NATIONAL HEALTH POLICY
FORUM

The Hospitalist:
Better Value in Inpatient Care?

ISSUE BRIEF
NO. 842

LISA SPRAGUE, *Principal Policy Analyst*

MARCH 30, 2011

OVERVIEW — *From perhaps a few hundred practitioners in 1996 to an estimated 30,000 today, the discipline called hospital medicine has shown remarkably rapid growth. It represents a fundamental separation of the inpatient and outpatient components of internal and family medicine. The split has implications for the quality and efficiency of care delivery, the outlook for the physician workforce, and the development of new models such as accountable care organizations (ACOs).*

THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON DC

National Health Policy Forum

2131 K Street, NW
Suite 500
Washington, DC 20037

T 202/872-1390
F 202/862-9837
E nhpf@gwu.edu
www.nhpf.org

Judith Miller Jones
Director

Sally Coberly, PhD
Deputy Director

Monique Martineau
Director, Publications and Online Communications

Hospital medicine—delivered by physicians known as hospitalists—is one of the fastest-growing areas of medical practice. While its development seems like a natural progression in the increasingly specialized world of modern medicine, many have raised the question of what it portends for primary care. Proponents point to the benefit of having an on-site physician as opposed to a community-based physician who stops by the hospital to check on inpatients now and then. Detractors suggest that dividing a patient's care between an inpatient and an outpatient physician only adds to the care fragmentation that is also a feature of modern medicine. Economic arguments tend to favor the greater efficiency of site-defined specialization. The expected growth of accountable care organizations (ACOs) as a result of the Patient Protection and Affordable Care Act of 2010 (PPACA) will raise additional questions about the role of the hospital-based physician and the incentives to which he or she responds.

The term "hospitalist" was coined in 1996 by Robert Wachter, MD, and Lee Goldman, MD (both at the University of California, San Francisco, at the time), who projected a growing demand for hospital-based general practice.[1] They estimated that a few hundred physicians (mainly internists) were practicing exclusively or at least predominantly in hospitals. Ten years later, the number had grown to 20,000. The Society of Hospital Medicine's (SHM's) 2010 estimate of 30,000 reinforces Wachter and Goldman's prescience. There appears to be consensus that the hospitalist is here to stay. However, some would suggest that the hospitalist's role in the larger agenda of system transformation (toward more effective, efficient, and patient-centered care) needs further definition. This paper looks at the forces that fueled the rise of the hospitalist, how various stakeholders are affected by this new provider type, how effective the hospitalist has proved thus far, and what issues remain for policymakers.

THE RISE OF THE HOSPITALIST

Who Are These Physicians?

Drs. Wachter and Goldman defined a hospitalist simply as a specialist in inpatient care, responsible for managing the care of hospitalized patients in the same way that office-based primary care physicians (PCPs) are responsible for managing the care of outpatients.[2] SHM, in a definition offered on its website, describes the field of hospital medicine as follows:

> "A medical specialty dedicated to the delivery of comprehensive medical care to hospitalized patients. Practitioners of hospital medicine include physicians ("hospitalists") and non-physician providers who engage in clinical care, teaching, research, or leadership in the field of general hospital medicine. In addition to their core expertise managing the clinical problems of acutely ill, hospitalized patients, hospital medicine practitioners work to enhance the performance of hospitals and healthcare systems by:
>
> - Prompt and complete attention to all patient care needs including diagnosis, treatment, and the performance of medical procedures (within their scope of practice).
> - Employing quality and process improvement techniques
> - Collaboration, communication, and coordination with all physicians and healthcare personnel caring for hospitalized patients
> - Safe transitioning of patient care within the hospital, and from the hospital to the community, which may include oversight of care in post-acute care facilities.
> - Efficient use of hospital and healthcare resources."[3]

The Society notes that most hospitalists are trained in internal medicine (89.6 percent in a 2010 survey[4]), pediatrics, or family practice, with a sprinkling of related sub-specialties. They are younger, on average, than their counterparts in office-based practice. Given that the option they have chosen is relatively new, this may not be a surprise, but it also reflects changing expectations about one's time commitment and work-life balance.

What Brought Hospitalists into Being?

Historically, a person's PCP was responsible for overseeing his or her care across a range of settings including the hospital. But several trends and developments though the 1990s and into the new century

encouraged a split between the inpatient and outpatient duties of the general medical practitioner.

As always, payment policy is a particularly powerful motivator. PCPs report ever-increasing pressure to schedule more and shorter office visits to maximize productivity. Fee-for-service, as the dominant payment mode, rewards volume.

