Changes to the ACGME Common Program Requirements and Their Potential Impact on Emergency Medicine Core Faculty Protected Time

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ABSTRACT

The Accreditation Council for Graduate Medical Education (ACGME), which regulates residency and fellowship training in the United States, recently revised the minimum standards for all training programs. These standards are codified and published as the Common Program Requirements. Recent specific revisions, particularly removing the requirement ensuring protected time for core faculty, are poised to have a substantial impact on emergency medicine training programs. A group of representatives and relevant stakeholders from national emergency medicine (EM) organizations was convened to assess the potential effects of these changes on core faculty and the training of emergency physicians. We reviewed the literature and results of surveys conducted by EM organizations to examine the role of core faculty protected time. Faculty nonclinical activities contribute greatly to the academic missions of EM training programs. Protected time and reduced clinical hours allow core faculty to engage in education and research, which are two of the three core pillars of academic EM. Loss of core faculty protected time is expected to have detrimental impacts on training programs and on EM generally. We provide consensus recommendations regarding EM core faculty clinical work hour limitations to maintain protected time for educational activities and scholarship and preserve the quality of academic EM.

BACKGROUND

The Accreditation Council for Graduate Medical Education (ACGME) regulates residency and fellowship training in the United States by establishing minimum standards for accredited residency programs. The ACGME has developed, and periodically updates, the Common Program Requirements (CPRs) that apply to all ACGME accredited residencies. The CPRs

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describe basic components and expectations of residency training to ensure that all programs provide structured, safe, and high-quality clinical training and that resident physicians are adequately prepared to practice independently upon completion of their training. Historically, the ACGME has allowed individual review committees (RCs) to specify further details to the CPRs to account for specialty-specific differences in clinical practice and training environments.

In December 2016, the ACGME received feedback at its ACGME Milestones Summit that differences in milestones and subcompetencies hindered multidisciplinary collaborative efforts, especially with regard to shared tool and faculty development. As a consequence, the ACGME sought to "harmonize" specialty-specific requirements by revising the CPRs and competency-based milestones to create a set of common standards for all specialties.[1] In the updated CPRs that took effect on July 1, 2019, the ACGME defined and listed specific requirements for core faculty. However, while the revised CPRs allowed specialty RCs discretion in determining the number of core faculty, the Review Committee for Emergency Medicine (RC-EM) and other specialty RCs were no longer able to establish requirements for core faculty protected time in this section of the CPRs.

In response to the changes in the CPRs, a task force of representatives and relevant stakeholders from national EM organizations convened in the fall of 2018 to examine the role of core faculty protected time and potential impact these policy changes would have on the specialty (Table 1).

The task force sought to assess the potential effects of these changes on core faculty and the training of emergency physicians. We reviewed relevant literature and the results of surveys conducted by national EM organizations. Together, we produced a joint policy statement endorsed by our member organizations.[2]

Individuals and organizations from multiple specialties submitted continued feedback to the ACGME regarding these changes to the CPRs. In response to this feedback, the ACGME Task Force issued a statement in September 2019. In this statement, the ACGME recognized the importance of allowing individual RCs discretion in requiring core faculty support. It also made clear that all requests for RCs to add requirements for core faculty support will follow the established ACGME process, including final approval by the ACGME Board in 2020 following an open public comment period and review. The concept of compensated academic time and unintended consequences of its removal are important for academic emergency physicians and hospital departments to understand. This paper, a unique collaborative effort of EM professional societies and organizations, discusses the implications of the 2019 ACGME CPRs changes and provides consensus recommendations regarding EM core faculty clinical hours and protected time.

Table 1
National EM Groups Participating in the Task Force

- American College of Emergency Physicians (ACEP)
- American Academy of Emergency Physicians (AAEM)
- AAEM Resident and Student Association (AAEM/RSA)
- American Board of Emergency Medicine (ABEM)
- American College of Osteopathic of Emergency Physicians (ACOEP)
- American Osteopathic Board of Emergency Medicine (AOBEM)
- Association of Academic Chairs of Emergency Medicine (AACEM)
- Emergency Medicine Residents' Association (EMRA)
- Council of Residency Directors in Emergency Medicine (CORD)
- Society for Academic Emergency Medicine (SAEM)
- SAEM Residents and Medical Students (RAMS)

2019 CPRS: WHAT ARE THE CHANGES?

The 2019 CPRs acknowledge the critical role that faculty play in residency programs: "Faculty are a foundational element of graduate medical education- faculty members teach residents how to care for patients."[3] In the prior (2017) EM program requirements, the RC-EM specified requirements for core faculty that included: "Core physician faculty members must be members of the program faculty, must be clinically active and teach, and must devote the majority of their professional efforts to the program. Core physician faculty members must not work clinically more than 28 hours per week on average, or 1344 hours per year, whichever is less."[4] Additional restrictions were placed on the clinical work hours of program directors (PDs) and assistant program directors (APDs). The inferred intent of these restrictions was to provide program leadership and core faculty sufficient protected time for engagement in educational activities associated with the residency program and academic productivity (e.g., scholarship).

