Hospitalists and family physicians: **Understanding opportunities and risks**

Ann Scheck McAlearney, ScD

Division of Health Services Management and Policy, School of Public Health, Ohio State University, Columbus

Practice recommendations

- Family physicians can leverage relationships with hospitalists by ensuring strong, ongoing communication to reduce risks to patients associated with lost information, miscommunications, and gaps in continuity of care.
- Family physicians will be well served by supporting new research on the influence of the hospitalist model on family practice; especially research that demonstrates the value of continuity of care, alternative compensation models, and longitudinal studies that assess qualitative and quantitative outcomes of hospitalist systems from the perspective of family physicians.

Abstract

Background Emergence of the hospitalist as a specialist in inpatient medicine provides an opportunity to examine a new provider type and its relation to family physicians.

Objectives To review the hospitalist literature to understand the hospitalist role, identify benefits and risks of the hospitalist model to family physicians, and discuss future opportunities to study and work with hospitalists.

Methods An integrative review of published literature about the hospitalist model focused on the influence of hospitalists on family practice.

Correspondence: Ann Scheck McAlearney, ScD, Division of Health Services Management and Policy, Ohio State University, School of Public Health, 1583 Perry Street, Atwell Hall 246, Columbus, OH 43210-1234. E-mail: mcalearney.1@osu.edu.

Results Three main themes were identified as interest areas for family physicians: descriptions of the hospitalist role and responsibilities; hypothesized benefits and risks of the hospitalist model; and reported research results evaluating the effect of the hospitalist model. Two major opportunities related to hospitalists and family physicians were also uncovered: opportunities to conduct future research to study the influence of hospitalists on family physicians; and opportunities to create workable relationships with these new practitioners.

Conclusions Despite some opposition to hospitalist programs, the economic climate and increasing productivity standards suggest that these programs are here for the foreseeable future, and it is in family physicians' best interests to understand the opportunities and risks of the hospitalist model. Family physicians can work proactively with this new patient care model by participating in the development of standardized and efficient ways to communicate and to partner with hospitalists. Meanwhile, future research studies can help inform the debate by investigating the specific influence of hospitalist models on family practice.

he hospitalist model has spread relatively rapidly throughout hospitals in the United States. Family physicians can proactively work with this new patient care model by developing standardized and efficient ways to communicate and to partner with hospitalists.

Advances in electronic data exchange can help facilitate these communications, and can reduce the risks associated with discontinuity of care inherent in the hospitalist model. Developing communications protocols involving transfer of patient information and maintaining contact with hospitalists while patients are under their care can help family physicians best serve the needs of their patients and ensure continuity of care and compliance with patient wishes.

■ HOSPITALISTS IN THE US

Rarely in medicine does the opportunity arise to examine a newly developed area of medical specialization and its effect on other providers. The emergence of the hospitalist, a specialist in inpatient medicine, provides this opportunity. Although dedicated inpatient physicians have been in practice in Canada and overseas for some time, ¹⁻⁶ attention to, and experimentation with, this role in the US has been relatively new.

Hospitalists were first described in 1996 by Robert Wachter and Lee Goldman,⁷ who coined the term and have widely studied and promoted the model. Presently, approximately 6000 US hospitalists are practicing inpatient medicine in diverse organizations, including adult and children's hospitals and skilled nursing facilities. The number of hospitalists in practice in the US has been projected to increase to around 19,000 within the next 10 years, making the size of hospitalist physician practice similar to that of the specialty of cardiology,¹ but far smaller than that of family practice.

Yet the introduction and spread of hospitalists throughout the US has not occurred without controversy. Given substantial debate about the changing role of family practitioners with respect to such issues as scope of practice, professional identity, and care and service to patients, the emergence of hospitalists has been perceived by many as a potential threat on all fronts.

Responses to the hospitalist movement

Responses to the hospitalist movement vary. To many, a specialty in hospital medicine appears to threaten the role of generalists in health care practice, and risks such as a reduced practice scope or the loss of hospital privileges are real concerns.⁸⁻¹¹ For others, the introduction of hospitalists has increased flexibility for family practitioners who are interested in working with or becoming hospitalists themselves.

As of 2001, 1 in 5 members of the American Academy of Family Physicians reported using hospitalists. Further, reasons such as economics, lifestyle choices, and concern about maintaining competence in caring for hospitalized patients have contributed to the decision of as many as 1 in 5 family practitioners who have chosen not to be involved in hospital care. Yet, as noted by Edsall, for family practitioners who choose not to practice inpatient medicine, the philosophical, professional, and financial risks of that decision should not be trivialized.

