Correction

In the February e-Bulletin, *the article on preparation for the accreditation site visit incorrectly noted that programs should include a copy of the Letter of Report from the most recent institutional review in the materials sent to the assigned Field Representative. This information now is provided to your assigned site visitor directly from the ACGME and does not need to be sent by the program.*

Revising the Program and Institutional Requirements

Kathy Malloy

The program and institutional requirements are an important aspect of the accreditation process, and program and institutional leaders may be curious how the Residency Review Committees (RRCs) and the Institutional Review Committee (IRC) review and update their requirements. The ACGME Policies and Procedures require all Review Committees to review their requirements at least once every five years. These reviews may entail minor updates to the standards, or may result in more significant changes to the requirements. The RRCs or the IRC may initiate major changes because of a need to update the educational curriculum, to meet changing national standards for the specialty or to address changes in the responsibilities of sponsoring institutions.

To begin the revision process, an RRC or the IRC may opt to send a copy of the current requirements to program directors and ask for feedback about needed changes that may be included in the proposed revisions. At the time of a revision, the Review Committee also may consider suggestions for changes it has received over the period since the requirements were last updated.

The RRC staff then prepares a draft of the proposed revisions. After these draft requirements have undergone final review by the RRC, they are disseminated widely for review and comment. This process entails notifying the specialty's program directors, designated institutional officials (DIOs), the RRC appointing organizations, other specialty organizations, the ACGME member organizations, the chairs of the other Review Committees and the ACGME field staff about the proposed change. In addition, the proposed requirements are publicly posted on the "Review and Comment" page on the ACGME's Web site (http://www.acgme.org/acWebsite/reviewComment/rev_programReq_Index.asp). Individuals and organizations have 45 days to review the proposed revisions and submit written comments to the Review Committee's executive director.

At the RRC meeting following the end of the Review and Comment period, the RRC considers all comments and decides how they should be addressed in the revision of the standards. A final draft of the proposed requirements and an impact statement justifying the proposed revisions is then submitted to the

ACGME for approval. This document includes summaries of the comments on the proposed requirements, and a summary of the Review Committee's response to all substantive comments. The proposed requirements are then reviewed at the next meeting of the Committee on Review of Requirements and the ACGME Board of Directors. Once the Board approves the revisions, the updated requirements become effective on the following July 1 or January 1. The effective date for the revisions is at least six months after the date of approval by the Board of Directors.

The revised requirements are posted on the ACGME Web site as "Approved but not in effect," and program directors, DIOs, the RRC appointing organizations and ACGME field staff are notified of the posting. This process is followed for all substantive changes in the requirements, including any minor updates. ∎

Kathy Malloy is the associate executive director of the ACGME Committee for Review of Requirements.

ACGME Clarifies Averaging of Duty Hours, "Mid-Cycle Review" for Programs with an Early Site Visit

To clarify an aspect of the ACGME's common duty hour requirements, the Committee on Review of Requirements at its February 2005 meeting noted that, where the standards permit averaging of requirements (such as the 80-hour weekly limit, or the frequency of in-house call in most specialties), programs should average duty hours within the given rotation. Assignments should not be designed so that heavy and light assignments are averaged to leverage compliance, nor should vacation weeks be included in the averaging.

The ACGME also receives questions about the timing of the internal review when site visit dates are moved up at the request of the program or the ACGME. The Institutional Requirements state that the internal review should be conducted approximately at the midpoint between the last RRC review and the next site visit. When the visit is moved up, and the internal review has not yet occurred, Institutional Review Committee expects programs to perform an internal review as soon as possible, even when this places it in close proximity to the site visit date. When an internal review occurs under these circumstances, the reason should be documented in the summary that is included in the Institutional Review Document.

Program directors also should be aware that when the RRC requests a progress report, collection and provision of this information cannot take the place of an internal review, even when the dates are roughly coincident. The two processes and the documents resulting from them have different purposes and intended audiences. The aim of the progress report is to offer the Residency Review Committee (RRC) information on how the program has addressed problems identified during the last review. In contrast, the internal review should produce a forthright assessment of a program's strengths and areas for improvement, and allow problems that are identified to be addressed prior to the next RRC visit. ∎

Guest Editorial

Lions and Tigers and Bears

Peter J. Fabri, MD

When Dorothy led her three friends along the yellow brick road to see the Wizard of Oz, she did not realize that the quest for brains, heart, and courage would be solved by realizing that they were there all the time. Nor did the group realize that their fear of lions and tigers and bears preventing their progress to Oz was unfounded and unrealistic. When the Greeks, the Egyptians and later the Arabs could not predict the movement of the sun, stars and planets, they invented a series of concentric spheres each moving in a different direction at a different rate. They still were not able to accurately predict the celestial movements. They failed because they insisted the earth had to be in the center. When Galileo perfected the telescope and proved that the sun was in the center, explaining the movements of the celestial bodies, the authorities refused to accept his observations for almost 200 years. Dorothy and the astronomers overcame a problem by inventing a solution. They believed in their "magic" so strongly that they resisted the truth.