The 2019 CPRs maintained protections for PDs and APDs but removed the requirement for EM core faculty protected time and the concomitant restrictions on core faculty clinical hours. The intent was to standardize requirements across all medical specialties, the majority of whom do not have specifically defined

protected core faculty time. However, there are many aspects of EM that make it different than other specialties. Requirements for EM need to be considered within the clinical context of our 24/ 7 work environment and multiple unique challenges to our practice and training requirements.

UNIQUE CHARACTERISTICS OF EM

Emergency medicine faculty are required to be supervising and working in the clinical environment 24 hours a day, 7 days per week, including nights, weekends, and holidays. In contrast to many other medical specialties, all EM resident work is directly supervised in real time by attending physicians, and virtually all attending physicians in EM work clinical shifts continuously throughout the year (i.e., there is no distinction between "on-service" or "off-service" months). Because high variability among work environments, patient populations, and shift distribution (e.g., working triage, fast track, pediatric EM, or nonpeak hours or days of the week) impact variable relative value unit (RVU) generation, academic EM faculty workload is typically defined in total clinical work hours per year, and 100% of those clinical hours are consumed by direct patient care. This contrasts with other specialties, which define faculty expectations in terms of RVUs or percent Medical Group Management Association productivity, such that if sufficient clinical productivity is achieved in less than 40 hours per week, the rest of the work hours each week can be used for academic activities like education and research.

Unlike other specialties, EM also lacks protected time set aside for teaching during clinical shifts. EM never "caps," there is no rounding, and patient volumes are ever increasing, so clinical shifts often focus on meeting immediate patient care needs, with limited time for bedside teaching.[5] Formal didactics and all other residency education-focused endeavors (e.g., mentoring, participation in resident development or wellness activities) in EM generally occur exclusively outside of regular clinical shifts, so that participation in these educational activities must be additive to clinical work hours for the faculty and factored into workhours for residents. These educational activities also usually occur during the day, which can further exacerbate sleep deprivation for emergency physicians working evening and night shifts. Working longer shifts and more night shifts have been specifically associated with an increased risk of burnout in emergency physicians.[6] In light of these factors, it has been suggested that the conventional 40-hour work week may not be a reasonable expectation for emergency physicians.[7]

The emergency department (ED) is also notable for its heavy cognitive load. This stems from various sources such as workload, multitasking, acuity of patients, interruptions, and teaching, and can lead to errors in patient care and task incompletion.[8] Interruptions in workflow are noted to be very common in EM, ranging from approximately six to 12 interruptions an hour[9–13], with EM residents also experiencing a high number of interruptions.[9] The rate of interruptions is significantly higher in the ED compared with the outpatient settings or inpatient wards, and the ED features higher patient loads than these other environments as well.[10,11]

One of the reasons that EM requires extensive educational time outside of the clinical environment is the nature of the specialty itself. EM residents have been estimated to encounter only 47% of the Model of Clinical Practice during their clinical shifts.[14] Hence, significant time and resources are needed to teach residents portions of the required curriculum that they are less likely to encounter working in the ED. Emergency physicians must have an extensive breadth of knowledge and the ability to immediately recognize and stabilize a vast array of diagnoses. Over the course of their training, residents must learn to perform not only common procedures but also rare but lifesaving interventions, like cricothyrotomy, perimortem c-section, pericardiocentesis, thoracotomy, transvenous pacing, and management of a mass casualty incident. The opportunities to develop these skills in vivo are so infrequent that, by necessity, residents must instead learn and repeatedly practice these skills in simulated settings under the guidance of experienced faculty, so that they are able to perform them successfully on only a moment's notice once they are working independently. As such, a considerable amount of didactic time in EM is devoted to simulation and procedural skills training. A recent survey of the Society for Academic Emergency Medicine (SAEM) Simulation Academy found that simulation now comprises approximately 10% to 30% of EM residency total educational time.[15]

