December 7, 2010

The Honorable David Michaels, PhD, MPH
Assistant Secretary for Occupational Safety and Health
U.S. Department of Labor
Occupational Safety and Health Administration
200 Constitution Avenue, NW
Washington, DC 20210

Dear Dr. Michaels:

On behalf of the more than 250,000 surgeons and anesthesiologists we represent and the millions of surgical patients we treat each year, the undersigned surgery and anesthesiology organizations write this letter to share our significant concern about the petition filed by Public Citizen and other parties to the Occupational Safety and Health Administration (OSHA) addressing regulation of resident duty hours. We believe that the federal government should not regulate medical resident and fellow training education, including duty hours, outside of the currently existing Accreditation Council for Graduate Medical Education structure. **For the reasons we outline below, we therefore adamantly oppose any additional regulatory intervention from OSHA, or any other entity, which would jeopardize the integrity of physician education.**

The issue of resident duty hours is critically important to the surgical community because it impacts the delivery of high quality, safe patient care, the education and training of residents in the future, and the well-being and safety of surgery and anesthesiology residents and fellows. Resident hours are one of many factors that impact quality and safety of patient care and the well-being of residents. Severe restrictions on resident duty hours without supporting evidence of corresponding benefits will result in a host of unintended negative consequences.

For example, limits on resident duty hours result in increased patient hand-offs and frequent transitions in care from one resident or team to another. This increased number of transitions may negatively impact the continuity of patient care and patient safety. Also, the practice of surgery and anesthesiology requires acquisition of both knowledge and procedural skills through sufficient experiences in clinical settings. Without such experiences, the workforce of the future will be inadequately trained to appropriately evaluate a patient preoperatively, handle surgical conditions and provide optimal medical oversight in the postoperative period. Mastery of the knowledge and skills required to expertly manage and treat the extensive and wide-ranging list of medical and surgical disorders clearly requires several years of continuous commitment and intensive experience. Finally, current duty hour limits are leading to the development of a "shift mentality" and a loss of professional responsibility to the patient. Therefore, if resident duty hours are further restricted, the quality and safety of patient care may be severely compromised.

A recent survey of residents, published in the *New England Journal of Medicine* this week and appended to this letter, bears out our concerns about patient safety, quality of care and medical education. According to the survey, current medical residents are concerned about the impact of

the new duty hour restrictions, finding that only a third of respondents believe that the regulations will have a positive effect on patient safety and only one quarter of respondents believe the changes will have a positive effect on medical education.

The Accreditation Council for Graduate Medical Education (ACGME) has a long history of ensuring the quality of graduate medical education and patient safety. One of the primary purposes of the ACGME is the ongoing evaluation, accreditation and enforcement of our nation's medical and surgical residency programs. In specifically addressing resident duty work hour standards, an ACGME Task Force was appointed and conducted an 18-month evaluation of this topic. This comprehensive analysis addressed the full spectrum of issues by (1) a thorough review of the current scientific literature; (2) testimonies from key representatives from medical and surgical specialties, residents, medical students, and the public; and (3) expert opinion from leading authorities on sleep research, physiology and fatigue management. After thoughtful deliberations and a careful and methodical iterative process, the proposed recommendations were developed and posted for public comment. Input from a variety of constituencies was considered, and the final recommendations were developed and approved by the ACGME Board of Directors and issued on September 28, 2010. The surgical community applauds the ACGME for the thorough and inclusive process utilized to address this complex issue.

The new duty hour requirements include increased safeguards to address the well-being and safety of residents. Over the past years, the ACGME has continued to rigorously monitor resident duty hours through the respective residency review committees that include individuals with the requisite expertise from the various specialties. Punitive actions have been taken against institutions that were found to be consistently out of compliance and the ACGME continues to strengthen and enhance its enforcement procedures.

