Teaching Physicians to Care Amid Chaos

Allan S. Detsky, MD, PhD
Donald M. Berwick, MD

For physicians who were residents in the 1970s (like we were), it was a simpler era for care. A relatively small number of medications were available for treatment and prevention of illness. All patients with acute myocardial infarctions received lidocaine because physicians mistakenly thought it prevented arrhythmic death. The powerful cardiovascular benefits of aspirin were unknown. Blood work and plain radiographs could be ordered (computed tomography was just arriving on the scene), but physicians had to go to the radiology department to view the images. Information was exchanged by synchronous face-to-face and telephone communication or by written notes and letters.

Physicians and surgeons worked in teams, whose members shared responsibility for the territory of specific patient wards. In most teaching hospitals, each resident was responsible for a roster of patients, and the work ethic was clear: complete all clinical tasks before leaving for the night. Even if a resident had been on call the night before, if one of his or her patients was unstable, he or she stayed late until the clinical issues were resolved. Signing over an unstable patient to a coresident was considered bad form.

Residents showed their investment in the well-being of patients by taking responsibility for them during the full length of time those patients were hospitalized, starting with their admission. Attending physicians typically served for 1 month at a time. After patients were discharged, residents often saw them in ambulatory settings—"continuity clinic," sometimes for as long as they trained at that hospital. When those residents left the hospital training program, they passed their clinic patients on as a group to incoming residents. Continuity was a key ingredient, allowing physicians of that era to translate their good intentions and commitment into care.

In 2013, inpatient medical care in teaching hospitals is different: far more complex, more intense, and, simply put, faster. The arsenal of diagnostic tests, medical therapies, interventional technologies, and health care professionals is much larger. Attending staff have shorter rotations, often 1 or 2 weeks. For good reasons, resident work schedules have fewer total and consecutive hours. A large proportion of the patients cared for by a primary team are admitted by other residents, handed off to them as "holdovers."[1] Team schedules seem less synchronized, and turnover of members seems more frequent. As a consequence of these scheduling changes, a hospitalized patient is now often cared for by many more and different physicians. The length of time a single physician bears responsibility for a patient may be as short as a few hours. The inevitable result is an increase in the proportion of time a hospitalized patient is cared for by physicians who neither initiated a care plan nor will be responsible for (or perhaps even aware of) the final outcome. Inpatient care in teaching hospitals has become a relay race for the responsible physicians and consultants, and patients are the batons.

Communication patterns are now fundamentally different from those of the earlier era, due to technological progress in electronic and mobile communication. These technologies have brought efficiency, but have also vastly increased the total volume of communication and the frequency of interruptions, even during important tasks. The electronic health record (EHR) has pulled both the resident and attending physicians' focus toward the computer instead of the patient,[2] and the contemporary EHR has become a series of often unrelated notes.[3] For all these reasons and more, the job of a resident and attending staff is far more stressful today than in previous times, and continuity—a hallmark of schedules in earlier eras—has decreased.

It is worth asking what the effects of such speed, complexity, and continual handoffs may be on the perspectives of the physicians involved—both for trainees and attending physicians. As physicians near the end of their time of responsibility, priorities can change, as they do for a lame-duck president or congressman. Additionally, do residents who care for patients for short periods really know each patient's full history? Can the broader sense of commitment,

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Author Affiliations: Institute for Health Policy, Management and Evaluation and Department of Medicine, University of Toronto, and Department of Medicine, Mount Sinai Hospital and University Health Network, Toronto, Ontario, Canada (Dr Detsky); Harvard Medical School, Boston, Massachusetts, and Institute for Healthcare Improvement, Cambridge, Massachusetts (Dr Berwick).
Corresponding Author: Allan S. Detsky, MD, PhD, Department of Medicine, Mount Sinai Hospital, 600 University Ave, Ste 429, Toronto, ON M5G 1X5, Canada (adetsky@mtsinai.on.ca).

responsibility, and command of patients' details that we recall (albeit through the distorting lens of nostalgia) from our own training years endure?

It is easy to conjure up specific, hypothetical examples. Might a resident filling in for a single 12-hour shift aim just to "get the patients through the night" and call that success? Will a surgeon, on call for just 1 week and caring for a patient who needs a difficult or risky procedure, delay the surgery until the next surgeon takes over? Will an internist nearing the end of an attending stint, faced with a family who is demanding futile care of a patient who is not in imminent danger of dying, put off that difficult conversation until the next attending takes over? These examples are not raised to impugn the motivation or ethical compass of today's residents and their teachers, but only to point out that rapid turnovers and short time horizons likely have consequences for who takes responsibility for what.

One remedy is an effective clinical team, which can and does help mitigate the risks of rapid turnover and diffused responsibility. However, the same dynamics that can erode an individual's mastery of patient histories can also impair teamwork. Clinicians on teams need time to get to know each other, and senior members of a team need to learn the capacities and limits of the juniors, just as juniors need to learn the styles of the seniors. Changing team members every 2 weeks, or even more often, can confound the best intentions of the workforce. Few other industries that depend on effective workforce cooperation would choose to be organized in this chaotic way.

These observations should not be interpreted as advocating a return to the imaginary "good old days" of every-other-night on call and brutally long working shifts; these conditions bred hazards and wrong lessons of their own. Nor should anyone ignore the importance of improving handoffs in patient care, which have now become crucial to excellence.[1] But perhaps, in this relay-race era of rapid turnover, it would be worthwhile for teachers and trainees together to examine explicitly what the profession means by the notions of "responsibility" and "caring" when a trainee's touch time with a single patient may be bounded in minutes or hours (not weeks or months), and when an attending physician may come and go from the hospital ward faster than the patient.

If senior physicians, younger attendings, and current residents are concerned about coming up short on caring despite their best efforts, some changes may be worth testing systematically.[4] Structural changes involve attempts to increase continuity by innovative scheduling. For example, more studies could be undertaken to determine whether rotations for residents and attending physicians should be lengthened or better synchronized.[5] Methods of reducing stress that leads to burnout could be developed that might enable rotations to be lengthened, including reducing the need for onerous, duplicative, and usually useless documentation by both attendings and residents.[6] Programs could aim for more continuity with shorter shifts by making sure that returning residents care for the same panels of patients they had signed over earlier. Teams could be reconstituted cyclicly through the year to foster familiarity of styles, communication, and expectations.

These strategies are aimed at logistics, and even very clever program directors will not be able to fix the fundamental "math" problem of shortened duty schedules. So other solutions will be needed to increase the sense of longer-range responsibility. For example, both attendings and trainees could systematically receive follow-up on patients about whom they had made decisions. Training programs could develop specific tracks for residents to follow patients through entire episodes of care over long time frames to expose them to the satisfaction of seeing their efforts through to completion.[7]

We are certain that today's trainees are not a whit less dedicated to their professional mission than those of an earlier era were at their best,[8] but we cannot help wonder whether the very definition of caring changes in undesirable and unintended ways when responsibility becomes a rapidly revolving door. If that risk exists, it warrants conversation.

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