

# The Hospitalist: New Boon for Internal Medicine or Retreat from Primary Care?

Steven A. Schroeder, MD, and Renie Schapiro, MPH

The growing reliance on hospitalists in the United States has implications for several areas of internal medicine, including patient care, administration, clinical practice, and medical education. This paper discusses some of the potential advantages and disadvantages of the use of hospitalists in each of these areas. The new hospitalist practice mode highlights long-standing tensions about the role and direction of internal medicine, tensions that affect generalist and specialty care in both outpatient and hospital settings. The career trajectory of hospitalists will depend on whether burnout is a problem and on whether hospitalists will be able to compete effectively with subspecialists, such as cardiologists and physicians specializing in AIDS. Clearly, hospitalism meets a clinical need and expands opportunities for internists, but it is important that it not overreach, forfeiting primary care turf and distorting medical education. This new field warrants close monitoring because of its potential effects and because—unlike related fields, such as emergency medicine and intensive care—its birth was strongly influenced by system-wide financial considerations.

*Ann Intern Med.* 1999;130:382-387.

From the Robert Wood Johnson Foundation, Princeton, New Jersey. For current author addresses, see end of text.

The emergence of a breed of inpatient internal medicine subspecialists, dubbed *hospitalists*, represents a new, market-driven turn toward specialized care and functions in a managed care environment that emphasizes efficiency over continuity of care. The development of the hospitalist has some parallels with the development of the intensivist and the neonatologist over the past few decades—the hospitalist today is not unlike the intensivist of 25 years ago. But the hospitalist is an unusual blend of subspecialist (in inpatient care) and generalist (across a range of disparate conditions), and the growth of the hospitalist field poses new and important issues.

Potential advantages and disadvantages of the hospitalist model have been noted (1–3) and tend to fall into four areas: patient care, administration (as measured by the goals of increased efficiency and reduced costs), clinical practice, and medical education. In this paper, we examine controversies in each of these areas, paying special attention to clinical practice and medical education and to the effect of hospitalists on the development of internal medicine.

## Patient Care

It can be persuasively argued both that hospitalists improve the quality of patient care and that they detract from it. Both assertions may well be true.

One apparent advantage that hospitalists offer is increased experience with inpatient conditions and procedures. Will this translate into better patient outcomes? The answer to this key question depends on whether the benefits that have been seen when specialized practitioners are more experienced in treating a disease or doing a procedure (4, 5) also occur in the context of the more generalized experience that hospitalists acquire. Data are needed on this point. In some cases, increased experience may account for a more efficient, less burdensome process, which is a benefit in itself even if patient outcomes are not improved.

It may turn out that any improvements in quality of care will be due to the hospitalist's better responsiveness to service demands rather than to his or her special medical knowledge. Hospitalists are likely to become more adept than many community physicians at orchestrating the various consultations and services required for inpatient care. Because they are at the hospital full time, they can respond to consultations and test results expeditiously, avoiding the inevitable delays that occur because community physicians may be at the hospital only once a day. In emergency situations, the availability of hospitalists should improve the quality of care. The fact that the home base of hospitalists is the hospital should also serve as an incentive for these physicians to take a strong interest in improving the suboptimal hospital practices and policies that office-based physicians tolerate. Thus, hospitalists could be influential in promoting hospital changes that improve care.

Inpatients would also benefit if hospitalists were to pursue new areas of research in addition to their clinical work. For too long, hospital-based care has suffered from a narrow, specialty-based focus. Hospitalists should have a broader research interest and agenda. They might explore such questions as, What happens in the transition from inpatient to outpatient care? or, What do we know about the efficacy of preventing hospitalizations? In addition, the hospitalist is well positioned to conduct patient-oriented clinical research on common conditions

that have not captured the interest of subspecialists. For example, generalists have made important contributions to our knowledge about the natural history of syncope (6) and pneumonia (7). Another underdeveloped research area might be called *orphan illnesses*, conditions that straddle different specialties (for example, dementia straddles neurology and psychiatry) and have been relatively ignored. Here, too, academic generalists have significantly advanced knowledge about dementia (8), low back pain (9), and osteoporosis (10). An optimistic prediction would be that recent substantial increases in federal funding for clinical research would generate more funds with which to address the neglected clinical research questions that should interest hospitalists. Realistically, however, as part-time researchers, hospitalists are likely to have difficulty competing for research funds.

