COUNCIL OF RESIDENCY DIRECTORS IN EMERGENCY MEDICINE

The Council of Residency Directors in Emergency Medicine (CORD) appreciates this opportunity to share our position on faculty protected time with the ACGME.

Substantial faculty non-clinical contributions are required to sustain graduate medical education. Residency programs are charged with providing crucial specialty training that encompass both on-the-job supervision and separate didactic education outside of the clinical environment. Ultimate responsibility for residency training within the program lies primarily with the program director, assistant/associate program director(s), and program coordinator(s). These individuals carry a heavy administrative burden; without sufficient support, the demands of the job can become overwhelming and consuming, leading to burnout and job turnover.[1,2,3,4] Core faculty also play an essential role in fulfilling the educational and administrative functions of the graduate medical education.[5] Supported time for program administration and resident education serves as the buttress for academic faculty who engage in the non-clinical work that allow residency programs to successfully train residents and meet accreditation standards.

Non-Clinical Administrative Time for All Specialties

We believe the ACGME must require specific support for faculty administrative/educational time and effort. In the absence of such requirements, expected faculty efforts may come to be defined solely by clinical productivity with concomitant reduction or elimination of faculty non-clinical contributions to graduate medical education. Just as the ACGME restricts resident work hours in order to ensure resident wellness, healthcare quality, and patient safety, so too must it regulate faculty clinical time and non-clinical effort to ensure the quality of residency education. Given the variability in how different specialties and institutions define 1.0 FTE, we believe it is important for the ACGME to define non-clinical protected time for program administration or resident education and/or maximum clinical time in a way that standardizes expectations across programs. With respect to non-clinical administrative time for all specialties:

- The ACGME should establish requirements for supported time for the non-clinical work of program directors, assistant/associate program directors, core faculty, and program coordinators
- To account for specialty-specific differences, the supported non-clinical time requirements should include a minimum base for all specialties with scaled increases for larger programs with more trainees
- Individual review committees should be granted discretion to further specify additional detail, in consideration of the unique educational needs and clinical environment of each specialty.

Non-Clinical Administrative Time in Emergency Medicine

The emergency physician must be knowledgeable about a wide range of conditions, including those infrequently encountered in clinical practice but nonetheless life-threatening. Didactic education

outside the clinical realm, specifically through simulation, is necessary to ensure that residency graduates are equipped to handle any presenting complaint. Certain skills, such as emergency ultrasound, require extensive direct supervision. The breadth of pathology in Emergency Medicine (EM) specifically requires extensive education, but it has been estimated that clinical shifts allow residents to encounter only 47% of the Model of Clinical Practice[6]; given that emergency physicians must be facile with even infrequently-encountered diseases and procedures, didactic education outside of the clinical environment-- specifically including simulation training, which now comprises approximately 10-30% of total EM residency educational time-- is crucial.[7] Proficiency in ultrasound imaging acquisition and interpretation requires hundreds of hours annually of direct supervision of residents and hands-on training by faculty (preliminary data, ACEP internal survey of Ultrasound Section). But faculty working emergency department (ED) clinical shifts already face a heavy cognitive load, characterized by high patient loads compared with other outpatient or inpatient settings, frequent interruptions estimated to range from 6-12 per hour, and constant task switching, which limit the formal education that can be provided on shift.[8–12] The continuous clinical demands and constant direct faculty supervision of clinical care on shift in the emergency department means that these didactics cannot occur during scheduled clinical work but must be additive to faculty clinical time.[13] Additionally, it is especially challenging to integrate EM clinical work-- which causes constant circadian disruption-- with non-clinical administrative and educational work, which generally strictly conforms to a diurnal rhythm.[14] Working night shifts and the concomitant sleep deprivation have been associated with fatigue, irritability, and decreased cognitive performance, limiting faculty's ability to work a night shift and then engage in administrative or educational work the following day.[15,16]

The 2018 Academy of Administrators in Academic Emergency Medicine (AAAEM)/Association of Academic Chairs in Emergency Medicine (AACEM) benchmark survey reported mean annual clinical hours of 942 for academic emergency physicians and mean non-clinical work hours of 922. (S. Bird, MD, September 2020).

