FROM THE ACGME BULLETIN EDITOR

Practical Answers to Frequently Asked Questions

Ingrid Philibert

The past year has found ACGME and the residency education community engaged in implementing the common duty hour standards and continuing the application of the six general competencies under Phase 2 of the Outcome Project. This issue of the *ACGME e-Bulletin* offers practical advice and clarification related to these activities, including a timeline for implementing the general competencies in subspecialty programs, and a clarification of the averaging period for the common duty hour standards. It also showcases two innovative ideas related to the duty hour and competency mandates. ∎

Introducing the Six General Competencies at the Mayo Clinic in Scottsdale

Julie Jacob

When the family medicine program at the Mayo Clinic in Scottsdale, Arizona, decided to revamp its curriculum at the same time the ACGME introduced the general competencies, this was the perfect opportunity to develop a collaborative care curriculum to teach the core competencies to residents, said Keith Frey, MD, chair of the department of family medicine at the Mayo Clinic in Scottsdale. "It converged at the same time," said Dr. Frey. "The first project came out in 2001. It was seeded by a grant from the Robert Wood Johnson Foundation."

The collaborative care curriculum teaches the competencies of practice-based learning, interpersonal and communication skills, and systems-based practices through a yearlong project in which residents in the final year of training analyze, develop and apply clinical guidelines for treating patients with common chronic diseases.

At the beginning of the academic year, senior residents pick a common chronic illness, such as diabetes or hypertension, explained Dr. Frey. The residents review the charts of patients with the condition and develop a plan to improve either the diagnosis or management of the disease. For example, last year the residents developed guidelines for improving the management of lipid levels in diabetic patients.

With guidance from the faculty, residents then do a literature review, develop the guidelines and present them to physicians, nurses and allied health staff during grand rounds and other meetings. The guidelines are then printed on laminated cards and placed in exam rooms and teaching areas. At the end of the year, residents look at the effect these guidelines had on patient care.

The project gives residents the opportunity to learn and hone skills in several areas, including looking at populations of patients, communicating with their colleagues and working with allied health staff to improve patient care, noted Dr. Frey. "It gives them a better understanding how to communicate with colleagues, and how to use nursing staff as allies in introducing a better model of care," said Dr. Frey.

Fred Edwards, MD, the program director for family medicine at the Mayo Clinic in Scottsdale, agreed that the collaborative care curriculum is a helpful teaching tool. "It is a valuable lesson for residents," said Dr. Edwards. "They haven't been exposed to this before the project. They were just looking at their own patient care, without looking at a broader patient population." Another indication of the project's success is the jump in resident confidence, measured through self-administered surveys completed at the beginning and end of the project. "Our survey shows they are much more confident in reviewing literature and understanding the quality of the literature underlying practice recommendations," said Dr. Edwards. "They have a greater understanding of how their individual practices affect patient care." ∎

Assessment of the Six General Competencies in Accredited Subspecialties

Ingrid Philibert

Over the past two years, core programs have incorporated the six general competencies into teaching and evaluating their residents. When the general competencies were initiated in July 2002, ACGME exempted subspecialty programs. In recent months, it has received questions from subspecialty program directors and designated institutional officials about the time line for including subspecialties in the assessment of the general competencies. *Exhibit 1* provides a timeline for all accredited subspecialties, showing whether the competencies have been incorporated into the subspecialty program requirements, and the date by which the Residency Review Committee (RRC) expects that they will be used in the review of programs.