These stories can be used to illustrate a problem in graduate medical education. Many medical educators still are convinced that the way to train residents is the way *they* were trained. When the ACGME introduced the common duty hour standards, the response of a significant number of academic surgeons was to resist, deny, and then try to do the same things in a compressed time period. The term that applies to this solution is to put "five pounds of content into a three-pound bag." Many solutions have been invented to solve the duty hour issue – night float, home call, use of fellows or mid-level practitioners, increased attending involvement – to name just a few. Each assumes the method used to educate residents is correct, and the goal is getting around the duty hour limits. The common concerns with these approaches is whether residents will get short-changed in their clinical experience, and whether the quality and continuity of patient care will be diminished.

None of this may be real. The duty hour limits may be merely a symptom of the real problem – that the paradigm for educating residents, which dates back one hundred years, is outdated and inappropriate in a world where new information is being produced at an exponential rate and technology puts data and solutions at our finger tips. The task will entail reengineering our residencies by finding new ways to educate the residents and take care of routine clinical tasks that used to be delegated to residents because they were readily available. If we could reinvent resident education using a clear statement of the knowledge, skills and attitudes we expect at the conclusion of training, we could create a progressive and logical sequence of learning that would parallel the work product that residents produce for their attending physicians and hospitals. Perhaps we could even redefine the 80-hour week as 40 hours of work and 40 hours of education.

A common complaint in the academic workplace is, "why are they doing this to me when we do so well already?" This is a difficult position to support since we have never measured the effectiveness of our training programs, except for the results of standardized written examinations. We do not assess how well prepared our residents are for the medical marketplace, how well they perform in the first years of practice, how often they get sued or lose their privileges, or whether they develop a chemical dependency. These would be useful outcome measures, with direct implications for patients and society. Instead, we invoke the Muse, chanting if we were able to do it, then so can they.

　　　　Our model for residency education can be traced back directly to the efforts of Osler and Halsted at Hopkins a century ago, and to British and German medical educators before them. Little change has occurred over the many intervening years. The apprenticeship model dominated, and worked so long as patients were inpatients and hospital stays were long. "Housestaff" did not rebel against long hours, as long as they were single males who lived in the hospital.

　　　　The introduction of quality management by W. Edwards Deming in 1948 and Bloom's competency based education model, which has served as the basis of higher education in the US for more than 40 years, went largely unnoticed by medical educators. Today, they are combined in the Outcome Project of the ACGME. The six "Core Competencies" form the basis of resident education, and are becoming interconnected to the goals of the undergraduate curriculum and the learning objectives of continuing medical education. Medical education is moving toward continuous life-long learning, and the operative paradigm is interpreting and using information, rather than memorizing facts and becoming a walking repository of knowledge. The Dreyfus brothers described a progression of acquiring competence from Novice to Advanced Beginner to Competent to Proficient to Expert to Master and identified the characteristics of each step. Residency includes the range from Advanced Beginner to Competent; undergraduate medical education is the progress from Novice to Advanced Beginner, and Continuing Medical Education advances the competent practitioner through proficiency, expertise, and mastery. Collectively, they span the educational continuum and lead to a life-long search for knowledge and wisdom. This quest demands new learning skills, advanced problem solving, and a solid infusion of probability and decision theory, database management, and information science.

　　　　The task immediately before us involves managing duty hours. This requires asking the question whether we will focus our efforts on finding ways to just do it as we have always done, or whether we will ask ourselves what a resident should learn to be competent at the end of training. Let us assume that the goal of redesigning resident education is to graduate individuals for whom we will proudly sign our names to a certificate, vouching for their competence. We then can begin to ask ourselves whether all things that residents do are necessary. We can explore how much "time on task" is really wasted, redundant or waiting time, and how much "educational time" truly is devoted to assist residents in the progressive acquisition of competencies for independent practice. And we can begin to ask the question, "am I competent?"

