

Emergency Medicine Clerkship Directors: Current Workforce

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Introduction: The emergency medicine clerkship director serves an important role in the education of medical students. The authors sought to update the demographic and academic profile of the emergency medicine clerkship director.

Methods: We developed and implemented a comprehensive questionnaire, and used it to survey all emergency medicine clerkship directors at United States allopathic medical schools accredited by the Liaison Committee on Medical Education. We analyzed and interpreted data using descriptive statistics.

Results: One hundred seven of 133 (80.4%) emergency medicine clerkship directors completed the survey. Clerkship Director's mean age was 39.7 years (SD-7.2), they were more commonly male 68.2%, of Caucasian racial backgrounds and at the instructor or assistant professor (71.3%) level. The mean number of years of experience as clerkship director was 5.5 (SD-4.5). The mean amount of protected time for clerkship administration reported by respondents was 7.3 hours weekly (SD-5.1), with the majority (53.8%) reporting 6 or more hours of protected time per week. However, 32.7% of emergency medicine clerkship directors reported not having any protected time for clerkship administration. Most clerkship directors (91.6%) held additional teaching responsibilities beyond their clerkship and many were involved in educational research (49.5%). The majority (79.8%), reported being somewhat or very satisfied with their job as clerkship director.

Conclusion: Most clerkship directors were junior faculty at the instructor or assistant professor rank and were involved with a variety of educational endeavors beyond the clerkship. [West J Emerg Med. 2014;15(4):398–403.]

INTRODUCTION

In the past three decades, emergency medicine (EM) as a distinct clinical specialty has undergone tremendous growth. Recent surveys report that close to 40% of United States (U.S.) medical schools offer a mandatory EM clerkship in the clinical years of medical school, with the majority being

in the senior year.¹⁻³ Job responsibilities of the clerkship director (CD) typically involve clerkship administration, clinical and didactic teaching, and participation in scholarly activity.⁴ In 2005, a study by Coates et al⁵ provided the first insight into the demographics and characteristics of the EM CD. In that study, the authors reported that: 72% of the

EM CDs were junior faculty (at the instructor or assistant professor level); EM CDs were only provided an average reduction of 2.7 hours per week from their clinical work to perform clerkship administration and teaching duties; and that most CDs (51%) received no reduction in clinical time for clerkship related duties. The lack of protected time afforded to EM CDs should be viewed in context of the national CD organizations that have recommended a clinical reduction of 0.25 FTE to perform clerkship administrative duties and up to 0.55 FTE for the additional time required for teaching and educational scholarship.^{4,6-8}

Since the publication of the Coates review (2005), a number of developments in the specialty of EM have occurred. In May 2007, the Clerkship Directors in Emergency Medicine (CDEM) was formed establishing a unified national voice for EM CDs and medical student educators to advance education, research and faculty development within the specialty.⁹ In 2008, CDEM became the first academy within the Society for Academic Emergency Medicine (SAEM). In November, 2008, CDEM was inducted as a full voting member of the Alliance for Clinical Education (ACE), a multidisciplinary group formed to enhance the clinical education of medical students.¹⁰ In addition, members of CDEM have worked closely with the Council of Emergency Medicine Residency Directors (CORD-EM) to develop the CDEM / Medical Student Educators Track at the CORD Annual Academic Assembly and with the SAEM Program Committee to increase the educational content at the SAEM Annual meeting. In light of all the recent changes to the emergency medicine profession, our objective for this study was to provide an updated demographic and academic profile of the EM CD including; general characteristics, participation in scholarly activities, perceived support from their home institution, and satisfaction with their job.

METHODS

Study Design and Population

We conducted a survey of EM CDs at U.S. medical schools fully accredited by the Liaison Committee on Medical Education (LCME). A roster of medical schools was obtained from the Association of American Medical Colleges (AAMC) web site (www.aamc.org). EM CD's names and contact information were obtained from the SAEM membership directory, individual medical school websites and through direct phone contact with the medical schools if the information was otherwise unavailable. The final roster included one representative identified as the EM CD at the primary clinical training site from each of the 133 targeted medical schools. The study met criteria for exemption from human subjects review and informed consent by the institutional review board at The Ohio State University College of Medicine.

Survey Content and Administration

Authors (DEM and SK) selected survey items and item formats based on the literature covering similar efforts to profile CDs. The initial draft of the survey instrument was primarily modeled off of one reported by Coates, et. al. who studied EM CDs specifically. All other authors, including one with formal training in survey development (DPW) reviewed survey items until a final survey draft was agreed upon by consensus opinion. Before implementation, the survey instrument was piloted by five EM CDs, not affiliated with the study. These individuals provided suggestions for improving clarity, readability, and comprehensiveness.

