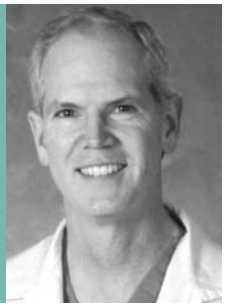
The New ACGME Resident Duty Hours: Big Changes, Bigger Challenges



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The Accreditation Council for Graduate Medical Education (ACGME) has recently responded to pressure from several constituencies by imposing strict guidelines for duty hours for all residents and fellows in all accredited training programs. Though for now, these rules are only "pro-posed" and still open for comment, you can take it to the bank that they will be "im-posed" on all ACGME institutions with a current anticipated date of July 1st, 2003.

To my mind, this is the biggest sea change in graduate medical education to come down the pike in the 27 years I've been involved—either as a resident or faculty. How did we get here and where will this likely take us in the next few years?

BACKGROUND

For many years residencies have involved long hours, sleepless nights, and often unreasonable demands on young physicians, thereby valuing stamina above quality education. This has been justified as "character building," or a "right of passage," necessary for all physicians. Even the words we adopted in the days of Osler to describe postgraduate training were inflected with tones of crime and punishment. Young physicians were literally "interned" in the hospital for their first year and after that considered "residents." They lived, ate, and all too infrequently slept in their hospitals. For most of the history of graduate medical education, the quality of life and the educational environment of any individual house staff officer was very much at the whim of his program director. Most of you reading this article will vividly recall struggling to maintain consciousness after a long night on call with no sleep and no hope of sleep for another 8 or 12 hours. You surely remember falling asleep in morning conference, maybe dozing off on the end of a retractor in the operating room, or worse yet, nodding off while driving home. No one looked closely at the negative effects on residents' education, family life, and safety or, most importantly, the patients cared for by these physician zombies.

Then came Libby Zion. In 1984 an 18-year-old woman named Libby Zion came to the Emergency Room of Cornell Medical Center Hospital and a few hours after admission, she died. Her father—a former federal prosecutor and writer for the New York Times claimed his daughter's death had at least in part been due to care given to her by overworked and under-supervised residents. Though the grand jury investigation into this case exonerated the hospital and the physicians involved, it showed a light on the whole system of resident training and supervision. In 1989, the so-called "Bell Commission" made its recommendations to the State of New York and the first rules regarding resident duty hours were passed. The hospitals and not the training programs were held responsible and were in fact fined when violations were identified. Several recommendations of the Bell ommission remain the basis for all subsequent regulations on resident duty hours: an 80-hour work week; no more than 24 hours on duty; no more than 12-hour shifts in the Emergency Room; and at least one 24-hour period free from clinical responsibilities in each week.

Though these rules went into effect in New York in the early 1990s, there was a catch: the so-called "surgical exclusion." These rules were not enforced for surgical specialties—often the residencies with the most abused house staff. In 1999, the State of New York finally began enforcing its own regulations on the surgical programs as well, and found that there was gross noncompliance. Many hospitals were warned, many were fined, and gradually most came into line.

In the mid-1990s the ACGME for the first time imposed specific duty hours guidelines for a few specialties through their Residency Review Committees (RRCs). Internal medicine and family practice residencies were first, but for most programs, including all surgical specialties, the guidelines remained vague. It was left up to the program director to take responsibility for his or her residents' welfare; some included call frequency limits or the 24-hour per week free time rule. The public, the residents, and eventually government agencies felt that this was not enough. Led primarily by a residents' group, The American Medical Student Association (AMSA), in partnership with several public interest groups (Public Citizen, The Center for Patient Advocacy, and others) has tried to force federal regulation of resident duty hours. They petitioned the Occupational Safety & Health Administration (OSHA) to regulate resident duty hours, citing higher rates of motor vehicle accidents, depression, and pregnancy complications among overworked residents. OSHA rejected that petition just a few months ago. AMSA and the same partners have worked with Rep. John Conyers (D-MI) to sponsor proposed

House Regulation 3236, the Patient and Physician Safety and Protection Act of 2001. This bill remains before the House of Representatives. This calls for the same 80-hour work week, the 24-hour on-call limit, and some other interesting ideas, including annual resident surveys and public disclosure of hospitals that violate duty hour regulations.

