Council of
Emergency Medicine
Residency Directors

January 28, 2016

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Dear Dr. Thomas J. Nasca,

The Council of Emergency Medicine Residency Directors (CORD) would like to thank you for providing our organization an opportunity to formally respond on the current ACGME resident duty hour requirements, including aspects related to cost, impact of implementation, and standards for the learning and working environment. We appreciate the ACGME's commitment to continuously review the current accreditation requirements for resident duty hours.

CORD is a scientific and educational organization. The mission for our organization is to have an integral role in the advancement of emergency medicine education. Our purpose is to improve the quality of emergency medical care and to establish and maintain high standards of excellence in emergency medicine training programs. In order to prepare our organizational response, we conducted a survey of the CORD membership in January 2016 to obtain an understanding of their perception of the current ACGME duty hours effect on educational experience, resident wellness, patient care and residency and hospital costs. The results of the survey are summarized in Tables 1, 2 and 3.

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CORD's formal position on the current ACGME resident duty hour requirements, including impact analysis, from CORD's perspective, on costs and impact of implementation.

Formal Position:

- CORD supports the concept of resident duty hour requirements to promote a supportive educational environment with resident well-being and patient safety.
- CORD has concerns about the effect of resident duty hour requirements on patient safety, transitions of care, quality of training and costs.
- CORD believes resident duty hours should be revised to better support the educational experience for trainees.
- CORD recommends that the ACGME should establish specialty-specific duty hour requirements for all specialties.

CORD strongly believes that programs must be committed to promoting a supportive educational environment with resident well-being and patient safety being essential components of training. CORD supports the ACGME program requirement of providing adequate, direct, and on-site supervision for emergency medicine residents. In addition, teaching hospitals should design and implement a structured approach to handoffs in order to ensure continuity of care and patient safety. Emergency medicine includes such training within their programs. There is, however, concern that due to the current duty hour restrictions in place, an increased number of handoffs occur resulting in less continuity of patient care and an increased risk of medical errors.[1]

The current ACGME duty hour restrictions have a negative effect on emergency department (ED) workflow resulting in holding inpatients in the ED and dealing with overcrowding. Previous studies have concluded that one of the greatest patient safety

issues in the ED is related to boarding of inpatients.[2,3] In addition, reduction in duty hour periods to 16 hours for interns has shown an increase in the number of serious medical errors in intensive care units.[4] It is important to recognize that the current duty hour requirements are not suitable for all specialties, specifically emergency medicine, which has a long-standing history of implementing solutions to combat resident fatigue and establishing continuous faculty supervision of residents.[5]

With the establishment of duty hour requirements, a mechanism for monitoring compliance within the various specialties must also take place. Vidyarthi et al noted the increase in cost associated with duty hour monitoring.[6] Additional staff may need to be hired in the Graduate Medical Education office and within the training program in order to have administrative oversight specifically to monitor duty hour compliance. Residency programs may need to purchase costly electronic management software to provide an efficient process to trainees for duty hour entries and gather data.

CORD's formal recommendations regarding dimensions of resident duty hours requirements, and justification (wherever possible) for these recommendations with evidence.

Formal Position:

- CORD supports duty hours that will enhance patient safety and resident wellness.
- CORD recommends the ACGME provide more flexibility in duty hours to provide for resident scheduling flexibility and professional development.
- CORD recommends absolving residency programs of monitoring external moonlighting hours.

- CORD recommends revising duty hours to promote professional citizenship, patient accountability and academic service.

An educational environment that enhances patient safety and resident wellness while maintaining all important aspects of the educational experience integral to preparing residents for the independent practice of medicine is consistent with CORD's focus on enhancing the quality of emergency medicine training and emergency medical care. While the currently identified dimensions of resident duty hours are intended to promote these goals, CORD believes that the current duty hours have most significantly impacted emergency medicine by limiting resident flexibility in balancing educational requirements, academic pursuits, and personal career interests.

