

# The expanding role of hospitalists in the United States

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## Summary

Hospitalists are the most rapidly growing group of providers in the United States; in a few years, there will be more hospitalists than cardiologists in the U.S. While early growth in the field was driven by financial demands on hospitals, more recent incentives include a growing focus on improving the quality and safety of care. With current evidence suggesting both financial and educational benefits from the increased presence of hospitalists in both teaching and non-teaching settings, the environment is ripe for further expansion. Hospitalists are likely to embrace a number

of additional clinical and non-clinical roles in the coming years. They will serve as change agents, hospital leaders and experts in both quality improvement activities and research initiatives around improving inpatient care delivery. As their skills sets and unique competencies become more clearly outlined, the next step will likely be the development of an independent specialty with its own board certification.

*Key words: hospitalists; hospitalisation; organisational innovation*

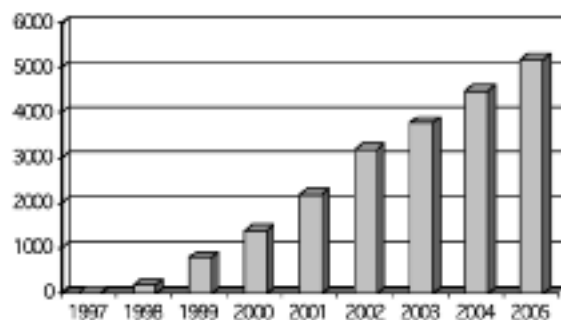
## Introduction

Over the past decade, the United States has undergone a remarkable evolution in the way it delivers inpatient medical care. Prior to that time, primary care physicians would retain the responsibility to manage and “round” on their hospitalised patients. Because of their outpatient practice, such rounds generally occurred before their morning clinic session, over their lunch hour, or in the evening after their last clinic patient. Even in academic settings, the supervising attending might only be available in the morning, needing to return to an outpatient practice, a procedure suite, or a research lab in the afternoon.

Today, in a growing number of teaching and non-teaching hospitals, the same patients now receive their care from an “inpatient” specialist who manages the hospitalisation and then transitions the patients back to their primary care physician following discharge. This new group of physicians, dubbed “hospitalists” by one of us (RMW) in 1996 [1], has grown rapidly to largely replace primary care physicians as the major inpatient providers. Approximately 12,000 hospitalists practice in America, and the field is likely to grow to about 30,000, making it a larger specialty than cardiology. Along with the emergence in clinical settings, the Society of Hospital Medicine, a professional society established in 1997, now represents more than 5,000 members [2] (figure 1). With this growth and early research confirming financial and clinical benefits of hospitalists to patients and health care systems [3], hospitalists are now assuming increasingly diverse roles, both in clinical and non-clinical areas.

In this review, we discuss the contextual factors that impacted the hospitalist movement both at inception and in the current day, the existing research supporting its growth, the expanding roles for hospitalists, the challenges ahead, and the future of the specialty.

**Figure 1**  
Membership in the Society of Hospital Medicine, 1997–2005.



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## Contextual factors: then and now

Current incentives of the hospitalist movement differ in many regards to the ones of the past. Initially, financial pressures facing hospitals and the American health care system led many to embrace hospitalists as a potentially powerful solution. In the mid-1990s, much of American health care was dominated by a managed care paradigm, which created new incentives (such as capitation) to control health care inflation. Among the effects, the level of patient acuity requiring or justifying hospitalisation increased, with many treatments and conditions once treated in the inpatient setting now shifting to outpatient clinics. Practically, this transition meant that outpatient providers were increasingly busy in the office, while those providing inpatient services needed to be immediately available and well versed in evidence-based practice and systems improvement. Reimbursement practices also increased in complexity, with greater emphasis on appropriate billing, documentation, and mechanisms to improve efficiency. With these changes, a need emerged for a physician to help orchestrate the hospitalised patient's care – such a physician would be well versed in the relevant clinical issues, would be available at any time, and would focus on providing clinically appropriate care, improving efficiency, and helping to make the hospital “system” work better. Clearly, these needs could no longer be met by a primary care physician rounding briefly on his or her hospitalised patients. This vacuum was filled with a new group of generalist physicians, called hospitalists, who focused their careers on caring for inpatients.

