



Seniorization of Tasks in the Academic Medical Center: A Worrisome Trend

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Much attention has been directed in recent years at enhancing the appropriate supervision of residents and fellows within the academic medical center (AMC). In 2011 the Accreditation Council for Graduate Medical Education (ACGME) introduced a framework for supervision and achievement of graded authority and responsibility. As a result of these and other efforts, the way teaching physicians work with and supervise residents has changed. The ACGME standards for supervision were designed to enhance the education and evaluation of residents while assuring patient safety in the clinical learning environment.¹

Recently, however, a disturbing trend has emerged in AMCs: the “Seniorization” of tasks related to patient care. Seniorization occurs when an AMC policy or practice is promulgated that results in tasks or services previously performed or provided by residents or fellows being assigned to faculty attending physicians or residents or fellows more senior in the hierarchy. This seniorization is the result of actions required in order to comply with institutional objectives, to streamline implementation of an electronic medical record system, or to improve efficiency or revenue cycle performance. Examples are shown in Table 1.

Proponents of seniorization argue that increased hands-on participation of progressively more senior physicians can only improve care and reduce medical errors. Yet, they fail to understand that the impact of these practices is detrimental to the development of the next generation of physicians. A fundamental principle of Graduate Medical Education (GME) is that progressive graded responsibility is assigned to trainees.² The common program requirements of the ACGME state, “...Graduate medical

education is the crucial step of professional development between medical school and autonomous clinical practice ... [and] has as a core tenant the graded authority and responsibility for patient care. The care of patients is undertaken with appropriate faculty supervision and conditional independence allowing residents to attain the knowledge, skills, attitude and empathy required for autonomous practice.”³ Levels of supervision appropriate for the experience and demonstrated skill of residents and fellows are the goal of ACGME supervision standards.⁴ Despite the perception in some quarters that recent changes in duty hours and supervision standards put forward by the ACGME may have contributed to the problem of seniorization, replacement of junior residents by more senior resident caregivers, or more senior residents with attending physicians, is not the goal of ACGME supervision standards.

In our best training programs, patient care occurs in the context of clear and established patterns of communication between team members, and is dependent on a culture of linked accountability and responsibility that is developed from the very beginning of the educational experience. Some of these patterns have developed over many decades and have their roots in the development of residency training at Johns Hopkins more than 100 years ago.² However, some surgical program directors have noted a lack of preparedness in medical students beginning their surgical training and have advocated for improving medical school curricula to address this serious problem.⁵ Some senior practicing surgeons have expressed concern about inadequate surgical skill in surgeons completing their training due to lack of appropriate autonomous surgical experience.⁶ This has led the American College of Surgeons to initiate the “transition to practice” program.⁷ Although this is a positive approach to the problem, we believe that the solution to inadequate experience in residency is not merely an extension of training. Rather, the solution is to rectify the deficiencies in progressive authority and responsibility during the graduate medical education experience.

It is important not to conflate concerns about patient safety with appropriate trainee autonomy. Several studies have concluded that, in well-administered AMC training programs, good patient safety outcomes can be achieved with AMC team structures that provide appropriate

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Table 1. Examples of Seniorization of Tasks in the Academic Medical Center

In trying to improve adherence to Surgical Care Improvement Project (SCIP) measures to remove bladder catheters in postoperative patients, a senior hospital administrator demands that attending surgeons (not surgical residents) be required to write the order to have catheters removed immediately after the operation.
The Centers for Medicare and Medicaid Services (CMS) requires that attending physicians personally sign orders to admit a patient to the hospital. A resident's signed order is not sufficient, even though that resident may have evaluated that patient in the emergency department and had been instructed to admit the patient.
A neurosurgery attending physician—not a resident—at a children's hospital is required to make the request for any MRI with conscious sedation done overnight.
Concerned about "inappropriate" requests for consultation, the ophthalmology service requires that requests for consultation on inpatients occur from attending to attending.
In attempting to decompress busy emergency departments and enhance timely decision making, a policy is established to have all communication about patient care occur between attendings.
Cardiology establishes a policy in which their consulting fellows—at night—will discuss their recommendations only with "an attending," not a resident.
At a major trauma center, attendings—not residents—are responsible for obtaining written informed consent before a patient can be brought to the operating room.

autonomy to trainees in multiple specialties.⁸⁻¹¹ However, the expectations of patients regarding supervision have been identified as one of several significant factors in limiting the delegation of autonomy to surgical residents.¹²

The widespread adoption of electronic medical records has the potential to increase the adverse trend of seniorization. For example, if only specific physicians, segregated by rank, are permitted to log on and click to order MRI scans, eventually trainees will be unable to exercise the judgment required to use this important tool in a cost-effective way. In order to assure billing compliance and revenue cycle performance, it is common for attending surgeons to be solely responsible within the electronic medical record environment for dictating formal operative notes. As a result, the art of efficiently dictating a meaningful operative note that accurately describes operative findings and decision making, is not learned by many trainees today. Yet, on graduation, these physicians must be able to provide such documentation in the absence of supervision. By requiring attending physicians, instead of trainees, to write certain orders, we run the risk of having the electronic medical record exacerbate the trend toward seniorization. When attending physicians

are consumed by responsibility for routine clinical data entry, they are diverted from their role as teachers. It is possible that the use of scribes by academic clinicians may partially counter this adverse trend.

