Dear Residents, Faculty, Program Directors, Designated Institutional Officials, Coordinators, and other members of the GME Community,

I would like to provide you with an update on the work of the **ACGME Resident Duty Hours Task Force (Task Force)**. This group of 16 individuals, under the direction of Susan Day, MD, Chair of the ACGME Board of Directors and E. Stephen Amis, MD, Chair of the Council of Review Committees of the ACGME, has received and continues to receive testimony from the full breadth of the profession, both within the United States, as well as from our colleagues in the United Kingdom and Canada. This data and opinion gathering began in December 2008, with the receipt of the Institute of Medicine's (IOM) Report on Resident Duty Hours, followed by ACGME survey of residents, faculty, program directors and designated institutional officials. In March 2009, the ACGME sponsored the International Symposium on Resident Duty Hours and the Learning Environment. In June 2009, the Task Force received written position papers from more than 140 medical organizations, and personal testimony from more than 70 national organizations representing the broad range of medical specialties, resident and student organizations, membership organizations, and the five ACGME Member Organizations.

In July, September, October, and December of 2009 the Task Force has heard from and will hear from additional perspectives, including: the leadership of the national patient safety movement, leadership of the United States Veterans Administration patient safety programs, experts from the sleep physiology and sleep medicine community, experts from the stress inoculation research community, the New York Hospital Association, the safety net hospitals, leadership of the Joint Commission, and three members of the IOM Committee that crafted the Report. In addition, the ACGME commissioned three external reviews of various dimensions of the literature over the past 20 years on patient safety and resident duty hours, patient "hand-overs," the impact of resident duty hour standards on educational outcomes, and resident safety and duty hour schedules. Preliminary verbal reports were received on these review projects in September, and final written reports are being delivered in October. Finally, an internal review of the legal dimensions of regulation of resident duty hours, and a review of key literature older than 20 years will be provided to the Task Force in October.

Based on this extensive testimony and written information, a number of observations and principles have already emerged.

First and foremost, patient safety always has been, and remains our prime directive both in this context and in the broader context of Graduate Medical Education. While straightforward in principle, this becomes complex in implementation. There are two dimensions of patient safety in play when discussing the education of residents. Let us call them the direct and indirect patient safety dimensions of resident education. The first and immediately obvious dimension is the direct patient safety implications of resident education. This is the assurance of patient safety in the context of current experiential learning of the resident. Regardless of specialty and impact of resident duty hour standards, the safety of the patients cared for by residents is of paramount importance. What must be abundantly and clearly understood by all is that the responsibility for safety and outcomes of patient care in the setting of resident and fellow education is a shared one, resting with the resident, the supervising faculty member, and the microsystem of care within which the resident functions in the context of the sponsoring institution. The microsystem of care includes: the oversight of the resident at the bedside and in the operating room, the redundant systems of error prevention in transcription and enactment of resident orders, the credentialing of residents to perform bedside and operative procedures, the direct supervision of senior residents, fellows and attending physicians in decision making and procedure performance, and the role peers, nursing colleagues and other professionals on the care team in their iterative interactions with trainees in the patient care setting. We must, then, assure that our redundant systems of supervision and oversight meet the expectation of prevention of errors, predictably made by residents early in their training, and do not reach the patient.

Further, when viewed in this context, the relative lack of impact in national level studies of changes in resident duty hours on patient outcome parameters is understandable. The redundant systems of patient safety appear to dampen the statistical impact that changes in duty hour standards might have had on patient outcomes. This may be consistent with the absence of any published analysis demonstrating improvement in patient safety or outcomes either in New York State (which has had global standards on resident duty hours for approximately twenty years) in comparison with the rest of the nation, where similar limits on resident duty hours have been present only for the past six years, or in the entire nation.