Once a subspecialty incorporates the competencies in its program requirements, the *General Competencies and Outcome Assessment Form* (formerly known as the *Competency Addendum*) will be made available through the Accreditation Data System (ADS). At present, completion of the form is required only for the Otolaryngology subspecialty of Neurotology. The program requirements in several other subspecialties include the competencies language, but these subspecialties are not yet being reviewed (sleep medicine) or the RRC plans to start the review at a future date. A number of RRCs anticipate that the review of the competencies in their subspecialty programs will begin in July of 2005. In the interim, at the time of the accreditation site visit programs may offer information on their progress on the competencies to the RRC on a voluntary, informational basis. ∎

Exhibit 1
Assessment of the Six General Competencies

Specialty/Subspecialty		Competencies in current program requirements	Competencies assessed during site visits	Planned date starting assessment
020	Allergy and Immunology	Yes	Yes	
040	Anesthesiology	Yes	Yes	
042–48	Anesthesiology Subspecialties	No	No	To be determined
060	Colon and Rectal Surgery	Yes	Yes	
080	Dermatology	Yes	Yes	
081	Procedural Dermatology	No	No	To be determined
100	Dermatopathology	No	No	To be determined
110	Emergency Medicine	Yes	Yes	
114–119	EM Subspecialties	No	No	To be determined
120	Family Practice	Yes	Yes	
125–127	FP Subspecialties	No	No	To be determined
140	Internal Medicine	Yes	Yes	
141–157	IM Subspecialties	No (PRs under review in fall 2004)	No	Planned for 7/1/2005
130	Medical Genetics	Yes	Yes	
190	Molecular Genetic Pathology	No	No	To be determined
160	Neurological Surgery	Yes	Yes	
180	Neurology	Yes	Yes	
181,185, 187,188	Child Neurology, Clinical Neurophysiology, Pain Medicine, Vascular Neurology	No	No	
186	Neurodevelopment Disabilities	Yes	No	To be determined
200	Nuclear Medicine	Yes	Yes	
220	Obstetrics and Gynecology	Yes	Yes	
240	Ophthalmology	Yes	Yes	
260	Orthopaedic Surgery	Yes	Yes	
261–270	Orthopaedic Surgery Subspecialties	No (PRs under review in fall 2004)	No	Planned for 7/1/2005
280	Otolaryngology	Yes	Yes	
286	Neurotology	Yes (7/1/2004)	Yes	7/1/2004
288	Pediatric Otolaryngology	No (PRs under review in fall 2004	No	Planned for 7/1/2005
300	Pathology–Anatomic and Clinical	Yes	Yes	

Core programs are indicated by grey shading, and began to use the competencies in the accreditation of programs in July 2002.
Dates for subspecialty programs indicate the date the general competencies are (will be) used in program reviews.

Exhibit 1 (continued)

Specialty/Subspecialty		Competencies in current program requirements	Competencies assessed during site visits	Planned date starting assessment
301–316	Pathology Subspecialties	No (PRs under review in fall 2004)	No	Planned for 7/1/2005
320	Pediatrics	Yes	Yes	
321–336	Pediatrics Subspecialties	No (under consideration)	No	To be determined
340	Physical Medicine and Rehabilitation	Yes	Yes	
341–345	Physical Medicine and Rehabilitation Subspecialties	No (at the next review of the PRs)	No	To be determined
360	Plastic Surgery	Yes	Yes	
361–363	Plastic Surgery Subspecialties	No	No	To be determined
380	Preventive Medicine	Yes	Yes	
398–399	Preventive Medicine Subspecialties	No	No	To be determined
400	Psychiatry	Yes	Yes	
401–407	Addiction, Child & Adolescent, Forensic, Geriatric, Psychosomatic Medicine	Yes	No	To be determined
408	Pain Management (Psychiatry)	No	No	To be determined
430	Radiation Oncology	Yes	Yes	
420	Radiology–Diagnostic	Yes	Yes	
421–427	Diagnostic Radiology Subspecialties	No	No	To be determined
440	Surgery–General	Yes	Yes	
442–445	Surgical Critical Care, Hand Surgery, Pediatric Surgery	No	No	To be determined
450	Vascular Surgery	No	No	Planned for 7/1/2006
460	Thoracic Surgery	Yes	Yes	
480	Urology	Yes	Yes	
485	Pediatric Urology	No	No	To be determined
520	Sleep Medicine (Internal Medicine, Neurology, Otolaryngology, Pediatrics, Psychiatry)	Yes	Not yet being reviewed	To be determined
999	Transitional Year	Yes	Yes	

Reducing Duty Hours in the University of Florida Neurological Surgery Program

Julie Jacob

The University of Florida's neurosurgery faculty was sure of one thing regarding the ACGME's duty hour standards: they would not wait until the last minute to figure out how to restructure resident schedules to comply with it. In the summer of 2002, a year before the implementation deadline, the faculty began to figure out how to adjust the neurosurgery residency program to comply with the duty hour standards.