Changes in clinical practice during the 1990s resulted more conditions being treated in outpatient settings. Hospital stays were getting shorter (again, partly in response to payment cues) and the threshold for hospitalization higher. Therefore a primary care physician was likely to have fewer but sicker patients in the hospital at a given time. As reported in the *Journal of Hospital Medicine*, a 1978 survey by the Robert Wood Johnson Foundation found that, on average, PCPs spent 40 percent of their time in the hospital, visiting ("rounding on") ten inpatients per day. By 2001, such physicians spent 10 percent of their time in the hospital, rounding on fewer than two inpatients per day.[5] Under these circumstances, a PCP may well conclude that his time is better spent in the office, and thus welcome the care alternative offered by the hospitalist.

Changes in clinical practice during the 1990s resulted more conditions being treated in outpatient settings.

Patient safety concerns rose to new prominence with the Institute of Medicine publications *To Err is Human* (1999) and *Crossing the Quality Chasm* (2001). Hospitals instituting quality-improvement and error-reduction programs often viewed hospitalists as natural leaders of such initiatives, given their institutional knowledge and (in shifts) round-the-clock availability. Dr. Wachter has suggested that the hospitalist was in effect re-branded at this point, going from someone who could move patients through quickly to someone dedicated to improving hospital care.[6]

Safety concerns also drove the Accreditation Council for Graduate Medical Education in 2003 to propose a cap on medical residents' work hours of an average 80 hours a week, and residency programs agreed to abide by it. This created a need for additional coverage in teaching hospitals, and hospitalists in many cases represented a reasonably efficient way to fill the gap.

Is Hospital Medicine a Specialty?

Over time, site-defined specialties, such as emergency medicine, gained the same acceptance as those defined by organ systems.

There is still uncertainty about whether hospital medicine constitutes a specialty. Dr. Wachter says it has the traditional attributes: a distinctive group consciousness, a thriving professional society, a core curriculum, and specialized training (albeit mostly at the fellowship level).[7] The American Board of Internal Medicine (ABIM) now offers internal medicine certificate holders the opportunity to be recognized in a new Focused Practice in Hospital Medicine maintenance of certification (MOC)[8] program. The program assesses, sets standards for, and recognizes the specific knowledge, skills, and attitudes of the growing number of ABIM-certified general internists who focus their practice on the care of hospitalized patients. SHM reports that the American Board of Family Physicians also will participate in the Focused Practice MOC as a pilot project.[9] The American Board of Medical Specialties does not recognize hospital medicine as a separate specialty.

STAKEHOLDERS AND THEIR STAKES

Hospitals

Since the implementation of Medicare prospective payment for hospital services in the 1980s, it has been to hospitals' advantage to move patients efficiently from admission to discharge. As an example, let us posit that the payment for a particular condition is $5,000. Without regard to other adjustments that Medicare may make, this is almost always the sum the hospital will receive for caring for the patient, regardless of the actual cost. Naturally it is preferable to fill a bed with another patient as rapidly as may be consonant with appropriate clinical care. A physician who can oversee patient care, coordinate with consulting specialists, and smooth transitions is a valuable asset. Researchers have averred that hospitals' willingness to support hospitalists' salaries is evidence of these physicians' value to hospital finances.

Hospitalists also have appeal from the perspective of in-hospital care quality and safety. While large-scale scientific studies of quality differentials are few, hospitalists have the undeniable advantage of *being there* when a crisis occurs, when a patient is ready for discharge, and so on. The observer must note, however, that hospitalists generally work in shifts, so the person who is there will not always be the same. Shift changes represent a potentially error-prone patient handoff.

Still, *being there* may serve as a defining concept of hospital medicine. Changes in the economics of medical practice have made community

"Being there" may serve as a defining concept of hospital medicine.

physicians increasingly less willing to take hospital call (especially without being paid to do so), to serve on committees, to spearhead quality improvement projects, or indeed to spend much time in the hospital at all. SHM Chief Executive Officer Laurence Wellikson, MD, has described an evolution to a tiered structure of hospital-physician relationships: the home team, physicians who work in the hospital; important visitors, such as cardiologists, orthopedic surgeons, and other specialists who are in the hospital periodically; and office-based physicians, now seldom found at a hospital bedside.[10] Hospitalists increasingly are called on to serve as a link between hospital management and more loosely affiliated medical staff.

Traditionally, hospitals had little control over physicians beyond the ability to grant or deny them privileges to practice in the facility. Now, whether hospitalists are employed directly or contract with the hospital to provide services, the hospital has greater control over their clinical behavior.