The safety and well-being of residents need to be addressed within the broad framework of patient care, resident education, and training because of the multifaceted and interdependent nature of these processes. Thus, the ACGME must remain the oversight body for enforcement of resident duty hour regulations. The ACGME has demonstrated its unwavering commitment to improving the educational training needs of residents, delivery of excellent and unassailable care to patients, and resident well-being and safety through its recent comprehensive review of the resident duty hours' initiative. Thus, relegation of these responsibilities to a body less familiar with the intricacies of medical education and health care would result in unsatisfactory and unsafe delivery of medical and surgical care to patients.

We would like to thank you for the opportunity to share our feedback in regard to resident duty hours and express our support for the role of the ACGME as the appropriate body to provide oversight and enforcement of the duty hours. We would also like to let you know that leaders of the surgical community would be pleased to meet with you to further amplify our views on this important issue.

Sincerely,

American Academy of Facial Plastic and Reconstructive Surgery
American Academy of Ophthalmology
American Academy of Otolaryngology-Head and Neck Surgery
American Association of Neurological Surgeons
American Association of Orthopaedic Surgeons
American Board of Neurological Surgery
American College of Obstetricians and Gynecologists
American College of Surgeons
American Society of Anesthesiologists
American Society of Cataract and Refractive Surgery
American Society of Colon and Rectal Surgeons
American Society for Metabolic & Bariatric Surgery
American Society of Plastic Surgeons
American Urological Association
Congress of Neurological Surgeons
Society for Vascular Surgery
Society of American Gastrointestinal and Endoscopic Surgeons
Society of Gynecologic Oncologists
Society of Neurological Surgeons
The Society of Thoracic Surgeons

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

Residents' Perspectives on ACGME Regulation of Supervision and Duty Hours — A National Survey

Brian C. Drolet, M.D., Lucy B. Spalluto, M.D., and Staci A. Fischer, M.D.

Residents' supervision and duty hours have been a matter of public concern since the mid-1980s, when New York State's Bell Commission and the Libby Zion law first set limits on the number of hours per week that residents could work. These limits became the basis for the 2003 Common Program Requirements established by the Accreditation Council for Graduate Medical Education (ACGME),[1] which were to be reassessed 5 years after implementation. In 2007, in the face of heightened public scrutiny of the effects of lack of sleep among pilots and concern over the effects of sleep deprivation on the most junior residents, Congress charged the Institute of Medicine (IOM) with examining the relationship between duty hours and patient safety. The IOM's report was released in December 2008 and recommended further limitation of residents' work hours, increased supervision, fatigue-mitigation strategies, facilitation of care transitions, and increased federal oversight of the ACGME.[2]

These recommendations were considered in the work of the ACGME Duty Hours Task Force, a multidisciplinary group that included residents, graduate medical education (GME) leaders in surgical and medical specialties, and a representative of the public. The task force's revisions to the Common Program Requirements, including further duty-hour restrictions and supervision requirements, were released to the GME community on June 23, 2010. The ACGME announced on September 28 that the recommendations had been accepted, and it released the new requirements, which are slated to take effect July 1, 2011. The new rules preserve an 80-hour limit on the resident workweek and, among other changes, mandate that all first-year residents work no more than 16 hours continuously, with in-house supervision available at all times (see Table 1).

A recent survey of directors of residency programs revealed mixed responses to the changes.[3] Seeking to assess residents' own responses to the proposal, we surveyed a large sample of residents nationwide about the likely effects of the revised standards on resi-

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Table 1. Summary of Existing and New ACGME Rules for Supervision and Duty Hours for Residency and Fellowship Programs.*