A recent survey of the Council of Residency Directors in Emergency Medicine members found that the majority of PDs report working between 711-735 clinical hours per year (0.4 FTE), with APDs working a median of 936-1159 clinical hours per year (0.5-0.6 FTE). Average administrative time per week was estimated at greater than 31 hours per week by a majority of program director respondents. (J. Smith, MD, unpublished data, August 2020).

An FTE can be defined as 2080 hours/ year, which includes 160 hours of paid time for vacation, conference attendance, and continued medical education. This leaves 1920 hours dedicated to clinical and non-clinical work in the emergency department.

Given the administrative and nonclinical education needs of EM residency training, we believe that the ACGME should require that:

- Program directors must be provided with the required salary support to devote at least 0.6 FTE non-clinical time to program administration, with clinical hours not to exceed 768 hours per year.

- Assistant/Associate program directors must be provided with the required salary support to devote at least 0.4 FTE non-clinical time to program administration, with clinical hours not to exceed 1152 hours per year.
- Core faculty must be provided with the required salary support to devote an average of at least 0.3 FTE non-clinical time each to fulfilling the program requirements, with average clinical hours not to exceed 1344 hours per year each. The specific distribution of non-clinical time for education and administration may be determined by the program director, with each faculty member receiving a minimum of 0.1 FTE of support for non-clinical education or residency administration effort.
- At least one program coordinator must be provided with 1.0 FTE support for administration of the program.
- Required support for administrative and educational effort should be scaled up as the size of the program increases:
    - We support the current ACGME requirement in emergency medicine (II.A.2.) for a minimum of 1 Assistant of Associate Program Directors (APD) for a program of 18-35 residents, 2 APDs for a program of 36-53, and 3 APDs for a program of 54 or more.
    - We request further scaling expectations of 3 APDs for a program of 54-71, 4 APDs for a program of 72-89, and 5 APDs for a program of 90 or more to address large training programs. This would ensure residents from larger training programs receive equivalent support from their program leadership to promote resident well-being.
    - We support the current ACGME requirement in emergency medicine (II.C.2.a.) of a minimum of 1.5 FTE support personnel including at least 1.0 FTE coordinator for programs of 31-45 residents, 2.0 FTE support personnel including at least 1.0 FTE coordinator for programs of 46-60 residents, 2.5 FTE support personnel including at least 1.0 FTE coordinator for programs of 61-75 residents, and 3.0 FTE support personnel including at least 1.0 FTE coordinator for programs of 76 or more.
    - We request clarifying 3.0 FTE support personnel including at least 1.0 FTE coordinator for programs of 76-90 with additional scaling for 3.5 FTE support personnel including at least 1.0 FTE coordinator for programs with 91 or more residents.

Characteristics of Residency Programs that Affect Workload

Specific factors that may affect the workload of program faculty and staff, and, thus, the required administrative time and effort include:

- Size of the program
- Affiliation with a medical school
- Number of other resident learners and medical students rotating in the emergency department
- Total number of clinical sites
- Number of other residency programs and overall graduate medical education resources available within the institution
- Financial resources dedicated to the program

- Institutional and local regulatory requirements
- Ratio of the total numbers of program APDs, core faculty, and program coordinators relative to the number of residents

Recommendations for How the ACGME Can Support Residency Program Leadership

In addition to requiring adequate support for program administration and resident education, the ACGME can lessen the administrative burden on program directors, core faculty, and program coordinators by reducing the effort required to comply with accreditation requirements.[17,18,19,20] Recent events have demonstrated that many tasks can actually be completed online and asynchronously with equal fidelity and superior efficiency.[21,22]