Hospitalists are particularly important to academic medical centers. In addition to filling the gap left by residents' hour restrictions, they increasingly serve as teaching physicians, or "attendings." One study of pediatric residency programs found that the majority of such programs, as well as associated medical student clerkships, use hospitalists as teaching attendings. Moreover, hospitalists were rated by residency directors as better educators and more accessible to residents than traditional faculty.[11]

Office-based physicians remain important, of course, as a hospital's sources of referral. Thus the facility may make staff hospitalists a part of their marketing strategy to community physicians: we will provide high-quality inpatient care for your patients without eating into your schedule. While few hospitals bar community physicians from caring for their own hospitalized patients, in practice this becomes ever less common. (Certain institutions, such as the Mayo and Cleveland Clinics, do mandate that all hospital care, general or specialty, be provided by their staff physicians.)

Physicians

As noted above, most hospitalists are trained in general internal medicine. Research by the American College of Physicians indicates that at the completion of residency, internists make a variety

of choices: in 2009, 21 percent planned to go immediately into an internal medicine practice, 10 percent to become hospitalists, and 65 percent chose further subspecialty education.[12] Those who choose hospital medicine cite a variety of reasons, but often mentioned are the greater clinical sophistication of inpatient medicine when compared with the daily patient rota in an office practice; greater control over one's schedule and lifestyle (hospitalists generally are not on call outside their specified hospital service hours); and freedom from the paperwork, supervisory responsibilities, and time pressures that come with practice management. Thus far, at least, there is little evidence that differential compensation plays a role; *Modern Healthcare*'s 2010 salary survey compendium reports a range of $184,200 to 231,691 for internists and $175,500 to $229,426 for hospitalists.[13]

Physicians choosing traditional office practice have mixed emotions about the hospitalist career option. While some may wish it had come along when they were young, others are dismissive: "It's like being a third-year resident forever," said one.[14] Looking at hospital medicine as a standard feature of modern practice generates similar ambivalence. On the one hand, the opportunity costs of driving back and forth to the hospital each day to see one or two patients have become significant. On the other, handing over one's patient to another physician can bring discomfort. As internist Howard Beckman, MD, wrote in *The Annals of Internal Medicine*, he believed initially that he would be a member of his patient's hospital team. Instead, a darker alternative prevailed: "My belief that hospitalist care would result in 'abandoning my patients' has largely been validated."[15] Hospitalists point out that, whatever nostalgia PCPs may feel for the good old days, they are actually voting with their referral patterns (and their feet, not found in hospital hallways) to turn over inpatient care to their hospital-based counterparts.

Some observers have raised the concern that separating inpatient and outpatient care does a disservice to the skills of both kinds of practitioners. Hospitalists, seeing a very sick patient for a short period of time, never have the chance to develop an understanding of that person's history, behavior, and preferences, or of the resources available to him or her upon discharge. At the same time, outpatient-only physicians can lose touch with the experience of truly sick people, thus limiting what previously was a larger clinical competence.[16]

Patients

There is agreement, even among the strongest proponents of hospital medicine, that it has succeeded because it benefits hospitals and makes physicians' lives easier. As one hospitalist wrote in response to Dr. Beckman's lament, "Primary care is among the most difficult jobs in U.S. health care; the hospitalist model evolved in part to relieve that stress."[17] No one has come forward to claim that patient preference played a central role in the trend. Indeed, in an exploration of the ethical implications of hospitalist systems, Bernard Lo, MD, observed,

> Generally hospitalist systems are introduced to achieve greater efficiency, which primarily benefits health care providers, integrated health systems, physician groups, or individual physicians. Patients also may benefit, because hospitalists are more available or have greater expertise in inpatient care. But such patient benefits are not the driving force behind hospitalist systems. Patients bear most of the risks and potential adverse effects of hospitalist systems.[18]

A response might be that the patient bears most of the risks in any part of the health care system. For example, it is well documented that transitions between one caregiver and another or one care setting and another are opportunities for error, omission, and miscommunication. All of these may occur in the handoff from PCP to hospitalist and vice versa. However, they may equally well occur between physicians in a purely outpatient setting. Fragmented care cannot be laid at the doorstep of the hospitalist alone.