It was in the face of these pressures that the ACGME decided this year to propose that all residency programs have the same duty hours restrictions. These include, but are not limited to (there are other guidelines regarding moonlighting, etc.):

- An 80-hour work week, averaged over 4 weeks
- 24-hour on duty limit (with 6-hour extension for "patient continuity"and education)
- One 24-hour period per week free from clinical duties
- In-house call no more than every 3rd night
- 10-hour rest period between all clinical duty periods

These "proposed" guidelines are still "open for comment," but will be imposed on all programs July 1st 2003.

WHAT WILL THIS MEAN FOR OCHSNER?

The Ochsner Clinic Foundation will comply with all regulations set by the ACGME and is committed to maintaining full accreditation for our institution and all our residency and fellowship programs. This means that we have already begun preparations to make certain that all our programs fit within the new guidelines. We have, for the first time, completed a resident duty hour time study, over a 4-week period from January 6th through February 2nd, 2003. We record the duty hours of all residents in all programs at our institution. This is done by entering data first onto time cards carried by the residents and from there to an Intranet-based program database. We will survey not just the "core" programs whose host institution is OCF, but also all joint and affiliated programs that rotate residents through our institution. With around 250 such residents and fellows, this is a daunting task.

But not as daunting as the next task—which will be to assure that all our training programs come into compliance with the ACGME guidelines. The January survey was just that: a survey. It will tell us which programs need help in meeting these guidelines and which are already in compliance. From that time, we will have only 5 more months to achieve compliance. Thereafter, all programs not in compliance will be cited in violation on both internal reviews and at RRC site visits. The Graduate Medical Education Committee that I chair has the institutional responsibility for assuring that all programs reach and maintain compliance. This will mean ongoing, periodic surveys—probably forever.

We know that the impact will be felt most heavily in our surgical programs. For my program—Orthopaedic Surgery—the biggest issue will not be the 80-hour work week, the one-in-three call frequency, or the 24-hour per week free time, but the "post-call" restriction. If a resident was on duty in the hospital for the last 24 hours, even if he slept through the night, he will have to go home for at least 10 hours, before he can return. He cannot come to the operating room and assist, and he cannot come to the clinic and see patients.

The New York programs that have lived in compliance with these rules for several years have pioneered many creative solutions. One common solution is a "night float" system, replacing the current on-call system. This means a resident comes in at, say, 7 p.m. and takes call until 7 a.m.. Two such residents might share call for month working only at night. This system has worked well in England and has been embraced by many programs in New York, but there are obvious impacts on resident education. Little surgery is done during these hours and few conferences are held. Attendings are rarely in the hospital during those hours, etc. In at least one Orthopaedic program in New York, their residents take night float call for 3 or 4 months of their PGY2 year and at least 2 months of their PGY3 year. This 6-month loss of surgical experience has to be balanced against the time gained by the residents not taking call at night and not being exhausted the next day.

Many other programs have redefined resident (and staff) duties to free the residents up from noneducational "scut" work that can be done by other personnel. And most hospitals have found it necessary to hire many more mid-level providers (physicians' assistants, nurse practitioners, and surgical assistants) to fill in the voids left by work previously done by residents.

We have had extensive experience in a few of our programs doing time studies to maintain compliance with RRC guidelines, and the administrative burden is labor-intensive. No one has a good estimate of the increased administrative cost of these regulations and the costs of hiring more mid-level personnel. But for most major medical centers that have already accepted these changes, the increased cost has been in the millions of dollars per year.

SUMMARY

Though these changes will be difficult to implement and expensive to accommodate, no one can really argue that maintaining the current system of overworking residents is rational. I've included several references below with hard data on the impact of sleep deprivation on resident work performance and patient care delivery. I encourage you to read some of them. You might also peruse the AMSA website (www.amsa.org/hp/rwhprimer.pdf).

Though obviously written from the bias of the overworked resident, it might be an eye-opener to some who still see residency as a "right of passage" to be endured in the name of some delayed educational gratification. I have read all the data presented with the petition to OSHA, and though I strongly disagree that OSHA is an appropriate regulatory body for resident educational issues, the data are compelling. We should also be aware that the limit on physician work hours in the European Union is 48 hours per week, in the UK 56 hours per week, in Germany 56 hours per week and in Australia, 75 hours per week! (1). I am not proposing that Americans will ever "work" like the Brits or most Europeans. But I leave you with this statistic: one JAMA study reported that 41% of 145 residents surveyed cited fatigue as a cause of their most serious mistake. In nearly one third of these cases, the patient died as a result of the error (2).

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