Programs are tasked with preparing residents for the independent practice of medicine. Part of being able to successfully practice medicine includes the ability to balance and integrate clinical work, non-clinical obligations and other opportunities in order to provide excellent patient care, build expertise, and allow for individual personal and professional development. The current duty hour definition and enforcement practices compromise the ability of programs to support the development of these skills. The established process of tracking resident time spent on activities that are not ACGME requirements or residency requirements is relieving the adult learner of responsibility for monitoring their own well-being and diminishing their ability to explore opportunities allowing for some individualization in their training. While we are supportive of limiting scheduled clinical time to 60 hours, we would suggest providing flexibility to the 72 hour rule if it is meant to encompass all outside activities. Additionally, allowing for averaging of 4 weeks in emergency medicine as currently allowed for other programs would provide residents more flexibility in scheduling. It would support resident development in the important skill of time management and more ably promote residents' work-life balance.

Another component of ACGME requirements currently impacted by the duty hours is conference attendance. Given the strict duty hours parameters, residents are limited in their ability to flex educational and clinical time. It is almost impossible for residents to move clinical shifts without violating duty hours or compromising conference attendance. Studies on duty hours have reported both a decrease in conference attendance and a perceived negative effect on education.[7, 8] Duty hour standards should afford programs and residents a degree of flexibility to allow individual educational experiences to be maximized.

In general, the current emphasis on duty hours seems to de-emphasize service as an important component of the career of a physician. While current requirements allow for exceptions to the rules, the need to provide explanations for these exceptions places an extra burden on the residents and has a punitive effect rather than applauding the principle of "responsiveness to patient needs that supersedes self-interest" as stated in the ACGME requirements (IV.A.5.f.2). Additionally, other specialties have incorporated more shift work in order to meet requirements thus increasing the number of patient handoffs. This can have a negative impact on resident education by limiting exposure to the continuum of patient care.

While we believe that duty hours serve a purpose, allowing for increased flexibility would meet the spirit of the law while allowing for individualization in education and deliberate practice on time management. The short term potential impact of duty hours on resident wellness may have unintended negative effects on long term wellness as residents are not exposed to the realities of all that encompasses medical practice.

CORD's formal recommendations regarding standards governing key aspects of the learning and working environment, and justification (wherever possible) for these recommendations with evidence.

Formal Position:

- CORD endorses further research to determine the value of a change in the frequency of oversight of monitoring duty hours and their subsequent reporting.
- CORD endorses a maximum shift length for all trainees of 24 hours of continuous duty. This would apply to hospital based rotations on floors and critical care units but exclusive of the emergency department where maximum shift length would remain 12 hours.
- CORD endorses a 14 hour period of time off for a shift length of 24 hours. For those shifts that are 12 hours or less, a minimum period of time off is expected between shifts.
- CORD endorses that residents rotating from outside the department's home program should be held to the same duty hour standard(s) that apply to the service they are rotating on.

In January 2016, a survey of emergency medicine educators was conducted by CORD and the American College of Emergency Physicians (ACEP) to assess the impact of duty hour reforms as it relates to patient safety, resident education and training, and resident wellness. Specifically, areas surveyed included patient handoffs, ED length of stay, ED boarding of patients, cognitive and procedural skills acquisition, program costs and personnel needs (as assessed by faculty/staff FTE), didactic education, professionalism, and resident wellness. Results of this survey are presented in Tables 1 and 2.

In addition to the results found within the survey, the frequency of reporting has had two untoward and unexpected effects - an increase in administrative responsibility

and time that staff are needed in order to monitor duty hours; and "shift work" mentality amongst residents. With additional research, the value of a change in the frequency of oversight of monitoring duty hours and their subsequent reporting can further be elucidated. This is consistent with what other studies have suggested.[8]

CORD endorses a maximum shift length for all trainees of 24 hours of continuous duty. This would apply to hospital based rotations on floors and critical care units but exclusive of the emergency department where maximum shift length would remain 12 hours. Despite the change in duty hours, the outcome measures of their effect on patient safety and medical errors has been variable.[8] Similarly, the expectant positive effect on resident fatigue and wellness has been inconclusive as well. [9, 10, 11, 12] Based on the results of the CORD survey, duty hour reform has had an untoward effect on schedule flexibility and attendance at didactic sessions. Indirectly, this reform has affected ED length of stay and boarding due to the increase in transitions in care as well as causing barriers to patient care.[13, 14, 15] The establishment of a consistent maximum duty hour length across all PGY levels may limit some of the aforementioned.