Rule	2003 ACGME Standards	2010 ACGME Standards (Effective July 2011)
Supervision		
Supervision	Adequate supervision is required for all residents.	PGY-1 residents must have direct supervision from an upper-level resident or attending physician who is on site and immediately available to provide assistance at all times.
Duty hours		
Maximum hours of work per week	Work is limited to 80 hours per week, averaged over 4 weeks; internal moonlighting is included.	Work is limited to 80 hours per week, averaged over 4 weeks; all moonlighting (internal or external) must be included.
Mandatory time free of duty	Residents must have 1 day free from educational and clinical responsibilities in 7 days, averaged over 4 weeks.	Residents must have 1 day free of duty every 7 days, averaged over 4 weeks; at-home call cannot be assigned during these days.
Maximum length of duty period	No new patients may be accepted after 24 hours on duty. Residents may remain on duty for an additional 6 hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics, and maintain continuity of medical and surgical care.	Duty periods of PGY-1 residents must not exceed 16 hours in duration. Duty periods of PGY-2 residents and above may be scheduled to a maximum of 24 hours with an additional 4 hours to complete work; no clinic or admissions after 24 hours.
Minimum time off between scheduled duty periods	There should be a 10-hour period between all daily duty periods and after in-house call.	Residents must have 8 hours between duty periods and should have 10 hours between duty periods. Residents must have at least 14 hours free of duty after 24 hours of in-house duty.
Call		
Maximum in-house on-call frequency	In-house call can occur no more frequently than every third night, averaged over 4 weeks.	PGY-2 residents and above must be scheduled for in-house call no more frequently than every third night.
At-home call	Hours spent in the hospital while on at-home call must count toward the 80-hour workweek limit.	Time spent in the hospital by residents on at-home call must count toward the 80-hour workweek.
Maximum frequency of in-house night float	NA	Residents must not be scheduled for more than 6 consecutive nights of night float.

* NA denotes not applicable, and PGY postgraduate year.

dents' education, lifestyle, and preparation for supervisory roles, as well as on patient safety and the quality of care.

In August 2010, we identified GME leaders at 75 institutions in 38 U.S. states through a broad Internet search for available e-mail addresses. We distributed an electronic, anonymous survey and asked these leaders to share it with their trainees. The survey consisted of 20 questions covering demographics, awareness of the ACGME proposal, perceptions of the effects of the changes, and overall assessment of the regulation of supervision and duty hours. Twenty-three institutions in 15 states agreed to participate, and a total of 11,617 trainees received the survey, representing a broad sample of residents at large and small hospitals in various states who were being trained in diverse specialties.

Within 4 weeks, we had received responses from 2561 residents (22%). The respondents were generally representative of residents in allopathic medicine in the United States (see Table 2). Of these residents, 72% were already familiar with the proposed changes. A majority (56%) were working in programs with more than 20 residents, and most (69%) were in the first 3 years of training. After reviewing a brief summary of the proposed changes, the residents were asked to indicate their level of agreement or disagreement with 10 statements about the effect that the proposed changes would have on residents and 2 statements regarding their overall effect on residents' education and patient safety (see Table 3). A free-response item elicited thoughtful and often lengthy commentary from nearly half the respondents.

The data show that residents' opinions vary widely regarding the effects of the changes. However, since we had a large sample, our study is well powered to make reliable statistical inferences with

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Table 2. Demographic Characteristics of Respondents and Comparative Data on U.S. Residents in Allopathic Medicine.*

Characteristic	Survey Respondents (N=2561)	All Residents in Allopathic Medicine
	no. (%)	%
Sex		
Male	1272 (49.7)	50.0
Female	1247 (48.7)	42.0
Not reported	42 (1.6)	8.0
Year of training		
PGY-1	600 (23.4)	36.8
PGY-2	631 (24.6)	28.5
PGY-3	529 (20.7)	25.0
PGY-4	400 (15.6)	7.4
PGY-5	220 (8.6)	2.0
PGY-6	113 (4.4)	0.2
PGY-7	68 (2.7)	0.1
Specialty		
Anesthesiology	193 (7.5)	5.9
Dermatology	25 (1.0)	1.2
Emergency medicine	137 (5.3)	5.3
Medicine	499 (19.5)	24.5
Neurology	75 (2.9)	2.0
Obstetrics–gynecology	147 (5.7)	5.3
Orthopedics	111 (4.3)	3.7
Pathology	91 (3.6)	2.6
Pediatrics	315 (12.3)	8.9
Psychiatry	140 (5.5)	5.2
Radiology	109 (4.3)	4.9
Surgery	238 (9.3)	7.8
Other	481 (18.8)	22.8
No. of residents in program		
1–4	125 (4.9)	NA
5–10	377 (14.7)	NA
11–20	633 (24.7)	NA
>20	1426 (55.7)	NA