We propose that the ACGME eliminate site visits and the self-study. The ACGME monitors program compliance through the annual WebADS update, but this is often duplicative with the Annual Program Evaluation and other local institutional requirements. To offload program directors, the responsibilities of monitoring program compliance, assuring the quality of training, and reporting to the ACGME should be shifted from individual programs to the institution. Similarly, since faculty development and faculty wellness are multifactorial and generally not controlled by residency program administration, oversight of these areas should fall within the purview of the institution rather than of the residency program director. The ACGME might also utilize existing learning management systems or develop a dual-purpose universal learning management system that would allow the ACGME to track necessary quality assurance data while also serving programs' educational and training needs. This would eliminate the need for programs or institutions to prepare and submit annual reports containing this data. The ACGME could redefine expectations for academic faculty broadly to encourage a more equitable distribution of workload among all faculty rather than a limited few.

Additional Considerations

In addition to changes in the accreditation and compliance process to reduce reporting effort required of program directors, CORD believes required support for non-clinical effort remains of paramount importance. Faculty need to teach and train future generations of physicians. Rapid advances in science and technology, increased demands of clinical care due to an aging population, and more onerous documentation requirements, contribute to an increasingly challenging work environment. It has become increasingly challenging to provide sufficient education in the clinical environment to allow trainees to develop the knowledge and procedural competency required for independent practice.[23] The ACGME has placed great emphasis on safety of residents and patients: dedicated administrative time allows for better resident education, which in turn translates to better patient safety and better quality of care.

The COVID-19 pandemic has highlighted that the work that faculty and residents do daily is essential and matters. It has also demonstrated the risks of a system that is already stretched to its limits at

baseline and the importance of having sufficient faculty and staff bandwidth to allow for unexpected challenges.

Emotional exhaustion and burnout previously have been positively associated with total weekly work hours and negatively associated with supported non-clinical time for academic faculty.[24,25,26] There has been growing recognition of burnout in program coordinators as well.[27] COVID-19 has disrupted traditional training processes, increasing the workload associated with residency education and administration, and has exacerbated the existing problems with burnout in graduate medical education.[28,29,30,31] Physician burnout feeds forward and affects patient care: studies have demonstrated negative effects of physician burnout on communication with patients, transfer of information during handoffs, pain management, ordering of tests, patient satisfaction, and unprofessional behavior.[32,33] Another important negative impact of burnout is physician turnover.[34–38] Turnover of a residency program director or key education faculty impacts not just the physician but the residency program and residents in it. Faculty burnout negatively impacts resident education, as the current ACGME Common Program Requirements recognize: "Faculty members create an effective learning environment by acting in a professional manner and attending to the well-being of residents and themselves."[39] The ACGME has demonstrated consistent concern for resident well-being and has prioritized quality and safety in patient care, but the dangers of physician burnout and the importance of physician well-being don't end upon graduation from residency. The recent suicide of Dr. Lorna Breen in New York is a reminder that faculty have finite limits on how much time and effort they can and should expend on clinical and administrative work.[40] Protecting medical education faculty from harm by prohibiting excessive workloads parallels job safety requirements established by regulatory agencies in other industries. Most importantly, it is necessary for the functioning of our graduate medical education system, and it is the right thing to do.

Summary Recommendations

It is imperative that academic medicine carves out dedicated non-clinical time for education. CORD would be pleased to participate in the proposed congress in November. We firmly believe that our residents' education, faculty wellness, and current and future patients' quality of care depend upon supported non-clinical time, so we can't afford not to provide it.

We strongly urge the ACGME to establish minimum requirements for supporting faculty non-clinical time for residency administration and education. Now more than ever, we must maintain standards of excellence in physician training, promote well-being for residents and faculty, and ensure the quality of future patient care.

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1. Fletcher KE, O'Connor AB, Kisielewski M, Willett LL. Why Do Residency Program Directors Consider Resigning? A Mixed-Methods Analysis of a National Program Director Survey. Am J Med 2020;133(6):761–7.

2. Beasley BW, Kern DE, Kolodner K. Job turnover and its correlates among residency program directors in internal medicine: a three-year

cohort study. Acad Med 2001;76(11):1127–35.