Despite the debate in the literature and the media, it appears this inpatient care model is here to stay. 1.13-16 Major medical organizations, including the American Academy of Family Physicians and the American College of Physicians—American Society of Internal Medicine, now note that hospitalist programs are acceptable as long as they are well designed and implemented voluntarily, and this consensus has helped spark program growth. 17

However, the increasing presence of hospitalists in hospitals and academic medical centers is forcing many family physicians to choose how involved they want to be in inpatient medicine. The goal of this study was to synthesize available information in the literature regarding the practice of hospitalists and their effect on family physicians, and to provide a discussion about future research opportunities to further evaluate the hospitalist model and its influence on family practice.

METHODS

A comprehensive review of the literature was conducted by database searches, by hand, and the Internet. Medline, Lexis-Nexis, and Academic Universe were used as the primary databases for the literature search. Key words such as hospitalists, inpatient physicians, hospital medicine, primary care physicians, and family practice were used to

Typical responsibilities of hospitalist physicians

Clinical

Patient admissions, daily inpatient rounds, and medical care attention

Ordering consultations, requesting tests, managing medications

Assisting other physicians with medical consultations

Helping with preoperative care and evaluations

Providing coverage of unassigned Emergency Department patients

Communicating with other involved physicians about patient conditions

Managing patient and family communications

Working with discharge planning, overseeing transfers from hospital, and post-hospital follow-up care

Organizational

Service on committees, involvement in administrative roles

Involvement in hospital quality assurance and utilization review activities

Involvement in disease management, care innovations

Teaching of medical students, residents, fellows

Involvement in hospital operations and systems improvement

Involvement in practice guideline and protocol development

Involvement in clinical information system development

Administrative involvement in hospitalist program including physician recruitment, scheduling, program development

Research responsibilities

Sources: Lurie et al 1999, Wachter et al 1996, Wachter 1999, and Geehr and Nelson 2002.20

focus a search. Furthermore, references in each article were reviewed to find related literature.

Literature was largely concentrated within the past 5 years and included both peer-reviewed and descriptive articles on hospitalists and their effect. Internet searches used Google as the primary search engine; results supplemented findings in other published material.

This literature review continued until saturation was achieved with respect to considering the possible issues and implications of the expansion of hospitalists, with special attention paid to the risks and opportunities to family physicians.

■ FINDINGS

This integrative literature review revealed 3 major themes of interest to family physicians regarding the emergence and expansion of hospitalists in the US: descriptions of the hospitalist role and responsibilities; hypothesized benefits and risks of the hospitalist model; and reported research results evaluating the effect of the hospitalist model. Synthesis of this literature also

Stakeholder perspectives of hospitalist model: Advantages and disadvantages

| Stakeholder perspective | Potential advantages | Potential disadvantages |
|-------------------------|--|--|
| Hospital | • Efficiency improvements3,16,23,24 | Discontinuity of care ³² |
| | • Quality of care improvements ^{16,25} | Loss of diversity of physician involvement in hospital affairs |
| | Inpatient continuity of care improvements²⁶ | Reduced contact with community-based physicians |
| | System improvements ¹⁸ | Effects may vary based on hospital type, hospitalist model |
| | Better control of formulary purchased goods, procedures²⁷ | Lack of buy-in from primary care physicians may hinder program³³ |
| | Involvement of hospitalists in administrative activities^{2,28} | Reduced loyalty from primary care physicians who do not care for inpatients³¹ |
| | Additional clinical coverage possible from staff hospitalists^{29,30} | |
| | New referral source from distant, nonaffiliated primary care physicians; strengthen relationships with rural physicians³¹ | |
| Patients and families | Improved communications with providers, families^{34,35} | Communication gaps within patient-hospitalist-PCP triad ^{19,22,35} |
| | Improved access to hospital-based physician³⁰ | Lack of patient familiarity ^{14,21,38} |
| | Quicker response times for test results and clinical findings²¹ | Reduced access to PCP ²² |
| | • Rapid emergency response ²⁷ | Reduced patient autonomy ²² |
| | • Better end-of-life care ^{18,36} | |
| Hospitalist physicians | Ability to develop specialized inpatient care expertise | Conflicting incentives for patient care and efficiency ^{6,41,42} |
| | Improved ability to negotiate hospital system¹⁸ | Physician burnout possible ²⁶ |
| | Dedicated time to teach, perform research, improve hospital systems of care¹⁸ | Malpractice risk may be increased |
| | Satisfying new career path ^{20,26,39,40} | Inability to recognize that both patient and referring physician are customers will be problematic |

uncovered 2 major opportunities related to hospitalist practice: opportunities to conduct future research to study the impact of hospitalists on family physicians; and opportunities to leverage relationships with these new practitioners.