* Data on all residents in allopathic medicine are from the Accreditation Council for Graduate Medical Education for academic year 2009–2010. NA denotes not applicable, and PGY postgraduate year.

an alpha level of less than 0.01. To consolidate the data for description, responses were clustered into three categories: disagreement (strongly disagree or disagree), neutrality, and agreement (agree or strongly agree). Using standard errors of proportions, we constructed two-sided 99% confidence intervals for the data (see Table 4).[4] If the intervals for different responses to a given question did not overlap, we took that to indicate a significant difference of opinion among the respondents.

The majority of the 2561 respondents believed that the changes would have a positive effect on residents' quality of life and well-being (51% positive, 28% negative). Respondents collectively held more negative views about the effects of the changes on the quality of care delivered to patients (41% negative, 33% positive); residents' education, experience, and fund of knowledge (54% negative, 24% positive); and residents' preparation for more senior roles (63% negative, 13% positive). In addition, residents tended to predict a negative effect on the promotion of education over service obligations (42% negative, 27% positive) when the new program requirements take effect.

A total of 84% of respondents indicated that their training program was currently in compliance with the ACGME's 2003 duty-hour regulations. When asked whether their program would comply with the proposed changes within its current infrastructure, 45% indicated that their program would comply, 27% indicated that their program would not comply, and 28% remained neutral or unsure. Residents overall believed that the 2010 changes to the Common Program Requirements would increase the duration of residency and fellowship training (50% agreed, 17% disagreed), but they remained divided on whether the changes would decrease the number of hours that they worked (40% said they would not, 35% said they would).

When asked about the overall effect of the proposed changes on patient safety, the residents'

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Table 3. Summary of Survey Results.*

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
			number (percent)			*no.*
The proposed changes will:						
Improve patient safety	258 (10.1)	655 (25.6)	702 (27.4)	687 (26.8)	258 (10.1)	2560
Improve the quality of care delivered to patients	341 (13.4)	708 (27.7)	667 (26.1)	601 (23.5)	236 (9.2)	2553
Improve my education, experience, and fund of knowledge	582 (22.8)	797 (31.2)	569 (22.3)	401 (15.7)	206 (8.1)	2555
Improve my quality of life and well-being	279 (10.9)	446 (17.5)	527 (20.7)	867 (34.0)	432 (16.9)	2551
Decrease the number of hours that I work	337 (13.2)	677 (26.5)	642 (25.1)	664 (26.0)	234 (9.2)	2554
Make me more prepared for my more senior roles	762 (29.8)	848 (33.2)	620 (24.2)	220 (8.6)	108 (4.2)	2558
Increase faculty supervision	307 (12.0)	709 (27.7)	896 (35.0)	504 (19.7)	142 (5.6)	2558
Increase the length of residency and fellowship training	97 (3.8)	328 (12.8)	849 (33.2)	904 (35.4)	379 (14.8)	2557
Promote education over service obligations	361 (14.2)	709 (27.8)	798 (31.3)	528 (20.7)	155 (6.1)	2551
Improve public perception of medical training and physicians	283 (11.1)	608 (23.9)	956 (37.5)	532 (20.9)	169 (6.6)	2548
Overall the changes will:						
Have a positive effect on patient safety	353 (13.8)	646 (25.2)	684 (26.7)	670 (26.2)	208 (8.1)	2561
Have a positive effect on education	473 (18.5)	755 (29.5)	671 (26.2)	476 (18.6)	186 (7.3)	2561

* Not all totals equal 2561 because not all respondents answered every question.

opinions were split, with 34% indicating that patient safety would be positively affected and 39% indicating that it would be negatively affected. Regarding the overall effect of the proposed changes on education, significantly more residents anticipated a negative effect than a positive one (48% negative, 26% positive).