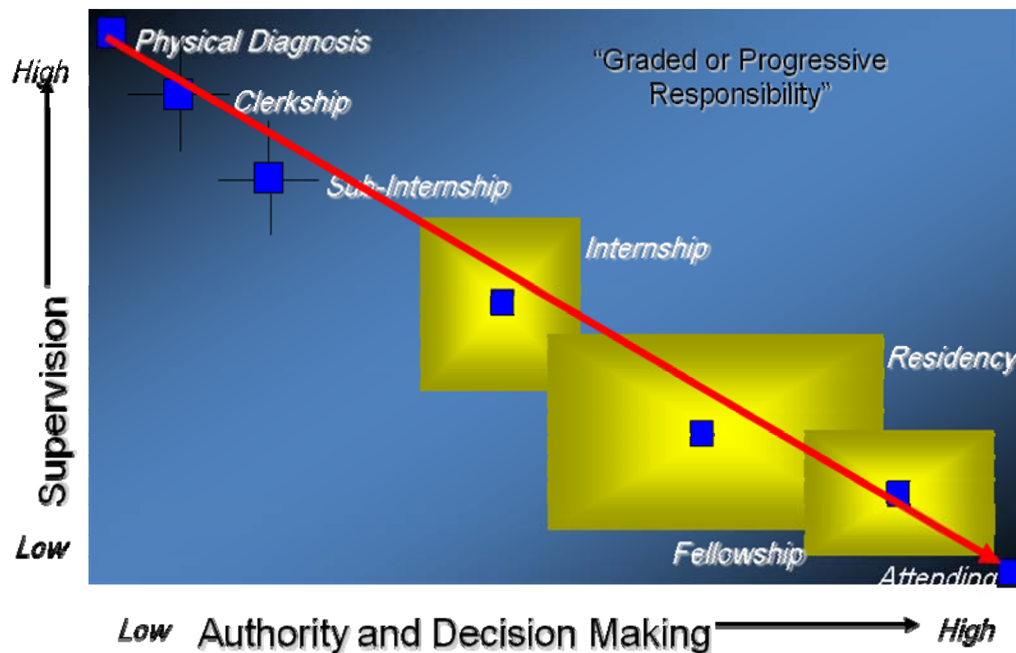
Although the outcomes of patient care in teaching hospitals, as judged by severity of adjusted morbidity and mortality, as compared to non-teaching hospitals are equal or better[i], we must all acknowledge that patient safety and outcomes must always improve, and America's Teaching Hospitals must lead the way. The ACGME hopes to work with all teaching hospitals to demonstrate commitment to, enhancement of, and leadership in patient outcomes and parameters of patient safety in their clinical environments.

The second dimension of patient safety, indirect patient safety, is the more removed of the two patient safety questions. Medical education in the United States has a greater level of responsibility for delivery of a proficient practitioner at completion of the formal phase of graduate medical education than many other countries, some of whom have resident (and faculty) duty hour standards that differ significantly from the United States (and Canada). At the completion of residency or fellowship the United States, each physician must be prepared to enter the unsupervised practice of medicine in a variety of settings on July first, with no direct supervision. This is in contrast to other systems, such as that in the United Kingdom, where "graduates" may remain within the teaching hospital, under the supervision of the faculty, for many years after their "registrar" function is complete, awaiting a posting as a consultant. This degree of independence upon graduation in the United States requires that the young physician (regardless of specialty) be provided with the opportunity to exercise, under supervision during training, increasing decision making and responsibility for provision of care (including surgical procedures) to assure that the young physician is capable of independent practice (see figure 1). It is in this area that major concerns have been raised by the educational community.

