Educational Excellence in a Crowded Emergency Department: Consensus Recommendations From the Council of Emergency Medicine Residency Directors 2010

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Abstract

Objective Emergency Department (ED) crowding is a major public health problem and one that has not been well studied for its effects on education. The objective of this article was to identify best-practice, consensus recommendations to help emergency medicine (EM) residency programs and faculty maintain educational excellence in an era of ED crowding.

Methods A geographically diverse group of 37 clinician-educator leaders in EM convened at the 2010 Council of Emergency Medicine Residency Directors Academic Assembly. The participants discussed innovative ideas and solutions to address the many educational challenges that ED crowding poses.

Results To cope with crowding, the consensus group identified 3 educational domains, focusing on the

educator, the learner, and the institutional system. Core subthemes included optimizing teaching opportunities, providing alternative teaching approaches, and redefining what faculty and learners traditionally think of as teaching. An ED rotation provides ample opportunities for teaching not only about patient care and medical knowledge but also other Accreditation Council for Graduate Medical Education competencies, such as interpersonal and communication skills, professionalism, and system-based practice.

Conclusions Crowding in EDs poses educational challenges, but with some creativity, flexibility, and desire to make the most of a challenging situation, educational excellence is an achievable goal.

Introduction

Emergency department (ED) crowding is a national public health crisis.¹ According to the American College of Emergency Physicians, “crowding occurs when the identified need for emergency services exceeds available resources for patient care in the emergency department,

hospital, or both.”² Crowding has been shown to result in slower processes of care and lower satisfaction scores by patients.^{3–11} Very few studies, however, have assessed the impact of crowding on education in the ED.^{12–14}

Crowding may both harm and benefit the education of medical students and residents in academic EDs. When patient volume and demands exceed ED resources, attending physicians are drawn away from traditional teaching opportunities because of pressing clinical issues, bottlenecks in patient flow, and other administrative problems. Learners may lower their standards for clinical care, patient privacy, and professionalism. In contrast, ED crowding may benefit other aspects of education. Learners can hone skills in time management, resource prioritization, and professionalism in stressful environments.¹⁵

The sparse literature on solutions to balancing education and service in academic EDs prompted the Council of Emergency Medicine Residency Directors (CORD) to convene a consensus group at the 2010 CORD Academic Assembly. To our knowledge, there have been no publications summarizing best-practice recommendations for maintaining educational excellence in a crowded clinical environment before now.

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TABLE	THE CORE THEMES FOR EDUCATIONAL IMPROVEMENT AND INNOVATION IN A CROWDED EMERGENCY DEPARTMENT		
Domain	The Educator	The Learner	The Institutional System
Core themes	Improve faculty teaching skills	Reset learner expectations	Schedule “teaching rounds”
	Announce the “teaching moment”	Empower the learner	Build teaching files
	Convert work into teaching	Involvement on crowding committees	Decrease excessive clinical burden for the resident
	Teach beyond the shift		Identify other educators
			Inpatient staff care for boarding ED patients

Abbreviation: ED, emergency department.

Methodology

More than 100 emergency medicine (EM) residency directors, clerkship directors, and other faculty members with an academic niche in education attend the annual CORD Academic Assembly. Conference attendees were asked to attend a 3-hour session to elicit insight about innovative practices addressing the educational challenges that ED crowding poses. A geographically diverse group of 37 EM educational leaders participated.

The group initially reviewed the literature on the impact of crowding on education. In informal, small-group sessions, members discussed the educational challenges and generated innovative ideas and best-practice solutions. These small-group sessions then reconvened to share examples and discussion points. The large-group dialogue was moderated by the first author and a digital audiotape was made. The 2-hour, large-group discussion was later transcribed and coded into domains and core subthemes. Member-checking was conducted by e-mail 2 weeks after the conference to assess trustworthiness and face validity.

Results

The consensus group identified 3 main domains for educational improvement and innovation in a crowded ED. Each domain focuses on a different aspect of the educational relationship: the educator, the learner, and the institutional system. The TABLE summarizes the core themes categorized by domain to help optimize the educational experience.

The Educator

The cornerstone of educational excellence starts with the educator. The following may help educators achieve better balance between teaching and the clinical stresses of an overburdened ED.

Improve Faculty Teaching Skills Faculty development in teaching is of paramount importance. Faculty should be encouraged to attend institutional faculty development courses focusing on such areas as bedside teaching and

giving feedback. Other opportunities include the CORD Academic Assembly, the American College of Emergency Physicians Teaching Fellowship, and the Harvard Macy Institute.

Announce the “Teaching Moment” Learners are sometimes unaware that they are being taught educational pearls by the attending physician. A successful teaching moment requires, to some extent, learner awareness. To help convey their educational importance, consider prefacing educational pearls with “the teaching point here is...”