Trainees must develop professional identity and learn to embrace the responsibility associated with themselves as a patient's doctor. If they are removed from the clinical care chain of decision making and communication, their ability to master clinical practice and make sound decisions with and for patients is progressively eroded. With all the pressures experienced by clinicians in the AMC today, it is easier for the attending to just "do it herself." This trend may begin with the small things, like ordering the use of sequential compression devices in postoperative patients, but gradually it spreads to the more complex aspects of patient care.

Seniorization also trickles down throughout the team. When medical students and junior residents become less involved in patient care as a result of administrative mandates, evolution of their confidence and self-image as clinicians is stifled. When residents are not delegated conditional autonomy, they are never forced to learn what they actually know or don't know, and when to ask for help. In many teaching hospitals, it is increasingly likely that residents will not have sufficient personal experience providing care "on their own" before completing their residencies in domains essential to the practice of their specialty. Certification by teaching program directors that the resident is fit for independent practice may be made difficult because they have not observed the trainee function in contexts resembling an autonomous practice environment.

How should we deal with this challenge? Expectations by all stakeholders with regard to appropriate supervision will not diminish. However, medical educators and AMC leaders should study and seek to define the role of appropriate semi-autonomous experience in fostering clinical competency growth. We must find ways to protect one of the fundamental missions of the "teaching hospital." That is, they must remain teaching institutions. The value of graded authority and responsibility leading to conditional autonomy in graduate medical education is widely recognized to be important by experienced educators, but it is incompletely understood.

First, research in this area should focus not only on patient safety and quality outcomes, but should include an emphasis on sociological aspects of organization and optimal cultures among members of high performing teams, and greater understanding of physician identity formation,¹³ as well as clinical technical skill development.¹⁴⁻¹⁶ Kennedy and colleagues¹⁵ have cautioned us that by decreasing trainee autonomy, we risk producing

clinicians who have had little experience in functioning independently. They call for rigorous studies to explicitly evaluate autonomous practice in simulated situations vs in the delivery of real clinical care, with outcomes measures for both patient care and trainee learning and performance. They further suggest that we should develop new and creative models of clinical supervision and conduct rigorous sociological research on the cultural context of clinical supervision as it relates to trainee autonomy.

Second, we, as medical educators, should work harder on understanding the relationship between milestones and entrustable professional activities (EPAs) in graduate medical education.¹⁷ Entrustable professional activities are "...units of professional practice, defined as tasks or responsibilities to be entrusted to the unsupervised execution by a trainee, once he or she has attained sufficient specific competence."¹⁸ By continuing to develop robust concepts and methods to document the basis for our delegation of entrustable professional activities to our trainees, we can assure the public that this delegation strengthens quality of care in AMCs.¹⁹ Much progress has been made on this recently, but many of our systems are difficult to use, somewhat subjective, and sometimes are not completely relevant to patient care. Academic medical centers provide much of the complex care delivered in our country. This care is delivered by large and complex teams that are made stronger by including trainees at all levels. The solution is for us, as medical educators, to support our trainees and take responsibility for and "own" their performance.

Third, we can learn from other high-stakes operations in which young people are trained to function at a high level. On the flight deck of an aircraft carrier during night-time flight operations, sailors in their late teens and early twenties safely move airplanes, each worth \$150 million, around in a very dangerous environment. This is possible because hundreds of years of naval tradition and standards for training and communication reinforce a culture of close linkage between accountability and responsibility. Instead of progressively dismantling similar standards and culture in our AMCs, we should study and optimize shared decision making and participation in patient care by teams of nurses, residents, fellows, and attendings, without resorting to the blunt implement of progressive seniorization. In the AMC, if we can't entrust a 31-year-old resident with multiple advanced degrees and 5 years of clinical experience to carry out routine clinical and administrative tasks, we have a problem.

Lastly, when AMC leaders use the tactic of seniorization to encourage "compliance" with their objectives,

they must realize that the use of this tactic is associated with a cost: the potential for deterioration in the culture of the learning environment and the risk of producing a generation of clinicians who are not adequately prepared for independent practice. This will result in a clinical care and learning environment in the future in which neither appropriate supervision nor seniorization will be possible, due to the collective loss of skills in both care provision, and bedside education. Hospital leaders must understand that appropriately delegated autonomous clinical work by trainees is essential for an AMC's fundamental educational mission. Systematic use of seniorization must be resisted as a tool used by AMC leaders to achieve their compliance and financial goals, and it must be avoided by overworked faculty, who find that "doing it themselves" is easier or quicker than teaching those entrusted to us by supervising their work.

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