At first, the faculty tried to get the residents to simply be more efficient in getting their work done, said William Friedman, MD, program director for the University of Florida's neurosurgery program. "That didn't work," said Dr. Friedman. "Some residents were very efficient in getting their work done, but others were less efficient and couldn't seem to get out of the hospital. It became clear that a system that relied on every one of the 12 residents being efficient was unlikely to ever work for us. We needed to come up with something that was more solid, in which variation in individual abilities would not play a role."

The faculty decided to take a three-pronged approach to restructure the duty hours and work patterns for residents. In one change, off-service residents (those in neurology, neuropathology and research rotations) were asked to take their turn doing in-house call on the weekends since they do not take care of patients during the week. This change cut reduced call for residents from once every fourth or fifth night to once every seven nights. The program faculty also made sure that every resident's post-call day fell on a weekday. "By insisting that every resident had a Saturday or Sunday completely out of the hospital and making sure their post-call day was a week day, we were able to mathematically guarantee that they would be under 80 hours if they started rounds by 5:30 a.m. and went home by 7:30 p.m. on the days they were not on call," said Dr. Friedman. "This was achievable by even our slowest residents."

The department also hired four advanced registered nurse practitioners (ARNPs) to handle non-educational patient work, such as pre-operative care. The addition of the ARNPs has been good for patients as well as the residents, said Dr. Friedman. "Hiring ARNPs has enabled us to get residents more focused on educational activities. We have also seen a fairly significant increase in patient satisfaction because the ARNPs have more time to spend with patients." Adding four ARNPs increased the department's costs, noted Dr. Friedman. While the hospital paid for some of these costs, most of the expense was footed by the neurosurgery department.

Residents initially resisted the duty hour limitations. Now they are happier and more rested, said Dr. Freidman. What is still unknown is whether the quality of patient care has increased along with patient satisfaction, he said. "Everyone is struggling with measures of patient care … it's not so easy," said Dr. Friedman. "We are going to have to wait for our hospital to let us know the effect on patient care." ■

TY Review to Include Responses to Prior Citations for Sponsoring Programs

Ingrid Philibert

Beginning immediately, the information requested in preparation for a site visit for a Transitional Year (TY) program will include responses to the citation from the last accreditation review for the program's two "sponsoring programs." The document that addresses prior citations needs to be sent to the accreditation field representative assigned to the program along with the program information form and other documents provided prior to the site visit. The letter announcing the TY site visit will alert the program director to the need to provide this information. ■

Revisiting a Frequently Asked Question: Clarifying the Averaging Period for the Duty Hour Standards

Ingrid Philibert

In the 14 months since July 1, 2003, when the new common duty hour standards became effective, the ACGME has published responses to frequently asked questions on its Web site and in newsletters. A recurrent question concerns the averaging period that applies to the 80-hour weekly limit, and the requirements that one day in seven be free from all program duties and that in-house call be no more frequent than every third night. An expanded answer to clarify some recent questions that have arisen is provided below.

While some programs have interpreted the standard to allow a "rolling average," the ACGME's intent is that averaging be by rotation, aggregating over either a four-week or a one-month period. A rolling average, as is provided by some duty hour software programs, may mask compliance issues and is not acceptable to ACGME, though programs may use it for internal monitoring purposes. Similarly, in calculating the frequency of in-house call, it is not appropriate to combine rotations with in-house call and those that do not include call. Also note that the RRC for Internal Medicine does not permit averaging of the interval between in-house call. Overall, it is useful to remember that ACGME expects that duty hours during the rotation with the greatest hours and frequency of call comply with the common standards.