Although the early motivation for the growth of the hospitalist field revolved around these largely financial factors, this relatively narrow motivation has given way to a more complex set of incentives. The first focuses on the commitment to quality and safety. The growth of the hospitalist field coincided with a new focus on improving the safety and quality of American health care, catalysed by the publication of two influential reports by the Institute of Medicine [4–5]. In turn, this new push to improve care led to a variety of measures within hospitals, including increased regulatory mandates for safety [6], public report cards [7] and pay-for-performance initiatives [8]. Hospitals felt forced to both engage physicians in such changes, and identify which physicians could help lead these quality and safety improvement efforts. Hospitalists were called upon to fill many of these roles as they were a relatively young group of physicians who enjoy working with multidisciplinary providers and administrators, actively embrace evidence-based medicine and the adoption of new in-

formation technology systems, and often receive some of their compensation from the hospital (which aligns the interests of the physicians and hospitals, something that does not occur when hospital care is delivered by a self-employed community-based primary care physician). As a result, many hospitals now use hospitalists to drive their safety and quality initiatives, further stimulating the growth of the field.

In teaching hospitals, another incentive resulted from restrictions on residency duty-hour limits mandated by the Accreditation Council for Graduate Medical Education (ACGME) [9]. The 80-hour work-week limitation (down from 100–120 hours per week in some disciplines) forced hospitals to search for alternative providers and systems for patient care. Equally important, the new work-hour limits placed a premium on improving patient hand-offs as well as teaching and supervision. In most cases, the resulting decrease in patient continuity for residents required greater continuity and attention from supervising attendings. This indicated a shift from the attending's traditional role as primarily teacher, and not as clinical supervisor. Today, hospitalists in teaching hospitals more actively direct and coordinate patient care. In addition, many academic institutions have developed non-teaching services managed by hospitalists, who admit, care for, and discharge patients without resident involvement, further catalysing the growth of the field in teaching environments.

Finally, hospitalists are increasingly involved in the care of surgical patients. Virtually all hospitalists provide some traditional medicine consultation services, evaluating patients at the request of a non-medical colleague, making recommendations, and following the patients during hospitalisation with varying degrees of involvement. As surgeons have become busier in the operating room (and have less resident support because of the duty hour limits), many hospitalists are providing consultative services in new care models referred to as “co-management.” In these arrangements, a hospitalist often takes on primary responsibility for much of the pre- and post-operative medical care, including full responsibility for managing many of the medical co-morbidities. Although the data demonstrating that this model improves quality and efficiency is limited [10], many hospitals, particularly non-teaching ones, employ systems in which surgeons admit their patients to hospitalists. If this model ultimately proves to improve quality and efficiency, this will further promote the growth of the field.

## Evidence for effectiveness

The efficacy of hospitalists has long been debated. Advocates argue that the new model improves efficiency and quality, while critics raise concerns about negative impacts on patient continuity and possible patient dissatisfaction when patients are cared for by hospitalists rather than their primary care providers. Early reviews summarised substantial data documenting an average reduction in length of hospital stay and costs of 15%, with no decrease in hospital quality and patient satisfaction [3]. More recently, a review of more than 20 studies evaluating the merits of hospitalists also found that patients managed by hospitalists experienced lower total costs, a factor attributed mostly to shorter lengths of hospital stay [11]. The latter review points out the need for greater randomisation in study design and for additional studies in non-teaching hospitals (most of the randomised trials occurred in academic or community teaching set-

tings). Nevertheless, overall the literature supports the economic benefits of hospitalists and, while many organisational factors will determine site-to-site variations, even many skeptics have come to believe that the model is likely to improve efficiency without harming quality (and perhaps improving it).

Regarding physician satisfaction, whereas early surveys of non-hospitalist physicians found skepticism about the new model, more recent surveys demonstrated a high level of acceptance, especially among physicians who had actually worked with hospitalists [12, 13]. Several studies also found improved teaching and supervision by hospitalists (as compared to traditional ward attendings) in the eyes of medical students, internal medicine residents, and paediatric residents [14-17].