Finally, more than 100 pages of commentary from nearly 900 residents were compiled and reviewed. Most commonly, residents who provided free-text responses raised concerns about the proposed 16-hour shift restriction for interns, with the majority expressing alarm that education and experience will be severely limited by the lack of traditional 24-hour call periods, as well as confusion over why the first postgraduate year (PGY-1) is treated so differently from later years. Some respondents suggested a more graded approach to the first year of residency training so that as interns gain experience and efficiency, their hours might be increased to allow them to gain the confidence and skills necessary to supervise others when they become PGY-2 residents. Many respondents expressed concern about diminishing patient safety and the quality of care by increasing the number of patient handoffs and reducing the continuity of care, which the changes will necessitate in most programs. Finally, residents responded negatively to the possibility that the duration of training would have to be increased.

Like residency program directors, residents had mixed opinions about the effects of the new ACGME requirements, though many remained neutral about these changes. The only strongly positive perspective we identified related to the effect on residents' quality of life. On the other hand, residents were concerned that the changes would negatively affect their education and preparation for senior roles, increase the emphasis on service over education, and diminish the quality of care. Furthermore, residents anticipated that these further work-hour restrictions would result in an increased duration of training.

The new Common Program Requirements and rules on supervision and duty hours were designed to improve patient safety and quality of care and to promote a "safe and humanistic educational environment" in which residents can learn.[5] The con-

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Table 4. Summary of Aggregate Survey Responses.

Statement	Disagree	Neutral	Agree
		% of respondents (99% CI)	
The proposed changes will:			
Improve patient safety	35.7 (33.2–38.1)	27.4 (25.1–29.7)	36.9 (34.5–39.4)
Improve the quality of care delivered to patients*	41.1 (38.7–43.6)	26.1 (23.9–28.4)	32.8 (30.4–35.2)
Improve my education, experience, and fund of knowledge*	54.0 (51.8–56.5)	22.3 (20.1–24.4)	23.8 (21.6–25.9)
Improve my quality of life and well-being*	28.4 (25.9–30.7)	20.7 (18.6–22.7)	50.9 (48.4–53.5)
Decrease the number of hours that I work	39.7 (37.3–42.2)	25.1 (22.9–27.3)	35.2 (32.7–37.6)
Make me more prepared for my more senior roles*	62.9 (61.2–65.4)	24.2 (22.1–26.4)	12.8 (11.1–14.5)
Increase faculty supervision	39.7 (37.5–42.2)	35.0 (32.6–37.5)	25.3 (23.0–27.5)
Increase the length of residency and fellowship training*	16.6 (14.1–18.5)	33.2 (30.8–35.6)	50.2 (47.6–52.7)
Promote education over service obligations*	41.9 (39.7–44.5)	31.3 (28.9–33.6)	26.8 (24.5–29.0)
Improve public perception of medical training and physicians	35.0 (32.7–37.4)	37.5 (35.1–40.0)	27.5 (25.2–29.8)
Overall the changes will:			
Have a positive effect on patient safety	39.0 (36.6–41.5)	26.7 (24.4–29.0)	34.3 (31.9–36.7)
Have a positive effect on education*	48.0 (45.8–50.5)	26.2 (24.0–28.4)	25.9 (23.7–28.1)

* There was a significant difference (with nonoverlapping 99% confidence intervals) between the proportion of respondents who agreed with this statement and the proportion who disagreed with it. CI denotes confidence interval.

cerns of residents should be considered in the implementation of the new standards, and the GME community should systematically study the effect of the changes on both residents' education and the quality and safety of patient care in teaching hospitals and outpatient settings.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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