A related issue concerns averaging for periods during which the resident takes vacation or other leave. ACGME requires that vacation or leave days be taken out of the numerator and the denominator for calculating duty hours, call frequency or days off. I.e., if a resident is on vacation for one week, the hours for that rotation should be averaged over the remaining three weeks. Because questions about the averaging period continue to emerge, ACGME plans to clarify this aspect of the common requirements at its February 2005 meeting. ■

Data from the ACGME Resident Survey Highlight Link between Duty Hours and the Learning Environment

Ingrid Philibert

ACGME has begun to analyze data from the first year under the new common duty hour standards. A poster presented at a recent Conference on Systems-Based Practice sponsored by ACGME and the American Board of Medical Specialties highlighted links between resident hours and deficiencies in the learning environment, using accreditation data, information from the ACGME Resident Survey and resident comments.

Accreditation data showed that of the 2,027 programs reviewed in Academic Year 2003-04, 101 (5%) received citations for non-compliance with the duty hour standards. For programs with a next site visit date set by the RRC, the mean cycle length if the program had a duty hour citation was 2.85 years (compared to an overall mean of 3.3 years). Mean cycle length for programs with citations for duty hour non-compliance and deficiencies in the learning environment was shorter yet at 2.05 years. Overall, the accreditation cycle length for programs reviewed in AY 2003-04, at 3.30 years, was shorter than the mean of approximately 3.7 years for the past several years. The shortened cycles for programs with duty hour citations may have contributed to this.

Data from the ACGME Resident Survey showed that, of the nearly 25,200 responding residents, the percentage who reported working beyond the weekly limits was quite small. Only 834 residents (3.3%), reported working more than 80 hours per week, but they were distributed across 370 programs (24.8% of the 1,492 responding programs). This suggests that factors at the level of the individual level may be contributing to some residents working beyond the duty hour limits. At the same time, in 81 programs (.5% of responding programs), 15% or more of the residents reported working beyond 80 weekly hours, and in four programs, more than 50% of the residents reported exceeding the weekly limit.

Table 1 highlights differences in residents' perception of the educational environment, grouping programs by the percentages of residents working above 80 hours. In programs in which more than 50% of the resident worked above the weekly limit, resident were more likely to indicate they performed support functions (95%, compared to 22% for programs where less than 15% of the residents worked beyond 80 hours). This suggests a link between deficiencies in the learning environment and higher duty hours, although the analysis is preliminary and the number of residents in some groups quite small. At the same time, resident satisfaction with their educational environment did not decline correspondingly to the increase in activities that do not contribute to their education.

Table 1
Resident Perceptions of their Educational Environment

	Yes or "To a great extent"		No or "To a limited extent"	
< 15% work beyond 80 hours				
Residents perform support services	5,127	22%	17,713	76%
Educational environment is satisfactory	20,068	86%	3,117	13%
> 15% but < 50% work beyond 80 hours				
Residents perform support services	105	38%	168	61%
Educational environment is satisfactory	164	59%	111	40%
> 50% work beyond 80 hours				
Residents perform support services	39	95%	2	5%
Educational environment is satisfactory	29	71%	11	27%

(1) Selected data from the ACGME Resident Survey, grouped by residents reported working > 80 hours per week
in their most recent rotation.

Residents' comments emphasized they felt more rested and alert; perceived themselves to have more balance between their professional and personal lives; and had more time for reading, self study and preparing for conferences or journal clubs. At the same time, they voiced concerns about the increased intensity of service during their shortened hours, and expressed worry about their and junior residents' educational and professional development.

ACGME plans further analysis of the effects of the common duty hour standards. Focusing on the relationship between duty hours and the learning environment will offer insight into the conditions that lead to excessive duty hours, and in the effect of the limits on learning and patient care. This will contribute to applying the limits in ways that maximize resident learning and patient safety. ∎