# APPENDIX E Comparison of the ACGME 2003 Standards, the Institute of Medicine Recommended Limits, and the ACGME 2011 Standards

| Standard | 2003 Standards | 2011 Standards | IOM Recommendations |
|---|---|---|---|
| Principles and introduction | *Principles*<br>1. The program must be committed to and be responsible for promoting patient safety and resident well-being and to providing a supportive educational environment.<br>2. The learning objectives of the program must not be compromised by excessive reliance on residents to fulfill service obligations.<br>3. Didactic and clinical education must have priority in the allotment of residents' time and energy.<br>4. Duty hour assignments must recognize that faculty and residents collectively have responsibility for the safety and welfare of patients. | *Introduction*<br>Residency is an essential dimension of the transformation of the medical student to the independent practitioner along the continuum of medical education. It is physically, emotionally, and intellectually demanding and requires longitudinally concentrated effort on the part of the resident. The specialty education of physicians to practice independently is experiential and necessarily occurs within the context of the health care delivery system. Developing the skills, knowledge, and attitudes leading to proficiency in all the domains of clinical competency requires that the resident physician assume personal responsibility for the care of individual patients. For the resident, the essential learning activity is interaction with patients under the guidance and supervision of faculty members who give value, context, and meaning to those interactions. As residents gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept—graded and progressive responsibility—is one of the core tenets of American graduate medical education. Supervision in the setting of graduate medical education has the goals of assuring the provision of safe and effective care to the individual patient; assuring each resident's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishing a foundation for continued professional growth. | |
| Professionalism, personal responsibility, and patient safety | | VI.A.1. Programs and sponsoring institutions must educate residents and faculty members concerning the professional responsibilities of physicians to appear for duty appropriately rested and fit to provide the services required by their patients.<br>VI.A.2. The program must be committed to and responsible for promoting patient safety and resident well-being in a supportive educational environment.<br>VI.A.3. The program director must ensure that residents are integrated and actively participate in interdisciplinary clinical quality improvement and patient safety programs.<br>VI.A.4. The learning objectives of the program must:<br>VI.A.4.a. be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; and,<br>VI.A.4.b. not be compromised by excessive reliance on residents to fulfill nonphysician service obligations.<br>VI.A.5. The program director and institution must ensure a culture of professionalism that supports patient safety and personal responsibility. Residents and faculty members must demonstrate an understanding and acceptance of their personal role in the following: | |