Offsetting some of these advantages are concerns about the adverse effects of hospitalists on patient care. One area in which hospitalists may adversely affect care is by changing the nature of clinical decision making. Experience with both adult and neonatal intensive care units indicates that specialists tend to use more aggressive, technology-based responses, whereas primary care providers tend to be more conservative. Some balance results from the presence of both perspectives. The increasing disenfranchisement of the primary care physician from decisions about inpatient care threatens this balance. This tendency may be compounded by the fact that hospitalists do not have a history with the patients they treat; this may incline hospitalists toward aggressive care rather than watchful waiting.

Much of the concern about the hospitalist model has focused on the break that appears in the continuity of care. In a hospitalist system, patients (and their families) often lose a physician whom they know and with whom they have some level of comfort and confidence at a time when they are most frightened and stressed. Of note, some anecdotal reports suggest that this may be less of a problem than expected; it needs to be carefully assessed across various populations and provider settings. Patients may be less resistant to the change in care partly because it is difficult for them to establish a longstanding bond with a particular physician in the current managed care environment. Patients switch health plans and providers with surprising frequency. Preliminary data from the past year show that 19% of the U.S. population switched their health insurance, and those who switch are twice as likely not to have a usual source of care (The Community Tracking Study. The Center for the Study of Health System Change; 1997). In addition, some patients switch physicians without switching health plans, and others lack a primary care physician to

begin with. As the market consolidates, however, less switching and more continuity with primary care physicians will probably be seen, increasing the likelihood that patients will want to see their primary care physicians when they are hospitalized.

Wachter (11) has referred to the possibility of a “voltage drop” in information as a patient is “handed off” from the primary care physician to the hospitalist. The response to this potential problem extends beyond ensuring an efficient transfer of records. Nuances important to the practice of medicine are likely to be lost in the transfer, no matter how efficient the record keeping. Primary care physicians are the doctors in whom patients most often confide their hopes and fears. The physician who knows the patient only as a creature of the hospital—and who therefore has a limited appreciation of where the patient comes from or returns to—is at a disadvantage in trying to provide care that considers the patient’s overall interests.

End-of-life care is thus an area of particular concern. At the same time that the hospitalist movement is picking up momentum, a broad-based effort to improve end-of-life care is taking hold. This is, in part, a response to SUPPORT (Study To Understand Prognoses and Preferences for Risks and Outcomes of Treatment) (12), which documented large numbers of patients dying in pain as well as a serious disregard for patients’ wishes at the end of life. A key component of the post-SUPPORT work is aimed at promoting community-wide discussions among patients and their physicians and families—before a crisis—about values and preferences for end-of-life care.

But where does this advance planning effort lead if it is the hospitalist—a physician previously unknown to the patient—who oversees decision making at the end of life? Not every circumstance at the end of life can be anticipated and recorded on paper, and a physician who has talked with the patient earlier is in a far better position than the hospitalist to provide care that is consistent with the patient’s desires. This is at the heart of the effort to conduct advance planning conversations in concert with an advance directive document. If a hospitalist is going to be the primary caregiver at the end of life, it may be necessary to rethink how patients can most effectively communicate their wishes about end-of-life care.

In addition, the natural tendency of the hospital-based physician toward aggressive, technology-oriented measures could undermine the wishes of patients who want only palliative care (including symptom relief) and prefer to die at home with their families rather than being hooked up to hospital machines. Although the suggestion that the hospitalist model could improve end-of-life care is

plausible, a self-selection process could prove to be a barrier. In the experience of one of the authors, internal medicine residents who are more interested in the "people side" of medicine go into fields such as general internal medicine or rheumatology, whereas those who are more fascinated with pathophysiology and technology become invasive cardiologists, intensivists, and (possibly) hospitalists. Residents who become hospitalists may be fleeing office-based care and the obligation of working with families over time and thus may be the least inclined to work through end-of-life issues with patients and families.

### Administration

Increased efficiency and reduced costs are major incentives driving the growth of the hospitalist movement. This could benefit the patient and the practice plan as well as the primary care physician. When an office-based physician is relieved of the need to make unpredictable visits to the hospital, the practice—whether it be general internal medicine or gastroenterology—stands to benefit. Patients do not like to be kept waiting for appointments, and removing the physician's trips to the hospital eliminates one source of delay. Health plans that measure patient satisfaction as a competitive measure of quality will be pleased. In addition, physicians, especially those with a declining inpatient population, may welcome the time gained. This time bonus may be short-lived, however, if efficiency-conscious practice administrators see it as an opportunity to schedule extra office visits. Physicians who give up inpatient care responsibilities may also miss the continuing contact they get by supervising their hospitalized patients; how this will balance out in the long run remains to be seen.