How patients actually feel about receiving care from hospitalists has been little studied beyond the patient satisfaction surveys of individual organizations. Again, one clear benefit of the hospitalist is that he or she is *there.* A patient might prefer to see good old familiar Dr. Green, but not necessarily at 7:00 a.m. before office hours and before the patient's daughter has been able to make it to the hospital to act as her father's advocate. When David Meltzer, MD, and colleagues used a national random sample survey to assess people's preferences, they found two-thirds of respondents expressing a preference for being taken care of by their own PCP in the hospital. Twenty-five percent had no preference, and only nine percent preferred a hospitalist. However, of those opting for their own PCP, the average willingness to pay extra for the privilege was capped at a level of less than $200.[19]

One might ask whether, in real life rather than a survey, patients in 2010 have a choice about who cares for them in a hospital. PCPs are less and less likely to take responsibility for inpatient care. A patient being admitted is likely to be assigned to the hospitalist on duty at the time, and to have his care transferred to another when the shift changes. Choice is not really an issue, and one might further ask on the basis of what information would a patient choose one over another? (For that matter, do most patients understand what a hospitalist is?)

Primary care physicians are less and less likely to take responsibility for inpatient care.

Patient health status may play a role here, at least theoretically. Relatively healthy people may not have a close relationship with a PCP to begin with. Those who are chronically ill, on the other hand, may feel more comfortable with a physician who has known them for a long time. The Meltzer survey did not address this kind of patient-level distinction.

Dr. Wachter put another spin on patient preference by imagining an evolution in the other direction, that is, from hospitalists to PCPs. "I'm certain," he wrote, "we would hear of patients who felt abandoned because their physician saw them at 6:30 a.m. but not for the rest of the day, or patients who felt that their care was completely uncoordinated because there was no 'quarterback' in the hospital, or patients who had unnecessary tests or incorrect decisions because of the primary care physician's lack of knowledge of evidence-based inpatient guidelines."[20] Nevertheless, it seems that the inpatient-outpatient split has occurred within the profession, without either branch putting much visible effort into persuading the patient that it is in her best interests.

PERFORMANCE

Various studies over the years have been able to show evidence of hospitalists' efficiency. For example, early in the hospitalist story, Dr. Wachter and colleagues compared the performance of a group of hospitalists (then called "dedicated attending physicians") to a group of traditional attending physicians. They found that patients cared for by dedicated inpatient staff had a 0.6-day shorter length of stay and $770 lower adjusted hospital costs.[21] Nine years later, Peter Lindenauer, MD, and colleagues generated similar results: as compared with patients cared for by general internists, patients cared

for by hospitalists had a shorter hospital stay (0.4 day) and lower costs (by $268). These researchers noted that shortened stay was not associated with adverse effects on rates of inpatient death or 14-day readmission, which were similar for the two groups. However, they also pointed out that in the interval between earlier studies and their own work, trends toward reduced length of stay reflected factors beyond the presence of hospitalists and likely affected all physicians and their systems of care.[22]

More refined indicators of quality than death or readmission rates are hard to find in the literature, and somewhat tenuous when they occur. For example, researchers Andrew Auerbach, MD, and Steven Pantilat, MD, looking at patients who had died in a community-based teaching hospital, compared end-of-life care provided by community physicians and hospitalists. They found that hospitalists were more likely to have and to document conversations with dying patients and their families regarding care, which, the researchers say cautiously, may have resulted in improved end-of-life care.[23] As noted, hospitalists are frequently called on to participate in or lead hospital-based quality improvement programs, and more data may be available at the individual facility level.

Hospitalists are frequently called on to participate in or lead hospital-based quality improvement programs.

One of the key concerns with respect to the quality of care delivered by hospitalists and PCPs working separately is the communication between them. The seamlessness envisioned by Dr. Wachter in his original article—"Potential problems with transfer of care between the outpatient and inpatient settings are prevented by meticulous communication between office and hospital"[24]—has not materialized. A literature review by Sunil Kripilani, MD, and colleagues revealed that direct communication between hospital physicians and PCPs occurred infrequently (3 to 20 percent of the time), and that discharge summaries were often both unavailable and lacking important information. The researchers wrote in summary, "Deficits in communication and information transfer between hospital-based physicians and primary care physicians are substantial and ubiquitous."[25] It should be noted that research published in 2011 by Ann O'Malley, MD, and James Reschovsky, PhD, found that communications between PCPs and specialists in office practice were also marked by gaps and delays.[26]

As a profession, hospitalists have undertaken special projects to address such concerns. A consensus statement published in 2009 brought together SHM, the American College of Physicians, the Society of General Internal Medicine, the American Geriatrics Society, the American College of Emergency Physicians, and the Society of Academic Emergency Medicine in the definition of principles to address "the quality gaps in the transitions between inpatient and outpatient settings."[27] In addition to clear and timely exchange of information between physicians, the group endorsed elements including the involvement of patient and family members at all stages of the transition process, and called for the development of national transition standards and related metrics.