Surveys were disseminated to the target population of U.S. medical school EM CDs using an electronic survey service (SurveyMonkey,™ Palo Alto, CA). An initial personalized email with a link to the electronic survey was sent to each EM CD in August, 2010. The email included an outline of the study and an assurance of confidentiality. Reminders and follow-up emails were sent to non-respondents monthly from September, 2010 – February, 2011. In April, 2011, an attempt was made to contact non-responders directly and a final survey was distributed. Over these 9 months, every medical school was directly contacted at least twice to enlist their participation in this study.

Data Analysis

Descriptive statistics were used to report general characteristics and demographics of the EM CD. Comparisons between medical schools which required students to take an EM clerkship and those which offered EM as an elective rotation were made when possible. All analyses were performed using IBM SPSS Statistics for Windows, Version 19. (IBM Corp. Released 2010. IBM SPSS Statistics for Windows, Version 19.0. Armonk, NY: IBM Corp).

RESULTS

One hundred seven (80.4%) of 133 EM CD's completed the survey. Although most EM CDs (71.3%) were reported to be junior faculty, e.g. at the clinical instructor or assistant professor rank; over a quarter (27.8%) of EM CDs had achieved the rank of associate or full professor. The mean number of years that a faculty member had served as CD was 5.5 (SD=4.5). More than one third (35.2%) had been in their current role as CD for 6 or more years. Many EM CDs reported having held or were currently holding leadership positions in their department other than CD. These included: assistant / associate residency director (22.4%), assistant clerkship director (9.3%), clinical director / associate clinical director (9.3%), chairman / division chief (7.5%), director of undergraduate medical education (4.7%) and residency director (3.7%).

The mean amount of protected time for clerkship administration reported by respondents was 7.3 hours weekly (SD=5.1), with the majority (53.8%) reporting 6 or more hours of protected time per week. However, 32.7% of

EM CDs reported not having any protected time at all for clerkship administration.

We asked respondents to report how much financial support they received from their departments, in dollars, for continuing medical education (CME). Most respondents (76.6%) said that they receive some level of financial support for CME, with the median amount reported as \$2750 (semi-interquartile range= \$1250). This means that 50% of the 82 respondents who said they received CME funding, reported receiving between \$1500 and \$4000 for CME support.

Another form of financial support we asked about was support for professional development beyond CME through conference attendance. Many (45.8%) CDs report receiving this type of financial support from their departments.

We asked CDs to tell us about the type of administrative or clerical support they receive for carrying out their clerkship duties. Responses varied widely with 15% (16 of 107) report having the support of a full-time coordinator, 24.3% (26 of 107) have a secretary/receptionist, while most (59.8%; 64 of 107) share a coordinator with other programs. Only 10 CDs (9.3%; 10 of 107) report that they have no clerical support.

We also asked CDs to rate the level of general support they receive from their department using a Likert-type response set ranging from high (excellent) to low (poor).

Forty two percent noted departmental support as excellent (19.6%; 21 of 107) or good (22.4%; 24 of 107). Almost a third (30.8%; 33 of 107) said that support was satisfactory, while a quarter (25.2%; 27 of 107) said that it was less than satisfactory (fair).

Almost half (46.7%; 50 of 107) said that they had some formal preparation for their role as CD. More than one third of the faculty (35.5%; 38 of 107) reported receiving brief training from a senior faculty member; 11.2% (12 of 107) had extensive mentorship; 10.3% (11 of 107) received a written job description and another 10.3% (11 of 107) were given a handbook of clerkship guidelines. However, (53.3%; 57 of 107) of respondents said that they had no formal training.

We also assessed how many CDs had formal training as educators. We found that more than one quarter of EM CDs (27.1%; 29 of 107) had completed the American College of Emergency Physicians (ACEP) Teaching Fellowship and 4.7% (5 of 107) had earned a Masters in Education degree. Additional faculty development programs completed by EM CDs included: the Harvard Macy Program (3.7%; 4 of 107), Medical Education Research Certificate / AAMC (2.8%; 3 of 107) and the Stanford Faculty Development Program (1.9%; 2 of 107). Additional information regarding general characteristics of the EM CD is presented in Table 1.

CDs also reported that they commonly engage in a wide range of teaching activities, with most (91.6%; 98 of 107) having teaching responsibilities beyond running the clerkship. Many of these activities involve pre-clinical medical students. CDs also engaged in formal academic scholarship with 79.4% (85 of 107) of CDs reporting having had peer

Table 1. General characteristics of the emergency medicine (EM) clerkship director.