Emergency medicine also has a track record of innovation in medical education. Such innovation requires the investment of faculty time exclusively outside of clinical shifts. EM was one of the specialties to pilot the ACGME milestones, which required programs to invest in extensive core faculty development

for successful widespread usage. EM also has led efforts to incorporate and evaluate novel modalities like flipped classroom didactics and free open-access medical education (FOAM) in graduate medical education.[16–19] Developing these unconventional methods of teaching and learning, creating new educational content, building assessment tools, and appraising and curating nontraditional resources require more faculty time than delivering "canned" lectures. In addition to preparation time, many of these labor-intensive educational efforts—like the flipped classroom—also require more faculty to participate—and must be studied after implementation to ensure that they are useful. The time and effort EM faculty devote to education make a difference: many of EM's graduate medical education innovations are adopted by other specialties' residency programs, to the benefit of the entire spectrum of graduate medical education.

Additionally, the widespread utilization of ultrasound in EM now represents a significant added competency that has been folded into traditional EM residency education. To develop proficiency, residents must spend time working closely with faculty instructors to learn the manual skill of performing ultrasounds and also gain a basic understanding of the physics of ultrasonography and the ability to interpret images. The Society of Clinical Ultrasound Fellowships has estimated that the average ultrasound division director already devotes 288 hours annually (which translates to >6 hours per week) to ultrasound education and spends another 124 hours on quality assurance, without which both resident education and patient care would decline (V. Friedman, President, American College of Emergency Physicians, Irving, TX, letter to Thomas J. Nasca, ACGME, Chicago, IL, November 6, 2018). This time does not include their regular clinical shifts and any other educational or research activities. All of these extraclinical didactics, including simulation sessions and ultrasound education, require both faculty preparation time and direct faculty involvement in teaching sessions beyond the normal clinical workload.

CORE FACULTY CLINICAL HOUR RESTRICTIONS: A BUTTRESS FOR THE ACADEMIC EMERGENCY MEDICINE EDUCATOR

The concept of providing salaries for faculty whose efforts are focused on educating young physicians dates back to Flexner's report on medical training in the early 20th century.[20] Flexner advocated for a move to salaried medical education faculty; he believed that freeing medical school faculty from reliance on clinical revenue for income would allow faculty to more fully engage in education and research. In the wake of the Flexner report, medical schools increased their complements of faculty, and salaried positions proliferated. However, over time, especially with the introduction of Medicare and the development of clinical (rather than tenure) faculty tracks, faculty salaries, and departmental budgets again were tied to revenue generated by faculty clinical practice, and faculty clinical hours began to rise (Table 2).[21]

In the modern era of medical education, restricting core faculty clinical hours has certain drawbacks. Limiting core faculty clinical hours requires programs to have more faculty overall to fully cover their clinical needs, and in turn, this translates to extra departmental costs. Restrictions on core faculty clinical hours can also complicate faculty clinical scheduling and lead to suboptimal clinical schedules. Additionally, as program requirements for core faculty become more detailed and specific, it becomes more onerous for programs to comply with all requirements and maintain accreditation. Specific requirements also may not account for variation in the focus or character of individual programs, e.g., the differences between a university-based residency program and a community hospital–based program.

However, these costs seem to be outweighed by the benefits of limiting clinical hours for core faculty. Because departments typically generate revenue through patient care, many faculty compensation models tie compensation to clinical productivity. This may lead faculty to perceive education and scholarship as uncompensated activities; if faculty are not specifically paid for their teaching activities outside of the clinical setting, these activities are essentially pro bono work over and above regular compensated clinical duties. Thus, when faced with the choice between clinical

Table 2
Benefits of Allocated Protected Time for Core Faculty

- Increased time for nonclinical educational activities
- Tangible recognition for scholarly work efforts outside of clinical responsibilities
- Time and resources to contribute to the academic mission of the department
- Increased opportunity and bandwidth to develop in-depth educational programming and/or pursue research

work that generates income or education work that does not, faculty may understandably choose clinical practice at the expense of engagement in medical education.[22] Protected time gives core faculty time to participate in medical education without adding to their overall workload or forcing them to choose between compensated and uncompensated work. Additionally, it represents recognition that an institution values scholarly educational efforts, and that these efforts contribute to the institution's overall goals of not only providing patient care but also training the next generation of physicians. In an editorial addressing protected time for teaching, Brenner et al.[23] noted that "In other fields where lives and safety are at high stake (e.g., aviation or certain military operations), there would be little question of either the time or other resources needed to assure minimum standards of competence. Yet chairs, program directors, and other educational leaders almost have to apologize for needing to request enough positions to account for protected teaching and program administration time."