　　　　Dorothy invented a solution for the problems of the Cowardly Lion, the Tin Man and the Scarecrow. At the same time, she fostered the fear that accompanied them along the way. But there weren't any lions or tigers or bears. And duty hours, the traditions of surgical training, and the rigors of "doing it as I used to do it" are just as easy to dispel. The "yellow brick road" of surgical training is a path to producing competent individuals to whom patients can turn with confidence. There is no Wizard of Oz to create magical solutions to invented problems. But a competency-based curriculum, which maps new knowledge, new skills, and acquisition of core qualities with a new set of privileges within the residency scope of practice, can dispel the "magic" and set the tone, create the benchmarks, and define the outcomes. Perhaps, if we click our heels, the duty hour problem will disappear. ∎

Innovative Ideas on Duty Hour Compliance

At the 2005 ACGME Educational Conference, several posters presented during the Marvin L. Dunn, MD, Poster Session offered innovative ideas for compliance with the ACGME common duty hour requirements. A selection of them is presented here.

Does Sleep Equal Safety? Exploring the Impact of the 80-Hour Work Week

Daniel G. Cuadrado, MD, Brian Beldowicz, MD, Bernard J Roth, MD, Lisa Danforth-Lewis, BA and Kenneth Azarow, MD, FACS. Madigan Army Medical Center, Fort Lewis, WA

Purpose: On July 1, 2003 our institution implemented the 80-hour resident work hour restrictions, in accordance with the ACGME regulations. Part of the impetus for change was the 2000 Institute of Medicine report citing the number of "medical mistakes" in US teaching institutions. The impact of these new regulations on patient safety has yet to be determined.

Methodology: A retrospective review of all inpatients at Madigan Army Medical Center for the academic years 2002–03 and 2003–04 was performed. The total numbers of potentially compensable and sentinel events were obtained from a prospectively maintained risk management database. All such events were studied before and after the initiation of the duty hour limits to determine the effects.

Summary of Results: A total of 23,200 patients were treated during the study time period (11,390 first year and 11,810 second year). Prior to implementation of duty hour restrictions 22 potentially compensable events and two sentinel events occurred for rates of 0.19 and 0.02% respectively. In the following year there were ten potentially compensable events (0.08%) and three sentinel events (0.03%). The odds ratio for PCE between years was 0.44 (95% CI, 0.08, 2.45) was significant by chi square analysis (4.95, $p < 0.05$). For sentinel events, the OR was 1.45 (95% CI 0.02, 89.13) and was not statistically significant.

Conclusions: In the first year following enactment of resident work hour restrictions there was a significant decrease in the number of potentially compensable events. The number of sentinel events remained unchanged. Although the etiologies of medical mistakes are multi-factorial in nature these data suggest a potential benefit on patient outcomes and deserve further study.

Enhancing Satisfaction and Complying with Duty Hour Requirements: A Pediatric Surgery Case Example

Karen E. Heiser, PhD, Donna A. Caniano, MD and Patricia Jay, MBA. Education Institute and Pediatric Surgery, Children's Hospital, Columbus, OH

Purpose: Not-for-profit hospitals have a mission to comprehensively meet needs of the community by providing such services as Level I Trauma. Patients believe that they receive better care in academic medical centers. Most believe there should be limits on resident duty hours. The revised the ACGME duty hour requirements provided the impetus to examine these complimentary goals and to design a new clinical education model.

Methodology: Children's Hospital is a free-standing tertiary pediatric institution with 21 ACGME accredited programs, including a two-resident pediatric surgery program, and a one-fellow surgical critical care program. An additional 19 general surgery residents in post-graduate years 1 through 4 rotate annually. The following steps were taken to achieve duty hour compliance and maintain Level I trauma status:

1. Hired 4.3 FTE advanced practice nurses (APNs) for day and evening coverage;

2. Modified Level II trauma responsibilities;

3. Hired three additional surgical faculty (one hospitalist and two pediatric surgeons);

4. Transferred responsibility for in-house call to pediatric surgery faculty; and

5. Revised the residents' schedules.

Summary of Results: 100% compliance was obtained, as validated by the monthly timesheets, duty hour surveys, and resident interviews. These changes also are evaluated by their impact on: 1) patient safety; 2) satisfaction – patient, resident, and staff; and 3) cost. Patient safety is tracked by several measures including incident reports, unplanned returns to the OR, and trauma indicators. The safety data remained the same or improved. Patient and nursing staff satisfaction improved with the use of APNs. Resident satisfaction also improved with more opportunities for self-directed learning and less time responding to Level II trauma. The costs were significant (~$1.8 million annually).

Conclusions: External factors can positively impact GME by providing the impetus to reexamine the overall clinical education model. However, it requires collaboration and resource commitment between hospital administration, GME, and clinical services.