TABLE **Continued**

| Standard | 2003 Standards | 2011 Standards | IOM Recommendations |
|---|---|---|---|
| | | VI.A.5.a. assurance of the safety and welfare of patients entrusted to their care;<br>VI.A.5.b. provision of patient- and family-centered care;<br>VI.A.5.c. assurance of their fitness for duty;<br>VI.A.5.d. management of their time before, during, and after clinical assignments;<br>VI.A.5.e. recognition of impairment, including illness and fatigue, in themselves and in their peers;<br>VI.A.5.f. attention to lifelong learning;<br>VI.A.5.g. the monitoring of their patient care performance improvement indicators; and,<br>VI.A.5.h. honest and accurate reporting of duty hours, patient outcomes, and clinical experience data.<br>VI.A.6. All residents and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. Physicians must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient's care to another qualified and rested provider. | |
| Transitions of care | | VI.B.1. Programs must design clinical assignments to minimize the number of transitions in patient care.<br>VI.B.2. Sponsoring institutions and programs must ensure and monitor effective, structured handover processes to facilitate both continuity of care and patient safety.<br>VI.B.3. Programs must ensure that residents are competent in communicating with team members in the handover process.<br>VI.B.4. The sponsoring institution must ensure the availability of schedules that inform all members of the health care team of attending physicians and residents currently responsible for each patient's care. | Teaching hospitals should design, implement, and institutionalize structured handover processes to ensure the continuity of care and patient safety.<br>Programs should train residents and teams in effective communication and handover processes.<br>Programs should schedule an overlap in time for transitioning on and off duty.<br>The process should include a system that quickly provides staff and patients with the name of the resident currently responsible, in addition to the name of the attending physician. |
| Alertness management/ fatigue mitigation | Faculty and residents must be educated to recognize the signs of fatigue and sleep deprivation and must adopt and apply policies to prevent and counteract their potential negative effects on patient care and learning. | VI.C.1. The program must:<br>VI.C.1.a. educate all faculty members and residents to recognize the signs of fatigue and sleep deprivation;<br>VI.C.1.b. educate all faculty members and residents in alertness management and fatigue mitigation processes; and,<br>VI.C.1.c. adopt fatigue mitigation processes, such as naps or backup call schedules, to manage the potential negative effects of fatigue on patient care and learning.<br>VI.C.2. Each program must have a process to ensure continuity of patient care in the event that a resident may be unable to perform his or her patient care duties.<br>VI.C.3. The sponsoring institution must provide adequate sleep facilities and/or safe transportation options for residents who may be too fatigued to safely return home. | ACGME should adopt and enforce requirements that adhere to the following principles: duty hour limits that promote prevention of sleep loss; additional measures that mitigate fatigue; and schedules that provide for predictable, protected, and sufficient uninterrupted recovery sleep to relieve acute and chronic sleep loss, promote resident well-being, and balance learning requirements.<br>Programs should provide formal education for residents and staff on fatigue/sleep loss.<br>Sponsoring institutions and programs should ensure that their practices promote that residents take the required sleep during extended duty periods. |
| Supervision of residents | The program must ensure that qualified faculty provide appropriate supervision of residents in patient care activities. | VI.D.1. In the clinical learning environment, each patient must have an identifiable, appropriately credentialed attending physician with privileges (or licensed independent practitioner as approved by each Review Committee), who is ultimately responsible for that patient's care.<br>VI.D.1.a. This information should be available to residents, faculty members, and patients.<br>VI.D.1.b. Residents and faculty members should inform patients of their respective roles in each patient's care. | Each RRC should establish measurable standards of supervision for each level of doctor in training, according to their specialty<br>First-year residents should not be on duty without having immediate access to a residency program–approved supervisory physician in-house. |

| TABLE | **Continued** | | |
|---|---|---|---|
| **Standard** | **2003 Standards** | **2011 Standards** | **IOM Recommendations** |
| | | VI.D.2. The program must demonstrate that the appropriate level of supervision is in place for all residents who care for patients.<br>Supervision may be exercised through a variety of methods. Some activities require the physical presence of the supervising faculty member. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Other portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member or resident physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post hoc review of resident-delivered care with feedback as to the appropriateness of that care.<br>VI.D.3. Levels of supervision<br>To ensure oversight of resident supervision and graded authority and responsibility, the program must use the following classification of supervision:<br>VI.D.3.a. Direct supervision: the supervising physician is physically present with the resident and patient.<br>VI.D.3.b. Indirect supervision:<br>VI.D.3.b.(1). with direct supervision immediately available—the supervising physician is physically within the hospital, or other site of patient care, and is immediately available to provide direct supervision.<br>VI.D.3.b.(2). with direct supervision available—the supervising physician is not physically present within the hospital, or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide direct supervision.<br>VI.D.3.c. Oversight: The supervising physician is available to provide review of procedures/encounters, with feedback provided after care is delivered.<br>VI.D.4. The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident must be assigned by the program director and faculty members.<br>VI.D.4.a. The program director must evaluate each resident's abilities based on specific criteria. When available, evaluation should be guided by specific national standards-based criteria.<br>VI.D.4.b. Faculty members functioning as supervising physicians should delegate portions of care to residents, based on the needs of the patient and the skills of the residents.<br>VI.D.4.c. Senior residents or fellows should serve in a supervisory role of junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow.<br>VI.D.5. Programs must set guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty members, such as the transfer of a patient to an intensive care unit, or end-of-life decisions.<br>VI.D.5.a. Each resident must know the limits of his/her scope of authority, and the circumstances under which he/she is permitted to act with conditional independence. | |