The educational value unit (EVU) productivity model represents an acknowledgment of the value of educational efforts and also of the time required for education that would otherwise either lengthen faculty work hours or come at the expense of clinical productivity (and, hence, faculty income).[24] Many institutions and a range of specialties have already incorporated EVUs as part of their productivity and compensation structure. A consensus report by the Alliance for Academic Internal Medicine Education Redesign Task Force in 2007 concluded: "Although financial support should ideally be provided to all faculty for their teaching responsibilities, such support is particularly critical for the core faculty, because their extensive time with teaching and supervision of trainees clearly limits their ability to generate revenue through clinical practice or research."[25]

Protected time for core faculty additionally facilitates participation in faculty development activities. Since the Flexner report was published more than a century ago, there have been continued calls to modernize residency training to ensure that it is maximally effective and educational.[26,27] Because of their significant engagement in medical education, core faculty need an understanding of curriculum design, learning theory, feedback, and assessment. Core faculty need protected time to participate in faculty development activities to acquire these additional nonclinical skills in order to become effective educators. Many newer and innovative didactic educational methods—like the flipped classroom model and simulation—especially require more faculty time and involvement.[28]

As society's collective medical knowledge continues to expand, faculty must conduct their own research to promote further progression of their field. They also must engage regularly with current literature to be able to effectively teach residents critical appraisal skills and evidence-based medicine. Education faculty who face competing demands for their limited nonclinical time may be forced to squeeze scholarship into whatever time remains after their clinical activities and required administrative duties.[29] In one study, medical education faculty cited fragmented time to devote to scholarship, prioritization of other responsibilities (e.g., clinical or administrative duties), and competition for nonclinical time as impediments to their scholarly productivity (and specifically to education scholarship).[30] Similarly, a consensus workshop at the Association of American Medical Colleges (AAMC) 2013 annual meeting listed time as one of the primary systemic barriers to medical educator research productivity.[31] In contrast, having a designated faculty research director —typically with protected research time as well—was linked with increased resident publications and presentations in one systematic review.[32]

Protected time, or compensation for teaching, has been associated with faculty retention. In a study of Harvard primary care physicians, faculty participation in a clerkship and their retention as clinical preceptors significantly increased when their stipend for involvement increased and when the stipend was directly linked to being a preceptor.[33] Similarly, lack of institutional recognition and support for excellence in teaching has been cited as a factor in faculty attrition.

BURNOUT AND EM

Burnout and retention are issues of particular concern in EM, which, for years, has had unusually high rates of burnout compared with other medical specialties.[34,35] Nearly half of the approximately 900,000 practicing physicians in the United States report symptoms of burnout. However, in a nationally representative sample of physicians from all specialties, adjusted for age, sex, and years since graduation from medical school, emergency physicians were at greatest risk for burnout (odds ratio [OR] = 3.18; $p < 0.001$), with nearly 70% reporting burnout (the mean across specialties was less than 50%).[34]

In the American Board of Emergency Medicine (ABEM) Longitudinal Study of Emergency Physicians, one-third of emergency physician respondents reported burnout, and although involvement with clinical teaching was associated with higher career satisfaction, physicians who reported fatigue, insufficient time for personal life, or inability to attend educational conferences had lower career satisfaction and higher levels of burnout.[36]

Administrative tasks outside of direct patient care not only consume physician time but also have been explicitly associated with physician burnout, which itself is linked with early retirement or reduction in clinical hours.[37,38] A thematic analysis of 47 papers identified long working hours as a predictor of physician burnout.[39] In a sample of academic otolaryngologists, dissatisfaction with work–personal life balance and inadequate administration time strongly predicted faculty burnout.[40] Similarly, work manageability has been correlated with physician happiness.[41]