Strategies to Re-engineer a Teaching Hospital to Meet the ACGME Duty Hour Requirements, Improve Resident Education and Increase Patient Care Efficiency

Peter Watson, MD, William Conway, MD, Lucy Young, Peter Tate, Robert Burke, MD, Melissa Brunsvold, MD, Peter Coggan, MD, and William Schramm, for the 80 Hour Work Week Task Force, Henry Ford Hospital, Detroit, MI

Purpose: In October 2002, to preemptively respond to anticipated changes in the ACGME duty hour limits, a multidisciplinary task force was created to re-engineer medical care in our institution. This project was not only an effort to comply with duty requirements, but it represented a new opportunity to improve care at the institutional level.

Methodology: Using system-wide internet based resident surveys and focus groups, processes were identified as redundant, non-educational and increasing the number of resident hours worked weekly. Other activities performed by residents were non-standardized and posed potential patient harm. The task force consisted of the chief executive officer, chief medical officer, director of medical education, nursing, medical staff, residents, and other ancillary personnel. The goals of the task force included:

1. Identifying ways to involve residents in institutional quality improvement;

2. Formulating and implementing a plan using a multidisciplinary approach to solve institutional workflow problems;

3. Examining hospital processes that affect the resident work day; and

4. Evaluating how increasing hospital efficiencies improve patient care while decreasing resident work hours.

Results: Endpoints of the ongoing project include improvement in resident satisfaction; a measurable reduction in the number of hours that residents/fellows spend in non-educational patient care activities; and increased safety of particular resident inpatient processes. Areas of improvement included: inpatient test ordering, viewing radiology studies, documentation redundancy, discharge planning and appointment scheduling, discharge medication safety, and patient "handoffs." By implementing focused projects in these areas, significant reductions in the average resident's workweek (12.9 hours internal medicine residents, 11.2 hours general surgery residents) were achieved.

Conclusions: Despite tradition, institutions can no longer rely solely on individual residency programs to reduce resident workload. A focused multidisciplinary approach and small reforms of "old and broken" processes can yield significant time savings and increased efficiency. ∎

What's Happening?
Institutional Faculty Development for Duty Hour Compliance and the General Competencies

Ingrid Philibert

A "town-hall meeting" session at the 2005 ACGME Educational Conference, allowed Designated Institutional Officials (DIOs) to "best practices" to prepare teaching faculty to address the general competencies and duty hour compliance. The attendees also discussed barriers to effective faculty development, and suggestions for how the ACGME could assist. Below is a summary of selected ideas shared by the DIOs and other institutional representatives who attended the session, which may be useful for other institutions to adopt or adapt.

"Best Practices" for Faculty Development

- An annual faculty development workshop, for which residents select the primary topic;

- Combined educational sessions for program directors and coordinators;

- Education programs for residents that address the differences between residency education and "real world" expectations;

- "Advanced" resident orientation in small group sessions led by faculty, with CME provided;

- Interdisciplinary Evidence-based Medicine/Systems-Based Practice Rounds involving physicians, nurses, other health professionals, medical records personnel and legal counsel;

- Adapt the Internal Review to provide opportunities to learn about each other and to network;

- An annual retreat for program directors and coordinators;

- Resident input into faculty "credentialing" for teaching, with the evaluation based on the six general competencies; and

- Resident luncheon sessions with the senior associate dean to promote sharing resident concerns without fear of retaliation.

Suggestion How the ACGME Could Assist

Attendees discussed obstacles to effective faculty development. Mentioned most frequently were the challenge of teaching the language and terminology of the competencies to faculty and residents; better preparing faculty for their role as evaluators; and getting faculty development "out" into programs, with faculty attendance one of the largest obstacles.

DIOs and others at the session also offered suggestions for how the ACGME could assist. Many ideas related to sharing validated assessment tools, including tools suitable for individual clinical specialties; providing more benchmark data to allow programs to assess how well they are doing; address inconsistencies across RRCs which make universal oversight challenging; adding a status report on the competencies to the ACGME notification letters; offering faculty development programs for new and established faculty with CME provided by the ACGME; Web-based educational programs on sleep loss and fatigue; and assistance with a resident portfolio including resolving the related question, such as who owns the portfolio.

ACGME staff participating in the session shared some recent enhancements to assist program director and DIOs in performing their role. This included copying the DIO on the letter the RRC for Internal Medicine sends to programs requesting them to complete the Computer Assisted Accreditation Review (CAAR) documents and associated surveys in preparation for a site visit. Other enhancement entail posting RRC notification letters in ADS, which makes them more accessible to DIOs; and weekly e-mails to DIOs notifying them of pending changes that require DIO review and approval. The goal of these enhancements is to make the accreditation process more transparent and easier to navigate for programs and sponsoring institutions. ∎