Characteristics/demographics	Percentage (SD)
Age	39.7 years (SD-7.2)
Gender	
Male	68.2
Female	31.8
Ethnicity	
White/Caucasian	83.2
Asian/Pacific Islander	11.9
Hispanic/Latino	3.0
African American	2.0
Academic rank	
Instructor	2.0
Assistant professor	69.3
Associate professor	22.8
Professor	5.0
No academic appointment	1.0
Board certified/prepared in EM	
Yes	98.1
No	1.9
Years as clerkship director	5.4 (SD-4.5)
<1	3.7
1-2	27.2
3-5	33.7
6-10	24.1
>10	11.1
Protected time for clerkship administration	7.3 (SD-5.1)
< 5 hours	46.2
6-10 hours	33.8
>10 hours	20.0
Job satisfaction	
Very satisfied	35.6
Somewhat satisfied	45.2
Neither satisfied nor dissatisfied	2.9
Somewhat dissatisfied	7.7
Very dissatisfied	8.7
Career aspirations	
Assistant/associate dean	36.2
Clerkship director	21.6
Residency director	13.8
Chairman	11.2
Assistant/associate residency director	8.6
Vice chairman	5.2
Dean	2.6
Research director	0.9

Table 2. Teaching outside of the clerkship and other scholarly endeavors of the emergency medicine (EM) clerkship director.

	Percentage (SD)
Educational responsibilities beyond the clerkship within the medical school	
Yes	91.6
No	8.4
Specific educational responsibilities	
Simulation	45.8
Introduction to clinical medicine	37.4
Advanced EM elective	35.5
Procedural curriculum	26.2
Physical examination course	22.4
Preclinical curriculum	16.9
Basic science curriculum	15.9
Clinical assessment/problem solving course	15.0
Leadership role in addition to the clerkship	
Director of advanced EM elective	15.9
Director of simulation	14.0
Director of procedural curriculum	6.5
Director of introduction to clinical medicine	4.7
Director of clinical assessment/problem solving course	3.7
Director of physical examination course	3.7
Peer reviewed publications	4.7 (SD-5.9)
None	20.6
1-5	53.3
>5	26.2
Peer reviewed educational topics	1.4 (SD-3.5)
Textbook chapters	3.6 (SD-5.5)
None	28.0
1-5	54.2
>5	17.8
Textbook educational topics	0.6 (SD-1.4)
Involvement in educational research	
Yes	49.5
No	50.5
Involvement in non-educational research	
Yes	64.5
No	35.5

SD, standard deviation

reviewed publications and 72% (77 of 107) having published textbook chapters. Approximately one quarter (23.4%; 25 of 107) of CDs reported that they had previously applied for an educational grant, with 64% (16 of 25) of those applying having received grant support. Information regarding teaching

outside of the clerkship and participation in other scholarly endeavors are reported in Table 2.

When we looked at protected time, ratings of departmental support, level of clerical support and level of satisfaction with their job, we found that CDs whose medical school curriculum consist of “required” EM clerkships were slightly more likely to receive protected time for their CD position when compared to those whose schools only offered “elective” clerkships (75% (42 of 56) vs. 58.8% (30 of 51)). The associated Chi-Square test for this comparison was not considered statistically significant ($\chi^2 = 3.173$; $df=1$; $P=.099$).

With regard to perceived level of support from their departments, both groups (required v. elective) were virtually the same in their ratings, with CDs with required clerkships having a mean rating of 3.357 (SD of 1.09) on this 5 Likert-Type scale and CDs with elective clerkships having a mean rating of 3.388 (SD of 1.08). CDs from institutions with required clerkships received slightly more clerical support than their elective institution counter-parts. More CDs of required clerkships had full-time clerkship coordinators (12 of 56, 21.4%) vs. (4 of 51, 7.8%) and fewer of them had no support at all (3 of 56, 5.4%) vs. (7 of 51, 13.7%). The primary clerical support model is a shared duty or half-time coordinator. This was true of both required clerkships (33 of 56, 58.9%) and those with elective clerkships (31 of 51, 39.2%). Support in the form of a secretary or receptionist was reported by 13 of 56 (23.2%) institutions with required clerkships and 13 of 51 (25.5%) institutions with elective clerkships.

Finally, ratings of job satisfaction were compared across the two institution types. Those CDs who have required clerkships rated their level of satisfaction with their job slightly higher than those who have electives, however this difference was not statistically significant.

DISCUSSION

In 2009, Margo et al¹¹ compared CD characteristics using data available from surveys published in 7 medical specialties. This study used the data that was previously reported by Coates in 2005.⁵ At the time of the Margo study, EM CDs were younger, more likely to be junior faculty at the clinical instructor or assistant professor rank and had less protected time afforded to support their role as CD when compared to their counterparts in other specialties.^{11,12} Little has changed over the 6 years since the Coates study. The mean age of the EM CD is roughly the same; 38.9 years (SD-7.0) v. 39.7 years (SD-7.2). This compares to the mean age of CDs in other core specialties which is; mean 46.7 years (mean range 45-47.7 years). Regarding gender, 68.2% of EM CD’s are male which is similar to the other core specialties (mean 62% males, range 50-75%).¹¹ When looking at the distribution of academic rank of the EM CD, in 2005, 72.1% of EM CDs were at the instructor or assistant professor level. Our more recent data shows that 71.3% of EM CD’s are currently at this level.

