Training on the internal medicine teaching wards

Kenneth M. Flegel, Anita Palepu

ß See related article page 1032

Although internal medicine residents currently receive about 85% of their training on inpatient services, most of their subsequent professional lives will be spent managing patients in offices or doing consultations in first-contact settings such as clinics and emergency departments. Therefore, internal medicine teaching wards can no longer be relied upon as the sole setting for training in this specialty. In particular, many of the patients in these wards are very ill, having one or more diseases that tend to be at the severe end of the spectrum and that tend to be multisystem in expression. Almost all of these patients are living the last year of their lives. Many are elderly[1] and have no family member involved in their care. Even if the spouse is still living, that person is often too ill to look after the patient. Furthermore, a large number lack the substantial financial resources necessary for private chronic care facilities. Discharge planning for such patients thus becomes a time- and energy-sapping task. Although there is value in caring for patients in this setting, residents need to spend much more time in other settings to prepare them for their professional lives.

The typical patient population on internal medicine wards today reflects changes in the approach to hospital care in recent years. Hospitals have responded to the budget cuts of the past decade by closing beds and shifting more patients to outpatient clinics and day hospitals to shorten length of stay. The number of hospital bed-days in Canada fell by 15.6% between 1995 and 2000, while the average length of stay went down by 3.8%.[2] Nowadays, many patients are admitted only long enough to undergo one or more invasive procedures.[3] The diagnostic thinking that used to occur during the hospital stay has taken place before the admission, or it will take place after discharge, when test results become available.[4] While experience with caring for this type of patient during the hospital stay will train our residents to insert central lines and order third-generation antibiotics or chemotherapy, it seems unlikely to prepare them for the complex diagnostic challenges that face most practitioners on a typical day in the office or emergency department.[5,6] For example, diagnosis and management of non-life-threatening diseases such as Grave's disease or deep vein thrombophlebitis cannot reliably be learned in this setting, as patients with such conditions are rarely admitted to hospital.

The ward rotations in internal medicine can be difficult for some residents for a number of reasons. Patients who can walk from bed to bathroom go home to convalesce shortly after undergoing their procedure, leaving the truly ill and bedridden on the wards; the monitoring and care of such patients represents a significant workload. As well, the pressure on house staff to "move" (i.e., discharge to home or to another, more appropriate care facility) seemingly immovable patients has grown inexorably, a predicament for which medical school provides minimal preparation. The change in residents' scheduled hours of work also poses a challenge. Days of frantic activity are followed by night call, which entails the provision of care to acutely ill patients on the wards and in the emergency department. Such difficult schedules are causing great stress and measurable rates of feelings of burnout.[7] Coupled with work fatigue is sleep deprivation, so it is hardly surprising that patient care can also suffer; this situation will likely continue to push the agenda for reform of residents' working conditions.[7,8]

Other aspects of professional development get little attention on the wards these days. A longer-term therapeutic relationship with the patient was perhaps better sustained when residents were plentiful and spent more hours on the ward. Using their own written narratives as a reflective exercise, residents in a primary care internal medicine program progressed from expressing ideal images of themselves as physicians in their first year of residency to describing a bleak, discouraged stage of development in their second year. However, in the third year, residents again felt hope, a change that was largely driven by their increasing skill in developing relationships with patients.[9] Thus, our training programs need to evolve to ensure that residents have opportunities to maintain long-term professional relationships with their patients. As we continue to develop more humane working conditions for them, residents' sense of responsibility toward their patients must be carefully safeguarded.

There have also been changes within the resident population over the past decade. In Canada, 1956 residents finished training in 1992, but this number had dropped to 1624 in 2001.[10] Not only are there fewer residents these days, but they are less interested in devoting their entire lives to medicine than were the medical trainees to whom the term "resident physician" was first applied several decades ago. They also have different expectations about their responsibilities in life and work. More of them are women — 2890 (37.0% of the total number of Canadian residents) in 1992 versus 3363 (47.3%) in 2001[11] — and both men and women want to avoid putting their lives on hold during residency. They want to develop interests beyond medicine, and many are unwilling to postpone having children until after training is completed.[12,13] Thus, there are fewer residents spending less time on the wards, where more of the work is of marginal value to their future careers. Any resident who has received a "modern" medical education should have been taught in the first year of medical school that to be a good physician one

needs first to be a successful human being. We should therefore welcome the shift in attitude that has occurred among residents, who now expect to have more time and energy for the nonwork aspects of life. At the same time, we need to ensure that they balance this attitude with their professional responsibilities toward their patients and their learning.

The Royal College of Physicians and Surgeons of Canada has defined a set of objectives for residency programs, which reflect Canada's health care environment and current thinking about the physician–patient relationship.[14] We need to develop our residency curricula to reflect these Canadian Medical Education Directions for Specialists (CanMEDS) 2000 objectives, and residency training programs need to ensure that residents are seeing the right types of patients for the right amount of time. Contact with the right types of patients could be ensured by reducing the now predominant contact with patients who are facing "last things" and increasing encounters with similarly challenging patients for whom residents would provide the first consultative contact. Such a shift would surely involve residents spending more time in outpatient or community settings, where undifferentiated illness awaits correct diagnosis and management. For the past 20 years, we have been paying lip service to this need for better balance in terms of where residents spend their time, but change has been slow in coming and it has been poorly measured. Ideally, the right amount of time can be ensured by shortening, wherever possible, the amount of training time to a period adequate to gain proficiency. Because each resident achieves training benchmarks at an individual rate, a good change would be to allow more flexibility in when a resident is promoted to a more senior training level.