Hospitalist roles and responsibilities

A hospitalist physician is a new type of medical specialist who combines the roles of acute care subspecialist and medical generalist in the hospital care setting.18 Hospitalists do not replace primary care physicians, surgeons, or specialists, but, instead, are concerned with managing hospital inpatients, from admission until discharge. They act somewhat as a case manager for a patient's hospital stay, working and communicating closely with other physicians involved in the patient's care.

Patients are assigned to hospitalists upon admission, either when an outpatient provider such as a family practitioner transfers inpatient care responsibilities to the hospitalist, or when patients arrive at the hospital unassigned to any other provider. The clinical and organizational responsibilities of hospitalists are in Table 1.

Hypothesized benefits and risks of the hospitalist model

Persuasive arguments have been raised about the advantages and disadvantages of the hospitalist model. 18,19,21,22 A variety of these potential advantages and disadvantages are summarized in Table 2, representing perspectives of 3 different stakeholder groups: hospitals, patients and families, and hospitalist physicians. Each of the listed advantages or disadvantages was discussed in 3 or more independent articles that were reviewed.

For family physicians specifically, the introduction of a hospitalist program at a local hospital has numerous associated potential benefits and risks. Table 3 presents a summary of the issues that were raised in 3 or more articles or studies.

Benefit: focus on ambulatory care. One widely discussed advantage in using hospitalists is the option for family practitioners, who so desire, to limit practice to outpatient medicine because of their interest in ambulatory care or because they feel overtaxed by the demands of the health care system. 12,21 Willing family physicians can relinquish care of their hospitalized patients to a hospitalist so they do not have to travel to the hospital for daily rounds or more frequent patient contact; upon hospital discharge, family practitioners subsequently resume care for their patients.

Given the pressures of managed care to increase office productivity,48 this delegation of responsibilities can create an important practice advantage. 15 Even for those family physicians who choose to visit their hospitalized patients, shifting overall responsibility for inpatient care to hospitalists can make hospital visits more efficient and thereby free office time for outpatient practices. 49

Risk: lack of patient familiarity. Research has shown that a lack of familiarity with patients can increase the risk of errors and poor outcomes in medicine, and the use of a hospitalist as a new provider indeed introduces this risk.50,51

Without dedicated effort on the part of the family physician, the treating hospitalist may have limited appreciation of a patient's situation. Hospitalists focused only on inpatient care may not know where patients come from or where they return to, and are less likely to be knowledgeable about needs for psychosocial support or for such patient preferences as endof-life care.14,21

Risk: reduced political leverage. In addition, a political issue for family physicians may arise if hospitalists become providers of choice for inpatient internal medicine, thereby defining a smaller role for community-based family practitioners.21

Risk: communication problems. Another major risk of hospitalist programs is poor communication, an issue raised in nearly every article discussing the hospitalist model. The involvement of a new physician provider and the process of patient care transfers between outpatient family physicians and inpatient hospitalists can lead to missed information, gaps in communication, and misunderstandings. 19,22,35,37

Potential benefits and risks of the hospitalist model for family physicians

Potential benefits for family physicians^{15,33,47–49}

Increased office productivity, less disruption of office schedules

Career development option limited to outpatient care setting may be desired lifestyle choice

Extra time for outpatients

Reduced travel time, especially for physicians in distant practice areas

Improved outpatient satisfaction

Increased provider satisfaction with ability to specialize in outpatient care

Can offset lost inpatient revenues with increases in office volume

Reduction in life stress and potential burnout

Potential risks for family physicians 12,32,50,51

Discontinuity in care for patients

Communication problems regarding patient care

Loss of information about patient wishes

Reduced contact with hospital-based professionals, specialists

Loss of influence at admitting hospitals, loss of hospital privileges

Decline in acute care skills, changes in continuing medical education

Shift in professional identity

Loss of status for outpatient practice

Reduced variety in medical education

Loss of variety in scope of family practice

Recent studies of discontinuity of care when patients are hospitalized reported that inpatients specifically wanted both contact with their primary care physicians and good communication between their established primary care physician and hospital-based physicians.⁴⁹ Guidelines created by the American Academy of Family Physicians (www.aafp.org/x6873.xml) support communication and interaction between community-based physicians and hospitalists for excellent patient care, 12 but the burden may fall on family physicians to ensure communication.