There is an evolving, very strong concern progressing to alarm among some, that our undergirding principle of graded authority and progressive responsibility coupled with graded and diminishing (but appropriate) supervision is eroding in the contemporary American teaching hospital. While appearing to occur contemporaneously with resident duty hour limits, this erosion appears to have had its roots in the latter portion of the previous decade. An unintended consequence of the I.L. 372 interpretations leading to the PATH Audits of the late 1990's was the beginning of a significant erosion of the delegation of authority for patient care of residents and fellows. The medical liability insurance crisis of earlier this decade, and the associated "risk management" policies and procedures put in place in most institutions have had a chilling effect on the delegation of authority and responsibility, especially to senior residents, for complex decision making and performance of procedures. The pressures placed on productivity and revenue generation by academic clinical faculty, coupled with the compliance motivated performance and documentation of key aspects of patient care in order to bill for services has removed the resident from the central role in provision of patient care in many teaching settings. Finally, the enactment of resident duty hour standards, as appropriate and well meaning as intended, have had in some settings the unintended consequence of removal of the resident from the previously held "pivotal role" in the care of patients on the teaching service. It is the "concern evolving to alarm" that we may have crossed a critical point, resulting in inadequate meaningful patient responsibility in a critical mass of the residents' experience. This, it is feared, will lead to inadequately trained clinicians entering the unsupervised practice of medicine.

It is tempting to link this indirect patient safety concern solely to resident duty hour standards. However, the factors involved in its generation are more far reaching than resident duty hour standards alone, and must not be conflated with these standards. They will require a complete review of the current state of the education of residents, an undertaking far beyond that of the revision of resident duty hours.

Figure 1. Progressive Responsibility. The principle underlying American Graduate Medical Education



The third observation is that each specialty has nuanced dimensions of the clinical educational environment that require some flexibility in standards. Both the IOM Committee and the Task Force have heard from the profession of the need to recognize three factors. First, specialties have unique educational dimensions that are necessarily adversely affected by excessively proscriptive constraints. Second, most disciplines believe that the negative impact of duty hour standards is most evident for upper level trainees, including the Chief Resident level of training. Finally, there is recognition on the part of some that more control over the duty and work load of first year residents may be required in certain specialties. These observations must be balanced against the sleep and fatigue literature, which demonstrate clear impact of fatigue on human cognitive and technical skill function. There is also a body of literature on fatigue management, stress inoculation, and clearer understanding of individual variation in impact of sleep deprivation on cognitive and technical skill performance as well as fatigue recovery that must be understood in order to understand the range of permissible flexibility within our standards. There is, in use in other high risk industries, a "fitness for duty" assessment that may be applicable to the educational environment.

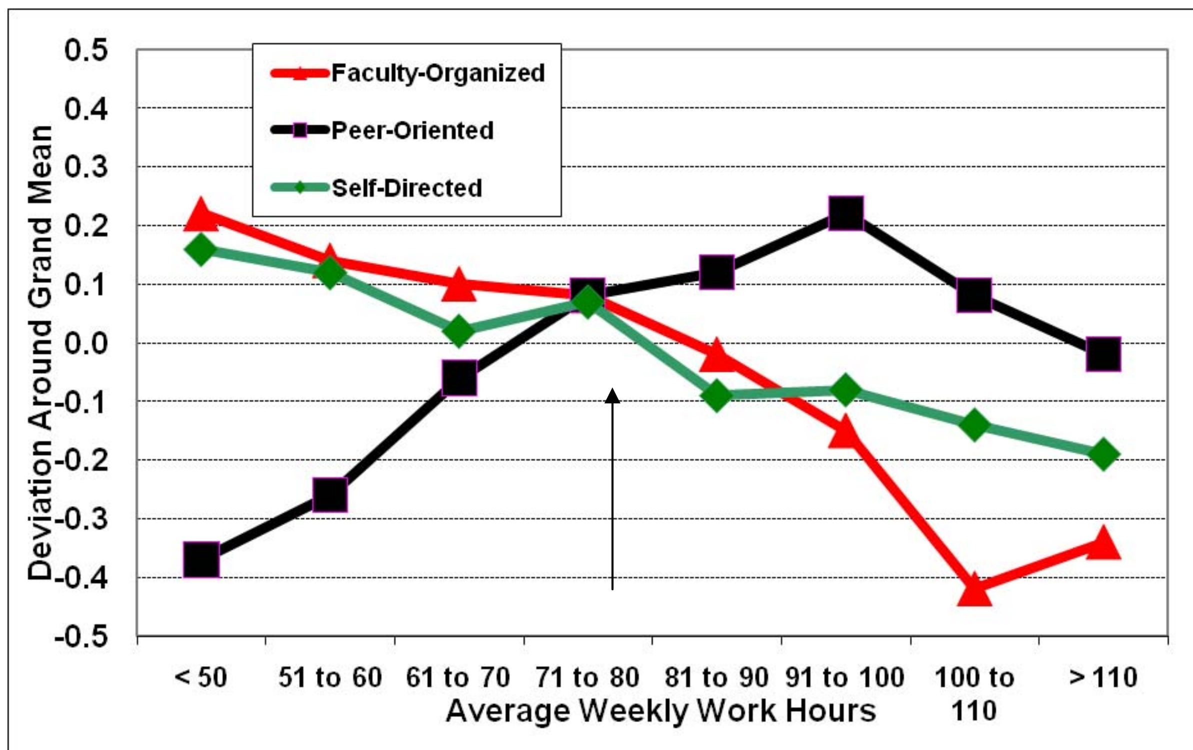
These findings, coupled with the observations of the past 5 years of enforcement of duty hour standards, indicate that the ACGME ***must*** continue to set standards in this domain, and enforce those standards consistently. It must also be recognized that duty hour standards affect (directly) 13 of the specialties.