A "critical mass" of patients from the same organization is necessary to support a dedicated hospitalist. Therefore, a hospitalist system may be efficient only for large organizations, such as academic medical centers or staff-model health maintenance organizations. Despite earlier predictions that staff-model health maintenance organizations would become dominant, it now seems that smaller practice models are both more viable and more attractive to consumers. Thus, it is uncertain how applicable the hospitalist concept will be in many practice settings.

Whether hospitalists will reduce medical care costs is a complex question to which the answer is still not known, but preliminary data are encouraging (13, 14). When the physician's availability eliminates delays that would otherwise, for example, push the next test to the next day, hospital stays can be shortened. For Medicare patients, this trend is profitable for hospitals. Because Medicare physician

payments, however, are still mostly fee-for-service, physicians still have an incentive to provide more care. Therefore, who pays the hospitalist and what their incentives are could have a major indirect effect on the behavior of hospitalists with regard to length of stay and use of tests and procedures.

### Clinical Practice

Questions must be raised about the career trajectory of internal medicine physicians who choose to practice as hospitalists. It is easy to foresee that such an intense style of practice could cut short a career. Will hospitalist medicine, like emergency medicine and intensive care medicine, tend to be a profession for the young? The hospitalist conference held in San Francisco in December 1997 attracted many young physicians who had recently completed a chief residency. This is worrisome because a physician who has specialized so completely in inpatient care may find a subsequent career in ambulatory practice less rewarding as well as less comfortable.

To prevent burnout, it has been suggested that hospitalists have clinical care responsibilities for only part of the year and that they conduct hospital care-oriented research in the remaining time. Hospitalists could also be physicians who spend less than 100% of their time in the hospital; Wachter (11) has proposed including those who spend 25% or more of their time in hospital care. The idea of a hospitalist who also maintains an office-based practice raises numerous questions. For example, are persons who are drawn to the faster-paced, more intensive work of a hospital likely to be content in a slower-paced office setting? If hospitalists must maintain competence in office-based care in addition to inpatient care, does this detract from the goal of establishing a cadre of physicians who can concentrate on becoming expert in hospital-based care?

The career of the hospitalist also depends on the long-term sustainability of a field in which physicians concentrate in inpatient care but are really generalists. Can hospitalists survive turf battles with specialists? Hospitalists already compete with physicians specializing in AIDS, cardiologists, and other subspecialists; over time, they could become obsolete in the face of greater inpatient specialization—at least in large hospitals. It may be difficult for hospitalists, like primary care physicians, to optimally treat a wide range of critical conditions. Thus, hospitalism may represent a step on the way toward greater specialization in many hospitals, and the hospitalist model may turn out to be most viable in rural settings where further specialization is inhibited by volume limitations.

The growth of the hospitalist model challenges some core values of internal medicine as it has developed in the United States. It highlights tensions about whether internal medicine is a specialty or a generalist field and about the degree to which internal medicine is hospital-based or outpatient practice-based.

Internal medicine's great strength is its breadth. It has room for both the primary care internist and the intensivist. Given this breadth, however, it is not surprising that there are cleavages within the fold. In fact, internal medicine is challenged to breach three splits. The first is between the subspecialist and the generalist; academic internal medicine has long been dominated by the subspecialist. The second is between outpatient and hospital practice; specialists and generalists exist in both venues, and (particularly now that care is moving to settings outside of the hospital) specialty care occurs increasingly in outpatient settings. The third split, especially evident in academic settings, is between researchers and clinicians.

The strict division between inpatient and outpatient medical practice, which is at the heart of the current hospitalist movement in the United States, has been comfortably ensconced in the United Kingdom, as well as other countries, for some time. The tradition of the British consultant physician, who takes over care of the hospitalized patient from the general practitioner, is grounded in the British Royal Colleges' strong, early influence on the development of medical practice in England. Internal medicine developed differently in the United States, without strong centralized guilds and through competition with other specialties (15). What makes internal medicine in the United States unique is its twin areas of competence in specialty medicine and generalist medicine. Both types of medicine include outpatient and hospital care components, and both stress continuity and coordination of care. If considerable academic energy now flows into training hospitalists, it could impede the current market-driven evolution of both generalist and specialist practice into predominantly outpatient medicine.

### Medical Education

To some extent, hospitalizations can be seen as failures—of compliance, of prevention, or of previous medical care. Understanding illness as part of a continuum is one of the most important lessons for a young physician to learn. Already, the declining length of hospitalization and the serious, acute illness typical of hospitalized patients have reduced opportunities for students and house staff to obtain a broader perspective on where a patient has come

from. This educational loss will be compounded if the primary internist (specialist or generalist), who provides an important link to the patient's earlier life, is removed from the care team. Also important is the transition out of the hospital, or discharge planning. Ideally, the hospitalist will pay attention to the periods before and after hospitalization. If he or she does not, a considerable educational (as well as patient care) loss will occur.