## Expanding roles for hospitalists

As hospitalists and hospitalist programmes emerge at institutions across the country, their roles continue to expand (table 1). These roles include development of new or improved clinical services (eg palliative care and medical consulta-

tion), involvement in medical education (eg curriculum development, core teaching and supervision, or leadership positions), commitment to quality and safety efforts, and engagement with institution-based operational initiatives (eg patient flow and bed control management). Adoption of information technology systems, including computerised provider order entry (CPOE) and electronic health records (EHR), represents an area of rapidly growing interest and one in which hospitalists are certain to play a critical role. Such roles will involve everything from design of documentation templates and workflow process to implementation efforts and ongoing modifications. The information technology revolution in health care is at the beginning and physician involvement will be key at each step of the process – a process known best by those who practice and understand the nuances of inpatient care delivery.

Early in the field's evolution, many hospitalists were trained medical subspecialists, largely in pulmonary and/or critical care, who already practiced in hospital-based settings and enjoyed caring for acutely ill patients [18]. However, as the field matured, many of these physicians returned to their primary specialty, leaving the hospitalist field to generalists (eg largely internal medicine-trained physicians, with smaller numbers of family physicians) [19]. Although hospitalists first emerged in the care of adult inpatients, the field has grown rapidly in paediatrics, now accounting for nearly 10% of U.S. hospitalists [20]. Over time, certain traditional inpatient specialty services such as cardiology, oncology, and possibly psychiatry, and surgical services such as orthopedics and neurosurgery, might also start providing hospitalists (eg

**Table 1**

Potential roles for hospitalists.

<b>Clinical</b>
Inpatient Wards
Intensive Care Unit
Medicine Consultation Services
Palliative Care Services
Post-discharge Clinic Services
Pre-operative Clinic Services
Non-teaching services (in Teaching Hospitals)
Skilled Nursing Facilities
<b>Educational</b>
Residency Programme Directorship
Student Clerkship Directorship
Curriculum Development and Leadership
<b>Operational</b>
Emergency Department Triage Officers
Bed Flow Coordination
Discharge Planning Coordination
Transfer Center Coordination
<b>Quality &amp; Safety</b>
Patient Safety Officer
Director of Quality (Compliance)
Quality Improvement Officer
<b>Other</b>
Clinical Information Technology Implementation
Hospital Leadership Positions

“surgical hospitalists” or “obstetrical hospitalists”, sometimes called “laborists”) in response to many of the forces already discussed.

How can hospitalists prepare for these expanding roles? One can envision that hospitalists might combine their clinical training with additional training in public health, business administration,

public policy, communications and advocacy, safety and quality, and health care leadership. These additional skills may be introduced during clinical training but are more likely to be acquired during post-training workshops, seminars, conferences, and true degree-granting programmes.

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## Challenges ahead

A number of challenges continue to face the field of hospital medicine. A review of these challenges is presented elsewhere [21]; here we will focus on financial constraints and the issue of physician burnout.

First, the economic viability of hospital medicine is the source of much debate, both among those in the field and those considering it from the outside. Most hospitalist programmes receive financial support from their institutions (generally hospitals) for their services, from creating bed capacity to leading quality improvement initiatives. Most of these activities are not compensated by the dominant U.S. fee-for-service system, even though they are critical to the clinical and fiscal health of many hospitals. In general, current reimbursement systems also fail to adequately reward a core activity performed by hospitalists: coordinating patient care. Hospitalists spend a significant amount of time meeting with specialists, conducting family meetings, arranging for appropriate and necessary discharge services, and ensuring timely follow-up appointments. As a result, hospitalists and hospitalist programmes often rely on the financial support of their institutions, which provide such support in recognition of the value the hospitalists bring to the institution. In these circumstances, institutional leaders consider their support of hospitalist programmes as an investment, not a cost.

However, this dependence on institutional support may be fragile. A number of programmes faltered when such support was cut in the face of budget pressures or leadership changes. Even when the support is stable, hospitalists will often be asked to justify such an institutional investment (particularly in the face of competing budgetary needs). For instance, an institution might “justify” their financial support of hospitalists by linking such support to compliance with quality and safety measures, administrative measures (eg length of stay, discharge time of day, readmission rates), or other measures determined by an institution’s current needs. This tension between the need for hospitals to support their hospitalist programmes and to meet other budgetary requirements will be an ongoing challenge for hospitalist programmes. In many cases, hospitalists’ expanding roles (ie in quality, safety, information technology, or palliative care) will be the key to the ongoing ‘business case’ needed to justify continued hospital support.

