGME | SAFE | TIMELY | EFFECTIVE | EFFICIENT | EQUITABLE | PATIENT-CENTERED |
| **Assessment of Care** | | | | | | |
| I. PATIENT CARE (Overall Assessment) | | | | | | |
| II. a MEDICAL KNOWLEDGE (What must I know) | | | | | | |
| II. b INTERPERSONAL AND COMMUNICATION SKILLS (What must I say) | | | | | | |
| II. c PROFESSIONALISM (How must I act) | | | | | | |
| II. d SYSTEM-BASED PRACTICE (On whom do I depend and who depends on me) | | | | | | |
| **Improvement** | | | | | | |
| III. PRACTICE-BASED LEARNING AND IMPROVEMENT (How must I improve) | | | | | | |
| © 2004 Bingham, Quinn | | | Information Technology | | | |

*Reference: Bingham, J, Quinn, D, et al. (2005) Using a Healthcare Matrix to Assess Patient Care in Terms of the Aims for Improvement and ACGME Core competencies. JC Journal on Quality and Patient Safety, 32(2), 98-105.*

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## Initiatives in Improvement of Door to Balloon Time at a Tertiary Care Hospital

*Devang M. Desai MD, Mouhammed Joumaa MD, Abdulrahman Arabi MD, Thomas LaLonde MD, Howard S. Rosman MD, St. John Hospital and Medical Center, Detroit*

***Purpose:*** For the cardiology fellows to lead a process of system-wide, continuous improvement and rapid feedback to reduce door to balloon time for patients presenting with acute ST elevation myocardial infarction (STEMI)

***Methods:*** In February, 2005, we retrospectively reviewed thirty cases of STEMI. The average door to balloon time was 130 minutes. We developed a data form identifying each step in the process and created a team that included leaders of every area of the hospital involved in the care of STEMI patients. Each area individually and the team collectively reviewed each case within 36 hours of admission as part of a continuous improvement process.

***Results:*** Sixty successive STEMI cases were evaluated prospectively in 2006. Improvements of the door to balloon process were developed on a continuous basis. Twelve major improvements have been made in the STEMI process, highlighted by:

1. ECG performed and interpreted within 12 minutes of arrival of patients with possible acute cardiac ischemic syndrome.
2. Activation of intervention team by ER attending with one telephone call.
3. Laboratory and personnel availability maximized by careful scheduling and process improvement.
4. Standardized data collected on all cases detailing timing of each step of the door to balloon process.
5. Detailed feedback to all involved within 36 hours.
6. Initiation of an "ECG in the field" (by Emergency Medical Services) program.

***Conclusions:*** A fellow led system wide improvement process has led to significant improvement, exceeding national standards, in door to balloon process for STEMI.

## A Letter to the Editor of the e-Bulletin

*In the December 2006 issue of the e-Bulletin Jefri Palermo, MA, Pediatric Residency Program Coordinator at the University of Iowa Hospitals and Clinics described a system for tracking and recording evidence of residents professionalism (Evaluating Professionalism and Practice-Based Learning and Improvement: An Example from the Field)*

I don't think that putting numbers on professionalism, trying to quantify it, is possible or appropriate. Then professionalism becomes achievable through piece work. Professionalism is a quality and that words are better used to assess it. What if someone gets a score of 400 and then lies about something. Are they reduced to a 380? Can they then get their score back by more good works? It seems very vulnerable to gaming and being perverted by a quantification scheme. The best feedback on professionalism about my fellows that I receive is from written comments by nursing, clerical and specialty workers. Please don't quantify professionalism.

*John H. Newman, MD, Elsa S. Hanigan Professor of Pulmonary Medicine, Vanderbilt Medical Center*