CORD endorses a 14 hour period of time off for a shift length of 24 hours. For those shifts that are 12 hours or less, a minimum period of time off is expected between shifts. To maintain mental alertness and mitigate fatigue and thereby attempt to maximize wellness for the individual resident and avoidance of medical errors for the patient, a minimum period of rest between shifts should be maintained. Common program requirements establish this as 14 hours off after a shift length of 24 hours. Within the ED, shift length has long met both ACGME and IOM standards with their limit to a maximum of 12 hours. This 12 hour interval is to be met with an equivalent period of time off. However, this leads to less schedule flexibility and disruptions in resident attendance at conference. A change in this equivalent 12 hour period of time off would still allow for clinical growth and responsibility while maintaining patient safety and resident wellness.

CORD endorses that residents rotating from outside the department's home program should be held to the same duty hour standard(s) that apply to the service they are rotating on. Given that the specialty program requirements and duty hour guidelines developed by the respective RRC are developed with attention to patient safety, resident education and training, and resident wellness, we endorse the prior statement. When a resident from another specialty is rotating within the ED but is expected to follow the guidelines set forth by its own specialty (e.g. Internal Medicine) rather than those of the service they are rotating on, this can lead to disruptions in patient care, increase in the number of handoffs, and loss of clinical experience - which is a primary objective as to why the resident is rotating on the rotation.

We thank the ACGME for providing an opportunity to CORD to formally respond on the current ACGME resident duty hour requirements. CORD looks forward to participating in the ACGME's Second Resident Duty Hours in the Learning and Working Environment Congress in March 2016.

Respectfully,

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President

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Table 1: 2016 ACEP-CORD Survey of Emergency Medical Educators Perceptions on the Impact of the 2011 ACGME Duty Hours – Respondent Demographics

	N (%)
Respondents (Total)	**154 (100)**
Program Directors (PDs)	92 (60)
Associate PDs	33 (21)
Assistant PDs	14 (9)
Chairs	4 (3)
Clerkship Director	3 (2)
Vice Chair	4 (3)
Chief Residents	1 (1)
Other	3 (2)
Program Geographic Location	
East	52 (34)
Midwest	41 (26)
Southeast	35 (23)
Southwest	7 (5)
West	18 (12)
Program Format	
PGY 1-3	115 (74)
PGY 1-4	40 (26)

Table 2: 2016 ACEP-CORD Survey of Emergency Medical Educators Perceptions on the Impact of the 2011 ACGME Duty Hours – Quantitative Responses

Domain	N	Significant Negative Impact (1)	Negative Impact (2)	Neutral (3)	Positive Impact (4)	Significant Positive Impact (5)	Mean
Patient Care/Safety Impact							
No. of EM-EM handoffs	157	10	44	101	2	0	2.61
No of consultant-consultant handoffs	156	36	67	49	4	0	2.13
Consultant competency	156	14	56	75	10	0	2.52
ED LOS	157	17	67	70	3	0	2.38
Likelihood of ED boarding	157	31	54	67	5	0	2.29
Programmatic Costs/Personnel Impact							
Departmental Clinical Operations Costs	157	15	59	81	2	0	2.45
Hospital Clinical Operations Costs	154	27	86	38	2	1	2.12
Educational Leadership (e.g., FTEs)	156	15	66	70	4	1	2.42
Educational Administration (e.g., FTEs)	156	20	68	64	3	1	2.34
Faculty Workload	157	23	73	57	4	0	2.27

Resident Workload	157	12	53	54	34	4	2.78
Resident Case Load Impact							
No. for Cognitive Competency – EM Res.	156	4	33	118	0	0	2.74
No. for Cognitive Competency – Consultants	153	17	75	60	1	0	2.29
No. for Procedural Competency – EM Res.	156	4	34	118	0	0	2.73
No. for Procedural Competency – Consultants	152	14	81	57	0	0	2.28
Educational Experience Impact							
Effective Deliver a Didactic Curriculum	156	9	58	81	6	2	2.58
Forster Professional Citizenship/Accountability	156	29	54	68	5	0	2.31
Foster Academic Involvement/Service	155	10	55	70	18	2	2.66
Foster Resident Work-Life Balance/Wellness	155	4	12	65	68	6	3.39

Table 3: 2016 ACEP-CORD Survey of Emergency Medical Educators Perceptions on the Impact of the 2011 ACGME Duty Hours – Representative Qualitative Comments