When broken down by specific academic rank, we observed that more EM CDs are at the assistant professor level than in 2005; 69.3% v. 61.3%. When we look at CDs at the senior faculty level (associate professor or professor), there is a small but positive trend. Currently, more than one quarter (27.8%) of EM CDs are at the associate professor or professor rank compared to 21.6% in 2005. These comparisons alone may not fully reflect the changing faculty rank of EM CDs as institutional promotion and tenure committees vary in requirements across medical schools.

Protected time for clerkship administration, teaching and participation in academic scholarship are necessary for CD success in fulfilling their role. A recent CDEM – Association of Academic Chairs of Emergency Medicine (AACEM) combined Taskforce publication outlines the expectations of the EM CD.⁸ This document mirrors many of the same expectations set forth by other national CD organizations.^{4,6,7} Despite the recognized importance of the role of the CD, the support afforded to the CD is variable across disciplines.^{11,12}

Regarding protected time afforded for clerkship administration, EM CDs have made some headway in recent years. Of the faculty reporting that they receive protected time for clerkship administration, the majority (53.8%) report receiving 6 or more hours of protected time weekly. However, less than one third (32.7%) report that they do not receive protected time for their role as CD as compared to 2005 when the majority of CD's (51.4%) reported that they had zero release time to perform clerkship administration.⁵

Despite this positive trend noted in the amount of protected time allotted, there appears to be a discrepancy between EM CDs and their counterparts in other specialties.¹¹ However, a direct comparison between EM and other clinical specialties is difficult to perform for a number of reasons. CDs in the other core specialties report their clinical workload as a combination of weekly outpatient clinic sessions and inpatient responsibilities.¹³ In addition, there is significant variability regarding inpatient clinical responsibilities across specialties further confounding a direct comparison. With regards to time committed to the clerkship, the other core specialty CDs report devoting an average 33% (range 30 – 48%) of their professional time towards the clerkship.¹³ Translating this to a typical 40 hour work week would mean that CDs devote approximately 13 hours per week to clerkship administration. Meanwhile, the average protected time for the EM CD is only 7.3 hours per week or 18.5% of time based on a 40 hour work week. This means that EM CDs are only being supported for about half of the time that CDs from other disciplines receive to run their clerkships and falls far short of the expectations outlined by various national organizations.^{4,6-8}

Rapid turnover in the CD position was reported as a common problem in 2005 by Coates, when approximately 45% of EM CDs reported being in their position for 2 years or less. More recently it appears that some headway has been made in addressing turnover, with just a little more than one

third (36.5%) of EM CDs report being in their current position for 1-2 years. In addition, almost one third (32.0%) of CDs have been in their current position as CD for 6 or more years as compared to 22.4% in 2005. Currently, the mean number of years a CD has been in their current position is 5.4 years. In comparison, as reported in a multispecialty review published in 2010, the mean number of years as CD for all of the core clinical specialties was 6.8 years (range 5.5 to 7.5 years).¹²

Administrative support for the clerkship is important as it has been reported to have a positive correlation with the academic productivity of the CD.¹¹ We found administrative support for the clerkship, to be quite variable, with more than half (59.8%) of EM CDs reporting a shared / half time coordinator and only 15% reporting a full time clerkship coordinator. This is far less administrative support than reported for other core clinical specialties.^{14,15}

Overall, the role of CD is viewed positively by the faculty who perform these duties. More than two thirds of CDs (70%) across multiple specialties have reported that the role has had a positive effect on their academic achievement (core clerkship directors). In addition, more than three quarters of these same CDs (90%) reported that being a CD enhanced their satisfaction with their professional work. As for EM CDs, our data support that the vast majority (80.8%) are satisfied in their current job.

LIMITATIONS

Our study fell short of profiling all EM CDs. We did not attempt to survey CDs from osteopathic medical schools nor did we attempt to survey CDs from community hospitals and secondary or regional affiliates of LCME accredited medical schools. We did not address many confounders such as year of training, length of rotation, and volume of students.

CONCLUSION

The majority of EM CD's are still junior faculty at the clinical instructor or assistant professor rank. We found that CDs had 7.3 hours of protected time per week and that this has generally improved since 2005. However, this still falls below expectations set forth by CDEM EM CDs are engaged in a wide variety of teaching activities in addition to the clerkship, and many perform educational research and scholarship. The majority of EM CDs are satisfied in their current position.

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