POTENTIAL IMPLICATIONS OF LOSS OF PROTECTED TIME FOR CORE FACULTY: SUMMING UP THE CONSEQUENCES

Loss of protected time for EM core education faculty will reasonably be expected to lead to higher clinical work hours for education faculty. The work of residency education will then either add to core faculty's heavier clinical workloads or fall on the few remaining program leadership faculty who retain (but will not gain additional) protected time in the new CPRs. As such, potential downstream effects of the loss of protected time for core faculty include decreased faculty job satisfaction and retention, fewer faculty choosing academic careers or medical educator career tracks, decreased scholarship, decreased educational innovation and scholarship, decreased faculty involvement in promoting resident wellness and supporting resident career development, and increased EM faculty burnout. Additionally, an inverse relationship between resident burnout and resident satisfaction with faculty has been demonstrated previously, so faculty burnout may, in turn, feed-forward and heighten resident burnout (Table 3).[42]

These effects seem to run counter to other ACGME CPRs changes, including a new focus in 2019 on faculty and resident well-being: "The addition of expanded and more specific requirements regarding resident and faculty well-being emphasizes the need for programs and institutions to prioritize well-being and recognize that physicians are at risk for burnout and depression." The ACGME further specifies that program and institution requirements now include, "... establishing policies and programs supporting optimal resident and faculty member well-being ...."[43] Of concern, physician burnout has been linked to a plethora of negative effects not only on physicians themselves but also on their patients. In a study of 77 attending and resident emergency physicians, those physicians with the highest levels of burnout were significantly more likely to report providing suboptimal care, including early patient dispositions, insufficient communication with patients and staff, excessive testing, inadequate pain management, and omission of information during patient handoffs.[44] Additionally, a systematic review and meta-analysis of over 40 studies of physicians found that burnout was associated with increased odds for unsafe care, unprofessionalism, and decreased patient satisfaction, particularly in early-career physicians.[45] Overlooking burnout, especially in younger physicians, has potential to cause negative impacts on an institutions' ability to deliver high-quality patient care. Thus, physician burnout that results from loss of protected time for core faculty and a concomitant increase in workload may lead to lower quality clinical care and poorer faculty supervision of residents and may thereby represent a threat to patient safety.

In response to the ACGME CPRs changes, several EM organizations surveyed their members to ascertain the likely effects of the loss of core faculty protected time. Recently, 865 SAEM and 212 Council of Residency Directors in Emergency Medicine (CORD) members responded to a survey asking about the protected time they are allocated solely due to their core faculty status.[46,47] A majority of respondents were PDs, associate PDs/APDs, or general core faculty members. Over 90% of respondents reported that the elimination of core faculty protected time would

Table 3
Potential Lost Opportunities due to Unrestricted Clinical Hours for Core Faculty

- Attrition of top talent faculty otherwise interested in education due to competing opportunities
- Increased faculty dissatisfaction due to increased clinical and nonclinical demands
- Harmful effects on education of trainees and quality of care
- Loss of innovations and advancements in education research

negatively impact their ability to perform their jobs. On a Likert scale of 0 (representing no impact) to 10 (major negative impact), the average score for a question asking how the elimination of protected time would impact job satisfaction was 8.6. A large majority of respondents reported that there would be a very strong negative impact on their well-being and on their ability to perform their academic duties for their programs. Respondents also reported it would change "in a meaningful way" their current level of involvement in educational activities.[46,47]

Some of the most common qualitative themes in survey responses about loss of protected time included the negative impact on the educational program (e.g., on lectures, simulation, ultrasound, mentoring), the negative impact on faculty wellness, increasing clinical responsibilities that would leave no time to perform faculty responsibilities, and a negative impact on the recruitment and retention of academic faculty. Many respondents reported their unwillingness to continue their current positions considering these changes. In response to a question asking how likely respondents would be to change in a meaningful way their current academic involvement if protected time were eliminated, on a scale from 0 (no change) to 10 (leaving academic medicine), the mean score was 7.3.[46] More than 95% of respondents reported that they considered elimination of the requirement for protected time job- or career-threatening .[47] Similarly, in the study of SAEM's Simulation Academy, 89% of respondents strongly agreed that protected time was important for EM simulation-based education. The same percentage of respondents also strongly agreed that elimination of protected time would impact their ability to teach residents via simulation.[15]

Recently, ACEP released preliminary data on its survey of the ultrasound section members to assess the impact of changes in mandated protected time allotment. Fifty-one ultrasound-trained EM physicians responded, of whom 90.2% identified themselves as core faculty. At the time of the survey, 82.4% reported having dedicated protected time. Ninety-six percent of respondents reported that they do ultrasound scans regularly on their clinical shifts. Respondents also reported that they spend an average of 8.5 hours per week on resident ultrasound training and an average of 8.5 hours per week outside of their clinical shifts teaching residents. One-hundred percent of respondents with protected time believed that dedicated time for ultrasound training would decrease if protected time is lost. Eighty-eight percent believed that the proposed ACGME changes eliminating protected core faculty time would adversely affect their ability to teach, and 92.2% believed that the proposed ACGME changes eliminating protected core faculty time would adversely affect their overall wellness (preliminary data, ACEP internal survey of Ultrasound Section). [Corrections added on January 27, 2020, after first online publication: The reference citation "38" was deleted from the above sentence.]