The appropriateness of residents' training time will have to be addressed through a number of approaches. Training program directors and resident associations have already taken the step of ensuring that night call and post-call departure agreements are observed. However, this attempt to reduce work imposes yet more work on those who, in covering for their absent colleagues, find themselves with a substantially increased patient panel. Another approach to reducing on-call hours is the employment of moonlighting residents. However, this tactic seems unattractive because it merely adds to some other resident's workload; worse, this approach carries with it the unfortunate implication that the training in which that other resident is still engaged is less important. Instead, the work on the wards – including night coverage — is going to have to be better parsed into the humdrum and the heuristic. Tasks falling in the former category can probably be fulfilled to a greater extent than is now the case by hiring nonfaculty physicians, by delegating medical acts and by operating nonteaching wards. One possibility would be to hire clinical associates who would be integrated into the teaching unit teams. These physicians could ensure continuity of care and manage patients needing subacute and chronic care. In addition, they would benefit from learning opportunities because they would not be working in isolation. These and other potential solutions, of course, are contingent on new funds that have not been forthcoming to date.

The teaching wards that were once the site of basic training for all medical students and interns[15] have become instead the home base of a new type of internist — the hospitalist.[16] The implication that these wards are now less adequate for their original training purpose has not been fully appreciated or accommodated. We owe it to our residents and to the patients they will treat over the course of their careers to modify our residency training programs to ensure that training prepares physicians for practice.

This article has been peer reviewed.

Dr. Flegel is Professor, Division of General Internal Medicine, McGill University, Montreal, Que., and Dr. Palepu is Assistant Professor, Division of General Internal Medicine, University of British Columbia, Vancouver, BC. Both authors are Associate Editors for *CMAJ*.

Competing interests: None declared.

Contributors: This commentary was conceived, researched, developed and written jointly by both authors.

References

1. Card SE, Rathgeber MA, Sheppard MS. An internal medicine clinical teaching unit — Does it affect services provided for the elderly in Saskatoon? *Ann R Coll Physicians Surg Can* 2002;35:274-8.
2. Hospital days and average length of stay for Canada, provinces and territories, 1994/95 to 1999/00 [table]. Ottawa: Canadian Institute for Health Information; [no date]. Available: secure.cihi.ca/cihiweb/en/media_26sep2001_tab3_e.html (accessed 2003 Mar 13). Data from *Hospital morbidity database*.
3. Schroeder SA, Showstack JA, Gerbert B. Residency training in internal medicine: Time for a change? *Ann Intern Med* 1986;104:554-61.
4. Reuben D, McCue JD, Gerbert B. The residency-practice training mismatch. A primary care education dilemma. *Arch Intern Med* 1988;148:914-9.
5. Blumenthal D, Gokhale M, Campbell EG, Weissman JS. Preparedness for clinical practice. Reports of graduating residents at academic health centers. *JAMA* 2001;286:1027-34.
6. Miettinen OS. The modern scientific physician: 3. Scientific diagnosis. *CMAJ* 2002;165(6):781-2.
7. Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med* 2002;136:358-67.
8. Lamberg L. Long hours, little sleep. Bad medicine for physicians-in-training? *JAMA* 9002;287:303-6.
9. Brady DW, Corbie-Smith G, Branch WT. "What's important to you?": The use of narratives to promote self-reflection and to understand the experiences of medical resident. *Ann Intern Med* 2002;137:220-3.
10. Canadian Medical Association. Number completing postgraduate training and entering practice by faculty of medicine, 1992-2001 [table]. In: *Statistical information on Canadian physicians: physicians in training* [online]. Ottawa: The Association; updated 2003 Mar. Available: www.cma.ca/staticContent /HTML/N0/l2/statinfo/pdf/EnterPracticeFoM.pdf (accessed 2003 Mar 14). Data from CAPER, annual census of post-MD trainees.
11. Association of Canadian Medical Colleges. Canadian post-MD educational registry (CAPER); annual census of post MD trainees 1988–2001 [table]. In: *Medical education statistics*. Ottawa: The Association; 2001.
12. Potee RA, Gerber AJ, Ickovics JR. Medicine and motherhood: shifting trends among female physicians from 1922 to 1999. *Acad Med* 1999;74:911-9.
13. Seltzer VL. Changes and challenges for women in academic obstetrics and gynecology. *Am J Obstet Gynecol* 1999;180:837-48.
14. *Skills for the new millennium: report of the Societal Needs Working Group. The Royal College of Physicians and Surgeons of Canada's Canadian Medical Education Directions for Specialists 2000 Project*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 1996 Sep [updated 2001 Jun 8]. Available: rcpsc.medical.org/english/publications/ (accessed 2003 Mar 19).
15. Barondess JA. The training of the internist. *Ann Intern Med* 1979;90:412-7.
16. Wachter RM, Goldman L. The hospitalist movement 5 years later. *JAMA* 2002;287:487-94.

Correspondence to: *Dr. Kenneth M. Flegel, Rm A4.19, Royal Victoria Hospital, 687 Pine Ave. W, Montreal QC H3A 1A1; fax 514 843-1676; ken.flegel@muhc.mcgill.ca*