The break in the continuity of care associated with the hospitalist movement ironically comes amid increasing calls for more ambulatory care training in residencies, intended in part to expose residents to the full continuum of patient care (16, 17). It is possible that if hospitalists, with their allegiance to inpatient care, become a dominant presence in training and a powerful role model for students and residents, it may become increasingly difficult for careers in ambulatory care to compete with careers in hospitalist medicine. Student exposure to ambulatory practice could be overwhelmed by the hospitalists who serve as the primary mentors for hospital-oriented clinical clerkships.

However, the increased presence of the hospitalist as role model or mentor could also have a salutary effect. As hospitalists supplant that subgroup of research-intensive attending physicians who do little clinical care except during the month on which they attend, the primacy of clinical internal medicine will be reinforced for students and residents. This is especially valuable for young physicians because academic leadership in internal medicine is so often research-based rather than clinically focused. (This is in sharp contrast to the situation in surgical specialties, where academic leaders usually have a more dominant clinical presence.)

Internal medicine, especially academic internal medicine, has always been ambivalent about its primary care role. In recent years, internal medicine's increasing subspecialization contributed to the creation and success of family practice. Internal medicine and family practice now compete for residents, and recent residency match results indicate that family medicine may be winning. Between 1991 and 1997, the number of U.S. senior medical students matching in family practice increased from 1374 to 2304, whereas the number matching in internal medicine (categorical and primary care) only increased from 2897 to 3486. Internal medicine offers many more residency positions (in 1997, there were 7068 for all internal medicine positions, including 1362 transitional slots) than family practice does (3262 positions in 1997), and it therefore remains the largest potential pool of primary care physicians. Nevertheless, in the past decade, the relative popularity of these fields for U.S. medical students has reversed. In 1986, 72.3% of internal medicine residency slots

and 63.1% of family practice slots were filled by U.S. medical students. By 1997, the figures were 63.1% for internal medicine and 71.7% for family practice (19). The gap narrowed somewhat in the 1998 match, although family medicine continued to have more U.S. graduates (66.2%) than internal medicine did (62.4%) (18).

If internal medicine decides to make the hospitalist track a major thrust of training, it should consider backing away from primary care and leaving that field to family practice, which has never been ambivalent about its commitment to primary care. This would require a major decrease in the total number of internal medicine residency positions. Such a step seems misguided, however, for two reasons. First, primary care general internists are well-established personal physicians and should be in competition with family physicians. They fare well in the current job market; residents in general internal medicine encounter fewer difficulties than internal medicine subspecialists do in finding suitable jobs as they enter the workforce (19).

Second, even if hospitalist training is emphasized in medical education, one must take realistic career opportunities after residency into account. For the purpose of some rough calculations, assume that each of the 818 U.S. acute care hospitals with more than 200 beds hires four hospitalists, creating 3272 hospitalist positions. That is approximately equal to the number of U.S. medical school graduates ( $n = 3206$ ) entering internal medicine categorical and primary care residencies in 1997. Even if each of the 1527 hospitals with more than 100 beds hired four hospitalists, it would take only a couple of classes of residents to fill all of the slots. Of course, not all residents will choose to be hospitalists, the four-hospitalists-per-hospital figure is an estimate, and we don't yet know how long hospitalists will stay in their positions. But whatever the precise figure, the point is that the market is finite and could be quickly saturated. If substantial burnout is seen, of course, more opportunities would be available.

A generalist base remains the key to the internal medicine residency. Perhaps in the third year of training, when residents have more flexibility, it might be sensible to offer a choice of paths: primary care, specialty care, or inpatient care (hospitalist or intensivist). An alternative would be to extend the internal medicine residency to 4 years, with the final year providing an opportunity for concentration in primary care, specialty care, or inpatient care. However, given internal medicine's current difficulties in the residency match, lengthening the training requirement is probably not practical.

## Conclusions

At this point, it is unclear how much the hospital of the future will rely on hospitalists to deliver care. Certainly, managed care is driving much of the growth of the hospitalist movement. Some primary care physicians are at least initially resistant to turning their patients over to others, and it is still unclear whether they will have the option to retain control over hospital care. Will reliance on hospitalists break out along rural-urban lines? Will hospitalists be concentrated primarily where managed care predominates? What is the ideal mix of community practitioners and hospitalists? Is placing all hospital care in the hands of hospitalists a worthwhile goal, or even an acceptable option? How will the growth of the hospitalist model affect internal medicine's balances between subspecialists and generalists and between office-based and hospital-based care? Will the current, relatively leisurely pace of the hospitalist succumb to the same "speed-up" economic pressures that currently assail office practice? If so, then the putative advantages of the hospitalist's increased accessibility may be attenuated.