| TABLE | **Continued** | | |
|---|---|---|---|
| **Standard** | **2003 Standards** | **2011 Standards** | **IOM Recommendations** |
| | | VI.D.5.a.(1). In particular, PGY-1 residents should be supervised either directly or indirectly with direct supervision immediately available. [Each Review Committee will describe the achieved competencies under which PGY-1 residents progress to be supervised indirectly, with direct supervision available.]<br>VI.D.6. Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility. | |
| Clinical responsibilities | | VI.E. The clinical responsibilities for each resident must be based on PGY level, patient safety, resident education, severity and complexity of patient illness/condition, and available support services. (Optimal clinical workload will be further specified by each Review Committee.) | ACGME should require that sponsoring institutions appropriately adjust resident workload.<br>Minimize the level of residents' work that is of limited or no educational value.<br>Provide residents with adequate time for patient care and reflection time.<br>ACGME should require RRCs to define and require appropriate limits on caseload, taking into consideration complexity of patient illness and level of residents' competency. |
| Teamwork | | VI.F. Residents must care for patients in an environment that maximizes effective communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty.<br>(Each Review Committee will define the elements that must be present in each specialty.) | |
| Maximum hours of work per week | Duty hours must be limited to 80 h/wk, averaged over a 4-week period, inclusive of all in-house call activities. | VI.G.1. Duty hours must be limited to 80 h/wk, averaged over a 4-week period, inclusive of all in-house call activities and all moonlighting. | 80 h/wk, averaged over 4 weeks |
| Duty hour exceptions | A Review Committee may grant exceptions for up to 10%, or a maximum of 88 hours, to individual programs, based on a sound educational rationale.<br>Before submitting the request to the Review Committee, the program director must obtain approval of the institution's GMEC and DIO. | VI.G.1.a. A Review Committee may grant exceptions for up to 10%, or a maximum of 88 hours, to individual programs, based on a sound educational rationale.<br>VI.G.1.a.(1). In preparing a request for an exception, the program director must follow the duty hour exception policy from the "ACGME Manual on Policies and Procedures."<br>VI.G.1.a.(2). Before submitting the request to the Review Committee, the program director must obtain approval of the institution's GMEC and DIO. | A Review Committee may grant exceptions for up to 10%, or a maximum of 88 hours, to individual programs, based on a sound educational rationale. |
| Moonlighting | 1. Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program.<br>2. Internal moonlighting must be considered part of the 80-hour weekly limit on duty hours. | VI.G.2.a. Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program.<br>VI.G.2.b. Time spent by residents in internal and external moonlighting (as defined in the ACGME "Glossary of Terms") must be counted toward the 80-hour maximum weekly hour limit.<br>VI.G.2.c. PGY-1 residents are not permitted to moonlight. | Internal and external moonlighting count as part of the 80-hour limit.<br>Require sponsoring institutions to include provisions in resident contracts that residents must receive permission from the program director to moonlight, and resident performance will be monitored to ensure no adverse effects from moonlighting. |