Domain	Comment
Patient Care/Safety Impact	Decreased [duty] hours have led to decreased experience of longitudinal care and stabilization of patients. It also leads to increased handoffs and a decreased sense of responsibility to drive the patient's plan of care forward in an expedited fashion. This leads to longer time to decisions, admissions, discharges and overall increases boarding.
Patient Care/Safety Impact	There are now increased handoffs amongst consultants leading to increased transition of care times, decreased knowledge about patients which all has downstream impact on the care provided in the Emergency Department.
Patient Care/Safety Impact	Boarding is a big issue at most facilities. Often times it is because the inpatient services cannot disposition or discharge patients in a more timely fashion. That may be due to night float or call systems of coverage (but not primary management) as a way to avoid duty hour violations, leaving the bulk of the work to the day teams. This backs up the ED by creating boarders, which ultimately impacts care of new patients arriving to the ED, as well as the stress level and education of the residents working clinically in the ED.

Programmatic Costs/Personnel Impact	It is a total waste of time to be chasing someone around and filling out reports because they stayed an hour later and then came to conference the next day without enough sleep. This will be their life, so why not practice for it. I am not in favor of 24 hour shifts at all as they are counterproductive on every service, but if the ICU block would be better served by having the ability to do 7 nights in a row and then have 2 days off, vs 6 nights in a row, one off, then 1 more night, from a 'wellness' perspective it definitely matters. If you don't work nights, like I would imagine most 9-5 administrators, they probably don't get it, but having worked 20 years of nights it is very disruptive. I think total duty hours, protected time for conference, etc. are a good idea.
Programmatic Costs/Personnel Impact	The residents may have a "better" workload, but they are also seeing less in three years than with the previous rules.
Programmatic Costs/Personnel Impact	The negative impact on educational leadership is more time spent on dealing with duty hours issues and less time spent on the administration of the education components and innovation. Resident workload has decreased and exposure to patients has decreased while faculty workload has increased thereby decreasing faculty availability for educational opportunities and faculty fatigue. The clinical operations cost has also increased as hospitals have worked to increase midlevel provider availability and increase faculty numbers to address holes in schedules.
Resident Case Load Impact	I think people are still competent, but I think it takes longer to get to that point. Particularly for consultants.
Resident Case Load Impact	Also teaching residents that it is more important to leave on time than to complete care and also negatively impacting sense of ownership. My residents now have a more difficult time transitioning to junior faculty roles as a result of being coddled by the rules.
Resident Case Load Impact	I think things are worse but "sufficient".
Resident Case Load Impact	The number of patients per resident decreased significantly. Our overall effect is that there is no change, but that is because we went from a 3-year to a 4-year program.
Educational Experience Impact	Ironically, the requirements for documentation of hours, and other ACGME requirements have taken the place of clinical work.

Educational Experience Impact	The residents should have the power to have more flexibility in their duty hours and scheduling. Safe patient care is enhanced by rested, healthy resident physicians. However, the time and activity each individual needs to stay well is variable and personable. I recognize that some programs at some sites are malignant and would use the flexibility to hurt residents to provide service. However, the vast majority are not and taking the handcuffs off of the creativity with the schedule would likely lead to healthier physicians and better patient care. Consider providing more leeway for "violations" for each resident. At a minimum give a defined number of times they can "violate" so if they want to work a couple extra days in a row so they can have an extended weekend away with family, etc., they can do that.
Educational Experience Impact	The documentation and reporting requirements have spawned unbelievable amounts of work for programs and for GME personnel and hospital leadership. Great example of "well intentioned" (I guess) regulations being implemented without sufficient examination of the unintended consequences and questionable rationale. I would say, however, that the effect on non-EM rotations has been healthy -- no more 36-hour calls, no residents who were too tired to think or care. On the other hand, residents got a heavy dose of autonomy and responsibility in the old days that they will not get under the current over-supervised regime. The duty hours have also produced a lot of disdain for honest and accurate reporting.
Educational Experience Impact	While I believe that duty hours have become too cumbersome, inflexible and irrelevant, it has given guidelines and quantification of resident time in order to help achieve a balanced life.
Educational Experience Impact	Because EM was already shift-work, and already had a more humane approach to training than many medical specialties, we did not see much impact from the duty hours restrictions to our trainees from a clinical perspective. It does make it much more complex and artificially restricted with respect to our non-clinical educational and service obligations (and opportunities).

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