The second challenge, partly related to the first, is the concern for possible burnout. Many hospitalist programmes operate around the clock, every day of the year. The field remains relatively young, and, though there is little evidence of burnout thus far [22], early surveys from the Society of Hospital Medicine suggest overall burnout rates of 13%, with an additional 25% considered at risk [23]. In general, burnout tends to result from perceived lack of control, stress, and conflict. While change in the hospitalist field is inevitable, burnout should not be if it is carefully addressed. Key variables for consideration include determining a reasonable volume of patients and optimal staffing. When volume gets too high, this might not only be a burnout precipitant, it can have negative economic consequences as well. Consider what happens when the hospitalists’ workload increases substantially. While a hospitalist may generate more revenue seeing a larger number of patients, the financial benefit may be offset by an increasing length of stay (if hospitalists are not able to aggressively move patients through the system). A true accounting of increased workload would also need to consider a possible increased rate of turnover, with its attendant retraining and recruiting costs [24, 25].

The frequent use of hospitalists to temporise or fix issues in a reactive fashion also contributes to the concerns about the field’s future health. Hospitalists carry growing expectations from numerous stakeholders, including employers, hospitals, consultants, primary care physicians, and payers. In academic settings, recent resident work hour restrictions have created a huge demand for hospitalists to fill gaps. These expectations, though validating the early justification for the field, also risk burnout if not managed carefully and proactively.

As hospitalists take on or fall into additional non-clinical roles and responsibilities, the potential for continued and sustainable job satisfaction may increase. Rather than feeling burdened by the schedule or intensity of the clinical job requirements, the opportunity to complement their inpatient clinical care with additional duties may benefit individual hospitalists, their programmes, and the institutions in which they work.

## The future of the specialty

Given the successful evolution of the hospitalist model, the next logical step for consideration would involve creating a distinct hospital medicine subspecialty with its own board certification. In general, the American Board of Internal Medicine (ABIM), the certifying body for U.S. internists, requires the following to make such a classification: the new field must 1) encompass a distinct and unique body of knowledge, 2) have applicability sufficient to support a distinct clinical practice, 3) generate new information and research, 4) require a minimum training period of 12 months, and 5) have a substantial number of trainees and training programmes nationwide [26]. Within the past thirty years, both Emergency Medicine and Critical Care Medicine emerged and eventually met these requirements. Hospital medicine is similar to both these “site-specific” specialties in that it too is a practice defined by its location. The field also

convenes for large annual meetings, has its own textbook [27], its own journal (the Journal of Hospital Medicine (JHM), launched in early 2006), and its own specialty society. The Society of Hospital Medicine is working to better define the core competencies of hospitalists [28], drawing on an earlier survey of its members that demonstrated that hospitalists’ work involves both clinical care and a set of skills (care coordination, end of life care, and communication) that traditionally receive less emphasis in medical training [29]. Given the explosive growth of the field, the ABIM (and other credentialing organisations) are presently considering the question of whether the field merits distinct credentials. At the same time, it seems likely that the relatively small number of existing hospitalist fellowships will grow, along with residency tracks that focus on the clinical and non-clinical competencies that hospitalists need [30].

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## Conclusions

The hospitalist field represents a merger of acuity and generalism, with a strong emphasis on systems improvement and coordination of care. Although hospitalists may lack the continuity relationships of primary care physicians, they form intense and important relationships with patients and their families over the course of hospitalisation. They also enjoy close relationships with their subspecialty colleagues, hospital staff (eg nurses and case managers) and administrators and, in teaching hospitals, fellows, residents, and medical students. The field of hospital medicine seems poised for continued growth and success, even as the reasons for its growth continue to evolve over time.

As the field continues its rapid growth, questions about hospitalists’ utility and efficacy have largely been replaced with ones about optimising their skills and expanding their roles. In the coming years, we anticipate continued growth and greater extension of hospitalists from the bedside into broader non-clinical roles where they will serve as prominent change agents in the way inpatient care is delivered – both locally and nationally. For other nations observing this massive change in

the organisation of American health care, the lessons may be: a) that there is value to a site-based generalist who assumes the role of coordinating inpatient care across a variety of traditional, organ-based specialties and conditions, b) that the increasing pressure to improve quality, safety, and efficiency will make it even more important to have a group of energetic, talented physicians based in the hospital who understand and enjoy systems-based thinking and leadership, and c) that, under considerable pressure from forces such as managed care and an evolving regulatory environment, even massive health care systems such as that of the United States are capable of major transformation.

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