The fourth observation was somewhat surprising to many. Resident duty hour limits, which have meaningful effects on 13 specialties directly, have had significant impacts on a number of the other specialties as well. Limits on resident time in Surgery have had implications for Pathology. Limits on resident time in Medicine and Surgery

have had major impacts on support for the work of the Emergency Department, and on the interactions with Diagnostic Radiology. Limits on resident time in the primary inpatient specialties have had significant negative impact on the Transitional Year residents. Limits on resident time and availability have often removed residents from meaningful engagement with the multidisciplinary teams that provide patient care, and are essential learning opportunities for residents. Finally, limits on resident duty hours have had significant negative impact on faculty and, in many settings, the sponsoring institutions. These rippling impacts have had adverse effects on the cross—fertilization of specialties, the development of collegiality among the specialties, and the engagement of residents in the day to day care of patients, the essential context for the experiential learning of medicine and surgery.

Fifth, the positive impact of current limits on resident duty hours is clear. Residents appear more rested, with less distress, have more time for reading and fulfillment of other life responsibilities. There appears to be less depression, and at least from the data of Baldwin (see Figure 2.) the 80 hour limit on weekly work appears to strike the appropriate balance between service, education, and rest. However, it does not appear that residents are sleeping dramatically more than prior to implementation of duty hour standards, and that the issue of patient safety is more related to "fitness for duty" and "fatigue management," than total hours worked. This is of great concern, because it is clear that total duty hours, as currently constructed, do not appear to be the limiting factor in fatigue. Rather, it is the number of hours of sleep that residents are enjoying, and the match of the resident's work load to their level of training that appear to be factors that drive fatigue. The possible exception to this is the issue of consecutive time on task. In other words, the balancing of the impact of working in excess of 16 consecutive hours with the desire to provide continuity of care and experience to the patient and resident, and to minimize the confounding variable of patient "hand-over" and associated error.

Figure 2. Variation in "Sources of Learning" Style, by Weekly Work Hours



Baldwin, DeWitt. ACGME Bulletin. Nov. 2007 pages 23-31.