Convert Work Into Teaching Attending physicians can convert work-related activities into useful educational experiences.

1. Instead of reviewing the entire list of patients in the ED alone, gather all the trainees in the department for frequent “rapid fire” rounds while interjecting teaching pearls. This helps to optimize team communications while also providing trainees with an opportunity to learn from all the patients in the department.
2. Involve the senior resident at the triage area to teach about patient prioritization and ED flow.
3. Verbalize real-time thought processes to the learner. This can include explaining techniques for addressing agitated patients or resource reallocation decisions.

Teach Beyond the Shift Once the ED shift ends, teaching can still continue. For instance, while completing medical charting after the shift, the attending physician may notice incomplete documentation by the trainee. A brief e-mail may teach about the importance of documenting a more robust medical decision-making section. The attending can also e-mail the learner a recent publication on a disease process assessed that day.

The Learner

Similar to faculty, residents and students are overwhelmed by patient care responsibilities when the ED is crowded. An

effective educational relationship requires not only skilled teachers but also receptive learners. The following approaches may help optimize the teacher-learner relationship from the perspective of the learner.

Reset Learner Expectations Learners often have preconceived views of what education is, which may differ from those of the faculty. Expectations of teaching and learning should be clearly defined for learners at the start of their ED rotation. The concept of education should include not only patient care and medical knowledge but also other ACGME competencies, such as professionalism, systems-based practice, and interpersonal and communication skills. For instance, maintaining a professional composure, multitasking, and effectively communicating with consultants in a stressful environment should be made clear learning objectives.

Empower the Learner Adult learning theory states that mature learners should be self-directed in their education, especially when formal learning time is limited.¹⁶ For example, the attending physician can start the shift by asking, “What do you want to work on today?” This learner-centered approach can help faculty focus their teaching and feedback. Another example is to assign learners “homework.” At the end of the shift, ask the learner to identify a topic to learn more about.

Involvement on Crowding Committees Crowding in the ED is a long-term problem involving various clinical departments as well as hospital administration. Residents in the ED should be incorporated into hospital and departmental crowding or ED flow committees as a method to teach the ACGME competency of systems-based practice. This will provide the residents with crucial insight into hospital politics and discussions.

The Institutional System

Schedule “Teaching Rounds” Institute dedicated teaching time for the learners. Such “teaching rounds” are brief, usually held once daily, and are away from the clinical area to minimize interruptions. Learners are released from clinical responsibilities while a faculty member or senior resident manages their patients.

Build Teaching Files Searching for teaching materials for learners in the ED is an inefficient use of time. Provide a paper-based and/or digital repository of readily-accessible teaching tools for faculty and residents, such as board-review questions, procedural teaching videos, and radiographic images.

Decrease Excessive Clinical Burden for the Resident Efforts should focus on residents and the reduction of excessive clinical burden. Education should be prioritized over service.

1. Recruit EM residents rotating on off-service rotations for ED patient care. For instance, the ED

resident on an anesthesia rotation might also be on call for sedation or procedures in the ED.

2. Implement ED “scribes” or assistants who can help decrease the administrative burden in writing charts, calling consultants, and gathering equipment.
3. Designate a patient care area as attending-only or mid-level providers-only to minimize resident clinical burden.

Identify Other Educators Attending physicians on shift are not the only providers who are able to teach in the clinical area. The scope of educators can include senior EM residents, pharmacists, nurses, social workers, and other health care professionals in the department.

Furthermore, additional attending physicians or residents can be assigned on shift to serve purely as a teaching resource for the learners. These “teaching attendings” and “teaching residents” do not have any direct patient care responsibilities and can help offload educational responsibilities from the providers on shift.¹⁷

Inpatient Staff Care for Boarding ED Patients The ED team often continues care for admitted patients who are “boarding” in the ED while there are no available inpatient beds. Systems should be developed for improved direct care of those patients by inpatient nursing staff and physicians from other clinical services. This would relieve the ED team from this additional patient care burden and potentially allow for more educational time.

Conclusions

This is the first publication, to our knowledge, outlining best-practice recommendations on maintaining educational excellence in a crowded ED. Faculty must be able to assess the clinical environment, educational opportunities, and learner needs. It is critical that educators be resourceful and think broadly about how “education” is defined and that learners be receptive to the unique learning opportunities during periods of crowding.

Because of the variability in resources, settings, and impact of crowding at different training programs, the list of recommendations is meant to provide a “menu” of options toward improving education in a crowded ED environment. Choosing what works best for each site may rely on a multimodal approach, which includes focusing on issues at the level of the individual educator, the individual learner, and the broader institutional systems.

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