Because educating EM residents and teaching procedural skills for emergency situations cannot be accomplished solely by teaching during clinical shifts, unintended consequences of the ACGME CPRs changes may include a reduction in the quality of training for EM residents. Without enforced prioritization of education and scholarship, departments and residency programs may emphasize generation of clinical revenue over investment in education; with the loss of protected time, core faculty will likely see their clinical workloads increase, precluding their participation in teaching activities. The CORD, SAEM, and ACEP survey results are a testament to the fact that loss of faculty protected time will result in the decline of training and the consequent inability of residents to achieve competency through the practice of critically important skills. As such, the ACGME CPRs changes have the potential to affect future emergency medical care: as the quality of resident training lessens, the quality of care provided by emergency physicians may decline, thereby impacting the future health care experiences and outcomes of the general public.

RECOMMENDATIONS AND POLICY IMPLICATIONS

Current ACGME EM program requirements specify that core faculty must be clinically active and substantially involved in resident education. This level of engagement is not possible when faculty work full time clinically; as such, core faculty must have protected time for their educational efforts (Table 4).

CONCLUSION

Emergency medicine is unique among medical specialties in that regular clinical shifts in the ED do not consistently allow time or offer opportunities for resident training in all necessary skills. Unlike other hospital or outpatient clinical environments, the ED's patient volumes and acuity are both unpredictable and

Table 4
Recommendations for Core Faculty Protected Time

• Residency programs should continue to abide by the requirement that core faculty's clinical hours "not exceed an average of 28 hours per week, or 1344 hours per year, whichever is less."[4]
• Residency programs should adhere to the joint 2019 policy statement, "Compensated Time for Faculty Academic Administration and Teaching Involvement."[2]
• Academic departments should adjust base clinical hours and define educational involvement and expectations for all core faculty.
• Departments should employ other innovative strategies to facilitate faculty engagement in education, such as tracking, quantifying, and compensating faculty for the contributions through an educational value unit (EVU) system.
• Core faculty should have some control over their clinical schedule and their clinical workload should align with didactics, faculty meetings, and faculty development.
• Academic departments should seek novel sources of revenue to hire additional clinical faculty, fund protected time, and offer nonsalary support to core faculty to facilitate work–life integration.
• If other methods are ineffective at maintaining minimum standards for core faculty protected time, we recommend that EM organizations develop a designation for programs that provide all core faculty with protected time that meets or exceeds the 2017 ACGME standard.
• This certification would recognize certain programs' superior commitment to education and allow residency applicants to identify those programs in which a culture of educational excellence and enhanced educational opportunities exist.

unlimited. The Accreditation Council for Graduate Medical Education Milestones track resident learning, knowledge, and skill development over the course of training, but residents can only improve on many emergency medicine milestones with skills training outside of the clinical arena. Thus, emergency medicine residency programs must rely on core faculty to provide this formal teaching outside of the clinical environment. Newer didactic modalities such as the flipped classroom, small group discussions, and simulation often require more faculty involvement than do traditional lectures. Resident ultrasound training, engagement in scholarship, and specific procedural skill acquisition all require faculty preparation for and participation in hands-on resident learning time outside of the clinical arena; this is only possible when emergency medicine faculty are given protected time for education and research.

Working more than 28 clinical hours per week, or 1,344 clinical hours per year, precludes sustained involvement in and substantive contributions to medical education. Additionally, excessive work hours or an unmanageable workload may precipitate burnout, which may negatively affect faculty recruitment and retention and ultimately the quality of emergency medicine residency training and future patient care; the unique nature of emergency medicine clinical practice may further heighten these effects. Protected time and reduced clinical hours are essential to allowing emergency medicine core education faculty to engage in education and research, without which academic emergency medicine would stagnate and residency programs could not function. Thus, emergency medicine core faculty must continue to have clinical work hour limitations and protected time for educational activities and scholarship.

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