

CHAPTER 1 **A COMPREHENSIVE APPROACH TO ENSURE SAFE CARE FOR TODAY AND THE FUTURE**

THOMAS NASCA, MD, MACP

Introduction

Residents' active involvement in clinical care is vital to the acquisition of knowledge, judgment, and skills required for entry into the unsupervised practice of medicine. One attribute of the 3 to 7 years of residency in the given specialty is the steep learning curve necessary to bring about the transformation from medical student to independent physician. Some see residents' long hours and intense involvement in patient care as an essential element of preparation for independent practice and a cultural symbol of a profession that requires availability to one's patients and putting their needs first. Others fear that the long hours of service may affect residents' alertness, and ability to provide safe and effective care, and may potentially compromise resident safety as well. These opposing views about the role of long hours in the clinical education of physicians have been the subject of intense debate for more than 2 decades. In 2008, when the Institute of Medicine (IOM) released its report entitled "Resident Duty Hours: Enhancing Sleep, Supervision and Safety," the competing perspectives were represented by members of the profession concerned about the adverse effects of duty hour limits on graduates' preparedness for practice and by members of the media and public, who expressed unease that the reductions achieved under the 2003 Accreditation Council for Graduate Medical Education (ACGME) duty hour standards were insufficient to have a positive effect on patient safety in the nation's teaching hospitals. The perspectives also highlight 2 competing goods: ensuring safe care today through limits on hours in the settings where residents learn clinical practice, and ensuring the safety of patients tomorrow by providing residents with adequate experience under graded supervision to prepare them for their future practice.

When the ACGME implemented common duty hour standards in 2003, it promised the profession and the public a comprehensive review after 5 years, with the aim of evaluating the effectiveness of these standards and identifying areas in need for refinement. In February 2009, the ACGME Board of Directors endorsed a review of its standards and appointed a Task Force to review the available scientific data and other relevant information and develop recommendations for new comprehensive standards to the ACGME Council of Review Committees and Board of Directors.

Scope and Aims

The aim of this monograph is to provide justification and contextual information to assist the profession, the education and research communities, and the public in understanding how the ACGME and the Task Force developed the 2011 standards. Data gathering for the work of the Task Force entailed an international duty hour symposium; 3 commissioned literature reviews; and a national duty hours congress during which the Task Force received written position papers from more than 140 medical organizations, and personal testimony from more than 70 organizations representing medical specialties, residents and students, and the ACGME's member and appointing organizations. A particular focus was on the educational community's interpretation of, and agreement with, recommended limits on resident hours, and the ACGME surveyed a broad group of stakeholders, including residents.

The Task Force also heard from patient safety leaders, the New York State Hospital Association, the Veterans Administration, sleep experts, safety net hospitals, associations, health care "accreditors," members of the IOM

Committee, patient advocates, and patients and families who had suffered a medical error in a teaching hospital.

Throughout its work, the Task Force sought to balance the sound bites that contribute to public concern, “Do you want a tired doctor?” and “Who can function after 24 hours awake?” with the complex task of reconciling the competing goods of safety today with safe and effective care tomorrow. An emphasis on deliberate practice with supervision, guidance, and availability of appropriate backup as key to the acquisition of competence and expertise was essential to this aim. At the same, these factors must be balanced by time limits on resident hours, which are needed in certain specialties to ensure that residents’ or patients’ safety and well-being are not compromised through excessive time on task.

The 2011 Standards

The monograph begins with a historical perspective on the ACGME’s effort to limit resident hours and with a summary of the Task Force’s data gathering and comprehensive deliberations on duty hours and related considerations. Chapters 5 through 10 summarize the 2011 duty hour and related standards. The standards setting limits on resident duty hours and their underlying scientific basis are detailed in Chapter 5. The major changes encompass more restrictive duty hour limits for first-year residents; added flexibility for senior residents and under certain special clinical and educational circumstances; and reducing the length of the continuous duty period to respond to ample scientific evidence about the negative performance effects of long periods of wakefulness. An added area of refinement encompasses specialty-specific standards that limit resident clinical responsibilities.

Like the 2008 IOM report on resident duty hours, the Task Force affirmed that the standards would need to go far beyond limits on resident hours to promote high-quality education and safe patient care, and the Task Force’s

recommendations included comprehensive, graduated standards for resident supervision, discussed in Chapter 6. Much of the deliberations of the Task Force focused on an appropriate balance between supervision and graduated responsibility. This is an area where the graduate medical education (GME) community has voiced growing concern, progressing to alarm, that a principle that undergirds clinical education—graded authority and progressive responsibility coupled with graded supervision—may be eroding in America’s teaching hospitals. The new standards incorporate validated approaches for supervision and graduated responsibility that balance delegation of patient care responsibility to residents, resident learning, and delivery of safe patient care. The new standards demand enhanced supervision for first-year residents, in keeping with research showing that this group benefits from added clinical guidance and immediate supervisory physician availability, important for learning patient safety and care delivery.