Assessing the effect of the hospitalist model

Research evaluating the impact of hospitalists has largely focused on hospital-based outcomes. Recently, Wachter and Goldman's review of 19 published studies showed that hospital costs decreased 13.4% on average and hospital lengths of stay decreased 16.6% on average after a hospitalist program was initiated.²³ These efficiency improvements were apparently gained while patient satisfaction was preserved.

Opportunities to study impact of hospitalists on family practice

Existing research focus on hospitalists

Satisfaction of patient, hospitalist, primary care provider

Quality of hospital care

Effects on hospital length of stay

In-hospital mortality

Readmission rates

Hospital cost savings opportunities

Hospitalist productivity, workload

New areas for family practice-focused research

Family practitioner experience, satisfaction

Perceptions of family practitioners, other primary care providers regarding disruption of patient care relationships,40 continuity of care issues

Outpatient costs, follow-up care costs

Economic impact of alternative compensation arrangements

Evaluation of economic and noneconomic benefits of continuity of care

Integration with nonhospitalist physicians, nonphysician workers

Qualitative perspectives of different stakeholders

Distinction between urban and rural practice settings

Distinction between community-based and academic practices

Family practitioner productivity, workload

However, results indicating improved outcomes, such as mortality and readmissions, were reportedly inconsistent among the studies evaluated.23 Additional studies3,24,52 of hospitalist programs have shown similar reductions in hospital costs and lengths of stay, and have also reported preservation or improvement of quality of care as measured by reductions in mortality^{3,24} and constancy of readmission rates.52

Study of the effect of hospitalists specifically on family practice has been limited. As noted by Smith and colleagues,53 methodologic con-

straints limit the reliability of many reported results, and the focus of most studies does not extend beyond the hospital setting.

This study additionally questioned whether hospitalist care is truly of better quality and lowers costs. Findings of higher costs associated with subspecialist vs generalist hospitalist care also warrant further investigation in larger studies. Also, because many recent studies have examined only length of stay and inhospital costs, it is still unknown whether the hospitalist model produces costs savings for the health system overall.12

Opportunities to further study hospitalists and their impact

Research has focused largely on quantitative values related to hospitalist care. Yet the emergence of this new provider type introduces issues to be studied that encompass more than effects on length of stay and mortality.

In particular, questions remain about issues surrounding the patient–physician relationship, including patient perceptions of how hospitalists affect communication, continuity of care, and trust. ¹⁶ Similarly, studies have investigated primary care physicians' attitudes regarding desired communication with hospitalists, ¹⁴ but none have studied the changing role of primary care physicians who no longer perform inpatient care, or have questioned family physicians about career satisfaction.

Further, published studies have not been large enough to consider the influence of multiple independent variables such as hospital type, hospital location, or patient factors such as insurance status, disease classification, or psychosocial issues. **Table 4** shows some of the many opportunities to formally study the effect of hospitalists on family practice, considering both the areas of existing research focus and new areas that can be explored.

CONCLUSIONS

Given that the goal of hospitalists is to affect the hospital sector of the US market—associated with around \$430 billion in expenditures for 2000^{54,55}—the potential to decrease costs while preserving quality of care is undeniably attractive. However, research evidence does not show uniformly positive results from the introduction of hospitalist programs.

A primary concern is that the purposeful discontinuity of care introduced by the hospitalist can affect quality of care, resulting in medical errors and poor outcomes for patients.³² In addition, more attention must be given to compensation and reimbursement so that family physicians are not discouraged from providing inpatient care for purely financial reasons.

Although a number of publications have discussed the implications of hospitalists, the specific effect of the hospitalist model on family practice remains largely unknown. Knowledge of such effects can be increased by performing well-designed research involving family physicians and by including both qualitative and quantitative approaches. Answers to clinical and managerial questions such as how to best manage communications, how to facilitate the crucial transitions between outpatient and inpatient care, and how to maintain clinical relationships given the introduction of a new provider type can help family physicians preserve and enhance relationships with hospitals, inpatient providers, and patients.

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