TABLE **Continued**

| Standard | 2003 Standards | 2011 Standards | IOM Recommendations |
|---|---|---|---|
| Mandatory time free of duty | Residents must be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. | VI.G.3. Residents must be scheduled for a minimum of 1 day free of duty every week (when averaged over 4 weeks). At-home call cannot be assigned on these free days. | 24 hours off per 7-day period. No averaging. One "golden weekend" per month. |
| Maximum duty period length | Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Residents may remain on duty for up to 6 additional hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics, and maintain continuity of medical and surgical care. | VI.G.4.a. Duty periods of PGY-1 residents must not exceed 16 hours.<br>VI.G.4.b. Duty periods of PGY-2 residents and more senior residents may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Programs must encourage residents to use alertness management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty, and between the hours of 10:00 PM and 8:00 AM, is strongly suggested. | Extended duty must not exceed 16 hours, unless a 5-hour nap is provided between 10:00 PM and 8:00 AM. The 5-hour nap must be included in the 80-hour limit. After a 5-hour nap, resident may continue for up to 9 more hours for a total of 30 hours. |
| Maximum duty period length | No new patients may be accepted after 24 hours of continuous duty. | VI.G.4.b.(1). It is essential for patient safety and resident education that effective transitions in care occur. Residents may be allowed to remain on-site in order to accomplish these tasks; however, this period of time must be no longer than an additional 4 hours.<br>VI.G.4.b.(2). Residents must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.<br>VI.G.4.b.(3). In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family.<br>VI.G.4.b.(3).(a). Under those circumstances, the resident must:<br>VI.G.4.b.(3).(a).(i). appropriately hand over the care of all other patients to the team responsible for their continuing care; and,<br>VI.G.4.b.(3).(a).(ii). document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director.<br>VI.G.4.b.(3).(b). The program director must review each submission of additional service and track both individual resident and program-wide episodes of additional duty. | No new patients after 16 hours. Extended duty (eg, 30 hours with a 5-hour nap) must not occur more frequently than every third night. No averaging. |
| Minimum time off between scheduled duty periods | Adequate time for rest and personal activities must be provided. This should consist of a 10-hour time period provided between all daily duty periods and after in-house call. | VI.G.5.a. PGY-1 residents should have 10 hours, and must have 8 hours, free of duty between scheduled duty periods.<br>VI.G.5.b. Intermediate-level residents (as defined by the Review Committee) should have 10 hours free of duty, and must have 8 hours between scheduled duty periods. They must have at least 14 hours free of duty after 24 hours of in-house duty.<br>VI.G.5.c. Residents in the final years of education (as defined by the Review Committee) must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.<br>VI.G.5.c.(1). This preparation must occur within the context of the 80-hour maximum duty period length, and 1-day-off-in-7 standards. While it is desirable that residents in their final years of education have 8 hours free of duty between scheduled duty periods, there may be circumstances (as defined by the Review Committee) when these residents must stay on duty to care for their patients or return to the hospital with fewer than 8 hours free of duty. | Residents must have:<br>10 hours off after a regular daytime duty period;<br>12 hours off after night duty;<br>14 hours off after an extended duty period and not return earlier than 6 AM the next day. |

TABLE **Continued**

| Standard | 2003 Standards | 2011 Standards | IOM Recommendations |
|---|---|---|---|
| | | VI.G.5.c.(1).(a). Circumstances of return-to-hospital activities with fewer than 8 hours away from the hospital by residents in their final years of education must be monitored by the program director. | |
| Maximum frequency of in-house night float | | VI.G.6. Residents must not be scheduled for more than 6 consecutive nights of night float.<br>(The maximum number of consecutive weeks of night float, and maximum number of months of night float per year, may be further specified by the Review Committee.) | Night duty must not exceed 4 consecutive nights and must be followed by a minimum of 48 continuous hours off (after 3 or 4 consecutive nights) |
| Maximum in-house on-call frequency | In-house call must occur no more frequently than every third night, averaged over a 4-week period. | VI.G.7. PGY-2 residents and more senior residents must be scheduled for in-house call no more frequently than every third night (when averaged over a 4-week period). | Every third night, no averaging |
| At-home call | 1. The frequency of at-home call is not subject to the every-third-night, or 24 + 6 limitation. However, at-home call must not be so frequent as to preclude rest and reasonable personal time for each resident.<br>2. Residents taking at-home call must be provided with 1 day in 7 completely free from all educational and clinical responsibilities, averaged over a 4-week period.<br>3. When residents are called into the hospital from home, the hours that residents spend in-house are counted toward the 80-hour limit. | VI.G.8.a. Time spent in the hospital by residents on at-home call must count toward the 80-hour maximum weekly hour limit. The frequency of at-home call is not subject to the every-third-night limitation but must satisfy the requirement for 1 day in 7 free of duty, when averaged over 4 weeks.<br>VI.G.8.a.(1). At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each resident.<br>VI.G.8.b. Residents are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new "off-duty period." | |

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; DIO, designated institutional official; GMEC, Graduate Medical Education Committee; PGY, postgraduate year; RRC, Resident Review Committee.