Sixth, all remain concerned that the concept of rigid duty hour standards, to be enforced in a regulatory fashion as "absolute rules" rather than accreditation standards where a standard of "substantial compliance" is applied is misguided whether from an investigative hypothesis or an IOM expectation. There are two major reasons for this concern. First, ACGME data indicates that in New York State, where the expectation of fulfillment of absolute rules in a regulatory context is demanded, with annual and unannounced site visits and institutional fines levied as enforcement mechanisms, the "citation rate" for Sponsoring Institutions is the same as, or higher than the remainder of the United States programs accredited by the ACGME. This indicates that more than a decade of a regulatory environment (with stricter standards than ACGME's current requirements) is insufficient to result in achievement of accreditation related "substantial compliance" related to ACGME duty hour standards at a rate greater than that in the "Unregulated" but "Accredited" Sponsors in the rest of the country. Based on our knowledge of the thoroughness of the I-PRO evaluation, it does not suggest that either process is flawed. Rather it suggests, perhaps, that the expectation rather than the outcome is flawed. This expectation (that absolute limits can be placed on a physician caring for patients) is a principal reason for concern. Most believe that it is a matter of professionalism that physicians must never be governed by the clock when a patient needs assistance. It is anticipated that residents will be placed in circumstances where they might be able to leave (or might be "expected" to leave), but a patient needs their continued assistance. Within the boundaries of reasonableness, and with a goal of patient safety, residents must demonstrate willingness to sacrifice for their patients' needs, being taught and given the opportunity to demonstrate the practical manifestations of altruism, the core virtue undergirding professionalism. Thus, while residents must not be forced to remain on duty for excessive periods, they must not be precluded from demonstrating the caring and commitment required of them as altruistic professionals. ACGME's standards, and the expectations of the public of the nature of enforcement of those standards, must match this important principle. It is here, as in other places, that the analogy with the airline industry fails. A pilot, running out of hours, can refuse to fly the plane, and the passengers are no worse off for the decision, other than the delay. The Neurosurgeon, faced with a patient requiring an emergency craniotomy, does not see an option to, nor does he or she want to say no. The patient struck by a car, with multiple trauma, acute rhabdomyolysis with hyperkalemia and acute renal failure, needs dialysis now, not after the Nephrologist has slept for five hours. The patient needs and demands no less, as does our vow of Hippocrates.

The Task Force is struggling with the manner in which the issue has been presented to the public. "Do you want a tired doctor?" is a convenient sound bite, versus the nuanced balancing of competing goods that the ACGME must accomplish. Did the patients in Charity Hospital during Hurricane Katrina want a tired doctor (or a tired nurse)? It is difficult for the public to understand both what we do, what we may be called on to do on occasion, and that we can and must be trained to function at high levels of performance under trying circumstances, including the circumstance of fatigue – for our patient's best interest, because we need to be able to do it in practice. Residents must not, however, be abused in the process of education in the name of this preparation.

These are among the challenges and "competing goods" that the Task Force has identified as factors in their deliberations. Testimony will continue until December, at which time the Task Force will consider draft requirements. These requirements will be edited by the committee in an iterative fashion, and brought to the Council of Review Committees and the ACGME Board of Directors in February 2010 for their input. They will be modified as necessary, and then returned to the Council of Review Committees for action. They then will be posted for public comment, revised if necessary, approved by the Council of Review Committees, then presented to the Committee on Requirements of the Board of Directors, and if approved, forwarded to the Board of Directors for final approval. This will likely be accomplished in September, 2010, with implementation of the new standards anticipated to be in July, 2011.

These requirements will be based on the literature, and the balancing of competing needs that are the reality of the clinical educational environment. They will attempt to enhance and assure patient safety, both direct and indirect, and they will require the commitment of the profession to implement effectively. They will require all involved in Graduate Medical Education to sacrifice, and to honestly assess our educational environment. And they will require the virtues of Courage to monitor and self-regulate and Honesty of all in the accreditation process. Anything less will, likely, result in the removal of the right of self regulation of this dimension of the education of future physicians from the control of the profession.

The Task Force, the Council of Review Committees, and the ACGME Board of Directors wish to publically thank the profession, and all who have provided extensive input into this process. It is our hope that the next iteration of resident duty hour standards will be an improvement for residents, faculty, and most importantly, the public we serve.

Sincerely,

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CEO, Accreditation Council for Graduate Medical Education
Vice Chair, Task Force for the Revision of ACGME Resident Duty Hour Standards

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[i] Kupersmith, J. Quality of Care in Teaching Hospitals: A Literature Review Acad Med. 2005; 80:458–466.