It is apparent that the hospitalist movement is gaining speed and that, in some form, hospitalists are here to stay. Clearly, this new practice mode meets a need and expands opportunities for internists. But it is important that it not overreach, forfeiting primary care turf and distorting medical education. It warrants close monitoring, not least of all because—unlike related fields, such as emergency medicine and intensive care—its birth has been strongly influenced by system-wide organizational and financial considerations.

*Requests for Reprints:* Steven A. Schroeder, MD, The Robert Wood Johnson Foundation, PO Box 2316, Princeton, NJ 08543-2315.

*Current Author Addresses:* Dr. Schroeder and Ms. Schapiro: The Robert Wood Johnson Foundation, PO Box 2316, Princeton, NJ 08543-2315.

## References

1. Wachter RM, Goldman L. The emerging role of "hospitalists" in the American health care system. *N Engl J Med.* 1996;335:514-7.
2. Gesensway D. Internists in the hospital—only. *ACP Observer.* 1997;5:1.
3. Wiebe C. Physicians turn to hospital practice in new specialty. *American Medical News.* 1997;1 Sept:1.
4. Luft HS, Hunt SS, Maerki SC. The volume-outcome relationship: practice-makes-perfect or selective-referral patterns? *Health Serv Res.* 1987;22:157-82.
5. Kitahata MM, Koepsell TD, Deyo RA, Maxwell CL, Dodge WT, Wagner EH. Physicians' experience with the acquired immunodeficiency syndrome as a factor in patients' survival. *N Engl J Med.* 1996;334:701-6.
6. Kapoor WN, Karpf M, Wieand S, Peterson JR, Levey GS. A prospective evaluation and follow-up of patients with syncope. *N Engl J Med.* 1983;309:197-204.
7. Fine MJ, Auble TE, Yealy DM, Hanusa BH, Weissfeld LA, Singer DE, et al. A prediction rule to identify low-risk patients with community-acquired pneumonia. *N Engl J Med.* 1997;336:243-50.
8. Larson EB, Reifler BV, Sumi SM, Canfield CG, Chinn NM. Diagnostic evaluation of 200 elderly outpatients with suspected dementia. *J Gerontol.* 1985;40:536-43.
9. Deyo RA, Diehl AK, Rosenthal M. How many days of bed rest for acute

- low back pain? A randomized clinical trial. *N Engl J Med.* 1986;315:1064-70.
10. **Cummings SR, Nevitt MC, Browner WS, Stone K, Fox KM, Ensrud KE, et al.** Risk factors for hip fracture in white women. Study of Osteoporotic Fractures Research Group. *N Engl J Med.* 1995;332:767-73.
  11. **Wachter RM.** An introduction to the hospitalist model. *Ann Intern Med.* 1999;130:338-342.
  12. A controlled trial to improve care for seriously ill hospitalized patients. The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments (SUPPORT). The SUPPORT Principal Investigators. *JAMA.* 1995;274:1591-8.
  13. **Wachter RM, Katz P, Showstack J, Bindman AB, Goldman L.** Reorganizing an academic medical service: impact on cost, quality, patient satisfaction, and education. *JAMA.* 1998;279:1560-5.
  14. **Diamond HS, Goldberg E, Janosky JE.** The effect of full-time faculty hospitalists on the efficiency of care at a community teaching hospital. *Ann Intern Med.* 1998;129:197-203.
  15. **Stevens R.** Issues for American internal medicine through the last century. *Ann Intern Med.* 1986;105:592-602.
  16. **Schroeder SA, Showstack JA, Gerbert B.** Residency training in internal medicine: time for a change? *Ann Intern Med.* 1986;104:554-61.
  17. **Council on Graduate Medical Education.** Seventh Report: COGME 1995 Physician Workforce Funding Recommendations for the Department of Health and Human Services Programs. Rockville, MD: Council on Graduate Medical Education; June 1995.
  18. American Academy of Family Physicians, Division of Education. 1997 National Residency Matching Program Information. 19 March 1998.
  19. **Miller RS, Dunn MR, Whitcomb ME.** Initial employment status of resident physicians completing training in 1995. *JAMA.* 1997;277:1699-704.