The 2011 standards extend beyond the recommendations of the IOM 2008 report and include new standards for resident professionalism and personal responsibility to maintain alertness, described in Chapter 7. Without attention to residents’ activities in their hours outside the program, the added limits on duty hours may not ensure sufficient rest and alertness for residents’ learning and participation in patient care. These elements of professional responsibility must be discussed and learned by all who provide care for patients. For the same reason, the ACGME decided to include all moonlighting hours under the weekly limit on resident hours. To educate residents for practice in the 21st century, the 2011 standards also include an explicit focus on teamwork, described in Chapter 8, and new detailed standards for transitions of care, which articulate programs’ and institutions’ added responsibilities to teaching and supervision of handover of patient care responsibilities to colleagues, and other transfers of care in the

teaching setting. Chapter 10 summarizes current scientific data on fatigue mitigation and alertness management, and how the standards address them. This is an area where future research has a high potential to produce added practical scientific methods to assess alertness and added future refinements to the standards. APPENDIX E of this monograph provides a side-by-side comparison of the 2011 ACGME standards with the IOM recommendations and the common standards implemented in 2003.

Several chapters provide context for the standards, including Chapter 11, which explores causes of errors in teaching hospitals and provides recommendations for solutions; Chapter 12, which articulates the need for flexibility in the standards to accommodate different specialties and levels of training; and Chapter 13, which summarizes the Task Force's thoughts on the graduate medical education community's responsibility to the safety of future patients by producing a fully trained physician at the completion of residency.

A major thrust of the IOM's 2008 report was concern about the rigor of the ACGME's enforcement of the 2003 duty hour standards. While much of this arose from differences between the substantial compliance model used by the ACGME as an educational accreditor and a "zero-tolerance" approach favored in some proposals for regulation of resident hours, the ACGME and the Task Force deliberated on enhanced enforcement of the standards, including a regular site visit for sponsoring institutions, to assess their ability to provide an appropriate, safe learning and care environment, and to assess their capacity for educating residents about error reductions through engagement of all residents in the patient safety and quality improvement programs of the sponsor. In this manner, the competency of systems-based practice will be inculcated in each resident in his or her daily activities. Detailed information addressing questions about enforcement of the standards is provided in Chapter 14.

Looking Toward the Future

The 2011 standards are based on the available scientific evidence and the literature, and the balancing of competing needs that are the reality of the clinical educational environment. However, both the IOM report and the Task Force found a relative dearth of scientific evidence in many areas important for setting standards to promote sound education and safe and effective patient care. In response, in Chapter 15, the ACGME and Task Force begin the process of laying out an initial research agenda, in the hope that the GME and research community will expand it and contribute to the work that needs to be done to assess the effectiveness of the 2011 standards and to provide for future refinements based on sound, scientific principles.

The outcomes of patient care in teaching hospitals, as judged by severity of adjusted morbidity and mortality and when compared to nonteaching hospitals, are equal or better. At the same time, we acknowledge that patient safety and outcomes must continue to improve, and America's teaching hospitals should 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 the clinical environments. The enhanced focus of the ACGME on resident involvement in quality and safety will benefit both teaching hospitals today and the institutions and settings where residents will practice after graduation. Most important will be the benefit that accrues to each patient when a resident pursues a career of service to the public.

Educating the next generation of physicians to ensure safe, high-quality care for future generations is a highly important undertaking. While the ACGME establishes standards, educating residents and assuring safe and effective care of those we serve now and in the future will require the active participation and commitment of the graduate medical education community and the profession. Critical elements in successful achievement of these goals are

honesty in assessing the learning environment; courage to monitor and self-regulate; continued voluntarism, which is essential in the peer review process; and willingness of all to continue to learn and innovate. Anything less may result in the removal of the right of the profession to govern the education of future physicians. However, we believe that our community of educators and physicians-in-training is committed to the ultimate goal of enhancing the health of the citizens of the United States by educating motivated, professional, knowledgeable, and humanistic physicians, devoted to excellence, in settings where these learners are taught about quality and safety by example. This monograph outlines the next step in that journey.

I would be remiss if I did not to thank all those who participated in this process of national

standard setting. To the hundreds of members of societies who rendered formal recommendations; to the many experts who gave of their time and wisdom; to the thousands of individuals who shared their comments on the draft standards; to the members of the Task Force for their contributions of time, effort, wisdom, and expertise, we express our deepest gratitude and appreciation. To the patients and patient advocates who shared their deepest wishes for a better health system, we hope our work was worthy of their sacrifices. Finally, to the Co-Chairs of the Task Force, Susan Day, MD, and E. Stephen Amis Jr, MD, FACR; to the editors of this monograph, Dr Amis and Ingrid Philibert, PhD, MBA; and to the coordinator of the Task Force, Emily Vasiliou, MA, we extend our deepest appreciation.