3. Fountain D, Quach C, Norton D, et al. The Perfect Storm Is on the Horizon! J Surg Educ 2017;74(6):e120–3.

4. Quinn, S., Kane, B., Goyke, T., Yenser, D., Greenberg, M., Barr, G. The Anticipated Negative Impact on Emergency Medicine Faculty of the new ACGME Common Program Requirements. Poster presentation submitted to: Society of Academic Emergency Medicine Annual Meeting, Council of Emergency Medicine Residency Directors 2019 Academic Assembly, and Pennsylvania College of Emergency Medicine Scientific Assembly. 2019;

5. Meyers FJ, Weinberger SE, Fitzgibbons JP, et al. Redesigning residency training in internal medicine: the consensus report of the Alliance for Academic Internal Medicine Education Redesign Task Force. Acad Med 2007;82(12):1211–9.

6. Finnell JT, Seupaul RA. Experiential Learning in Emergency Medicine [Internet]. Annals of Emergency Medicine. 2005;46(3):29. Available from: http://dx.doi.org/10.1016/j.annemergmed.2005.06.111

7. Frallicciardi A, Cassara M, Falk M, et al. Society for Academic Emergency Medicine Simulation Academy Core Faculty in Simulation Survey. 2019;

8. Skaugset LM, Farrell S, Carney M, et al. Can You Multitask? Evidence and Limitations of Task Switching and Multitasking in Emergency Medicine. Ann Emerg Med 2016;68(2):189–95.

9. Laxmisan A, Hakimzada F, Sayan OR, Green RA, Zhang J, Patel VL. The multitasking clinician: decision-making and cognitive demand during and after team handoffs in emergency care. Int J Med Inform 2007;76(11-12):801–11.

10. Chisholm CD, Dornfeld AM, Nelson DR, Cordell WH. Work interrupted: a comparison of workplace interruptions in emergency departments and primary care offices. Ann Emerg Med 2001;38(2):146–51.

11. Westbrook JI, Raban MZ, Walter SR, Douglas H. Task errors by emergency physicians are associated with interruptions, multitasking, fatigue and working memory capacity: a prospective, direct observation study. BMJ Qual Saf 2018;27(8):655–63.

12. Ratwani RM, Fong A, Puthumana JS, Hettinger AZ. Emergency Physician Use of Cognitive Strategies to Manage Interruptions. Ann Emerg Med 2017;70(5):683–7.

13. Greenberger SM, Finnell JT 2nd, Chang BP, et al. Changes to the ACGME Common Program Requirements and Their Potential Impact on Emergency Medicine Core Faculty Protected Time. AEM Educ Train 2020;4(3):244–53.

14. Kuhn G. Circadian rhythm, shift work, and emergency medicine. Ann Emerg Med 2001;37(1):88–98.

15. Smith-Coggins R, Broderick KB, Marco CA. Night shifts in emergency medicine: the American board of emergency medicine longitudinal study of emergency physicians. J Emerg Med 2014;47(3):372–8.

16. Maltese F, Adda M, Bablon A, et al. Night shift decreases cognitive performance of ICU physicians. Intensive Care Med 2016;42(3):393–400.

17. Ruchman RB, Kwak AJ, Jaeger J, Sayegh A. Job satisfaction of program directors in radiology: a survey of current program directors. AJR Am J Roentgenol 2013;200(2):238–47.

18. Mullins ME, Gunderman RB. Change overload and the program director. Acad Radiol 2015;22(4):539–40.

19. De Oliveira GS Jr, Almeida MD, Ahmad S, Fitzgerald PC, McCarthy RJ. Anesthesiology residency program director burnout. J Clin Anesth 2011;23(3):176–82.

20. Feist TB, Gilbert DL. Program Administrator Burnout: More Than a Wellness Issue. J. Grad. Med. Educ. 2019;11(6):732.

21. Potts JR 3rd. Residency and Fellowship Program Accreditation: Effects of the Novel Coronavirus (COVID-19) Pandemic. J Am Coll Surg 2020;230(6):1094–7.

22. Almarzooq ZI, Lopes M, Kochar A. Virtual Learning During the COVID-19 Pandemic: A Disruptive Technology in Graduate Medical Education. J Am Coll Cardiol 2020;75(20):2635–8.

23. Lin MP, Baker O, Richardson LD, Schuur JD. Trends in Emergency Department Visits and Admission Rates Among US Acute Care Hospitals. JAMA Intern Med 2018;178(12):1708–10.

24. Aggarwal S, Kusano AS, Carter JN, Gable L, Thomas CR Jr, Chang DT. Stress and Burnout Among Residency Program Directors in United States Radiation Oncology Programs. Int J Radiat Oncol Biol Phys 2015;93(4):746–53.

25. West CP, Halvorsen AJ, Swenson SL, McDonald FS. Burnout and distress among internal medicine program directors: results of a national survey. J Gen Intern Med 2013;28(8):1056–63.

26. Porter M, Hagan H, Klassen R, Yang Y, Seehusen DA, Carek PJ. Burnout and Resiliency Among Family Medicine Program Directors. Fam Med 2018;50(2):106–12.

27. Eckart CM. Burnout in GME: It's Not Just a Physician Problem [Internet]. Journal of Graduate Medical Education. 2019;11(4):410–1. Available from: http://dx.doi.org/10.4300/jgme-d-19-00480.1

28. Virarkar M, Jensen C, Javadi S, Saleh M, Bhosale PR. Radiology Education Amid COVID-19 Pandemic and Possible Solutions. J Comput Assist Tomogr 2020;44(4):472–8.

29. Kwon YS, Tabakin AL, Patel HV, et al. Adapting Urology Residency Training in the COVID-19 Era. Urology 2020;141:15–9.

30. Coe TM, Jogerst KM, Sell NM, et al. Practical Techniques to Adapt Surgical Resident Education to the COVID-19 Era. Ann Surg 2020;272(2):e139–41.

31. Robbins JB, England E, Patel MD, et al. COVID-19 Impact on Well-Being and Education in Radiology Residencies: A Survey of the Association of Program Directors in Radiology. Acad Radiol 2020;27(8):1162–72.

32. Lu D, Dresden S, McCloskey C, Branzetti J, Gisondi M. Impact of Burnout on Self-Reported Patient Care Among Emergency Physicians [Internet]. Western Journal of Emergency Medicine. 2015;16(7):996–1001. Available from: http://dx.doi.org/10.5811/westjem.2015.9.27945

33. Panagioti M, Geraghty K, Johnson J, et al. Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-analysis. JAMA Intern Med 2018;178(10):1317–30.

34. Shanafelt T, Goh J, Sinsky C. The Business Case for Investing in Physician Well-being. JAMA Intern Med 2017;177(12):1826–32.

35. Windover AK, Martinez K, Mercer MB, Neuendorf K, Boissy A, Rothberg MB. Correlates and Outcomes of Physician Burnout Within a Large Academic Medical Center. JAMA Intern Med 2018;178(6):856–8.

36. Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in Burnout and Satisfaction with Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. Mayo Clin Proc 2015;90(12):1600–13.

37. Shanafelt TD, Mungo M, Schmitgen J, et al. Longitudinal Study Evaluating the Association Between Physician Burnout and Changes in Professional Work Effort. Mayo Clin Proc 2016;91(4):422–31.

38. Shanafelt TD, Noseworthy JH. Executive Leadership and Physician Well-being [Internet]. Mayo Clinic Proceedings. 2017;92(1):129–46. Available from: http://dx.doi.org/10.1016/j.mayocp.2016.10.004

39. Common Program Requirements (Residency) [Internet]. [cited 2020 Aug 25];Available from: https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2020.pdf

40. Knoll C, Watkins A, Rothfield M. "I Couldn't Do Anything': The Virus and an E.R. Doctor's Suicide. New York Times. 2020;A1.