SHM launched Project BOOST in response to a study showing that one in five Medicare patients was rehospitalized within 30 days, half without having seen an outpatient physician, and with associated costs of $17.4 billion.[28] Project BOOST (**B**etter **O**utcomes for **O**lder **A**dults through **S**afe **T**ransition) aims to create a national consensus for best practices, create tailored tools and processes to implement these practices, and provide technical support. Piloted in 2008 in six hospitals, the project now has more than 80 operational sites. In addition to reduced readmissions, its success will be measured in terms of improved communication flows, patient satisfaction scores, and the identification of (and specific intervention for) high-risk patients.[29] Project RED (for Re-Engineered Discharge), independently implemented at the Boston Medical Center, similarly aims to structure the discharge process to ensure that patient education, coordination with the PCP, and follow-up consultation take place.

The Society for Hospital Medicine launched Project BOOST in response to a study showing that one in five Medicare patients was rehospitalized within 30 days, half without having seen an outpatient physician, and with associated costs of $17.4 billion.

POLICY CONSIDERATIONS

Workforce

The allegation has been made that the development of hospital medicine as a career path will exacerbate a perceived shortage of PCPs by dividing the percentage of American medical students

who ultimately choose to pursue internal or family medicine. While it is possible to argue about the assumptions behind shortage projections, it is clear that growth in residency positions has been in specialty programs and that the number of residents going on to primary care practice has been falling for some time.[30] This state of affairs has caused some analysts to question how much of office-based primary care needs to be carried out by a physician. Many would agree that with more emphasis on teamwork in the training process, much routine care could be delivered by physician assistants, nurse practitioners, nurses, and educators while the physician spent time on more complex cases.

Training is potentially a concern going forward. Should PCPs and hospitalists continue to receive the same training as their practices look increasingly different? Further, since hospital medicine is still a fairly young field, it remains to be seen whether its practitioners are able to sustain it as an effective and satisfying practice, or whether it proves to be another step toward ever-greater specialization. Already there are reports of "laborists," "surgicalists," and "outpatient intensivists." From the standpoint of patient needs, such specialization is not necessarily a bad thing.

Incentives

As with virtually every health policy issue, it is a matter of time before reimbursement is adduced as the root of the problem. Some suggest that the gap between inpatient and outpatient care could (and should) be bridged with gold. For example, one physician writes, "If office-based physicians were required to provide, could bill, and could be fairly reimbursed for a hospital visit on the day of admission and the day of discharge, incentives would be established to encourage 'skilled explicit transitions of responsibility' to integrate the primary care physicians as integral members of the health care team and to instill in patients a sense of continuity care."[31] While it is difficult to argue that paying for communication would likely generate more of it, adding more money to the health care mix is bound to be a tough sell to policymakers.

Several researchers have raised the question of hospitalists' potential conflict of interest. Dr. Lo notes that many physicians face conflicts of interest between what they judge to be best for the patient

and what financial incentives from payers encourage them to do. He suggests that the pressures on hospitalists may be more intense:

> "The small number of hospitalists may make it easier to improve the quality of care. This small number, however, also makes it easier to implement guidelines to improve efficiency even in situations where quality of care is likely to be compromised. [B]ecause hospitalists have no ongoing relationship with patients, countervailing forces that promote the patient's best interests may be weaker."[32]

Some hospitalists are paid a straight salary; more commonly compensation is a mixture of salary and incentive payments for productivity or quality, or both. A 2010 report, *The State of Hospital Medicine,* jointly conducted by SHM and the Medical Group Management Association, found that hospitalists who received a smaller proportion of their compensation as base salary were more motivated to add to their workload and productivity in order to earn additional money through productivity-based incentive pay. This is certainly not surprising; as one news story commented, the findings are "a hard-data affirmation that medicine is a business as much as it is a healing mission."[33]

Quality

The further divergence of inpatient and outpatient care may exacerbate quality concerns by creating another occasion for patient care to be handed off. As noted, however, handoffs occur across the continuum of patient care. Measuring quality in terms of patient outcomes remains a somewhat limping, piecemeal process. Maintenance of certification allows a physician to assess and test his or her knowledge, skills, and practice patterns, but (as the seemingly ubiquitous Dr. Wachter noted long ago), "Physicians and those who manage them have finally realized that the inputs into high-quality efficient care relate to some degree to the quality of the physicians, but just as much to the integrity of the system in which they function."[34] There are examples of efforts to assess care at an organizational or practice level, such as the National Committee for Quality Assurance's Patient-Centered Medical Home standard. It may be that standards relating to communication and coordination of care between hospitalists and PCPs will grow out of provisions of PPACA or the growth of ACOs, or that policymakers may wish to consider making expectations for coordination and communication among clinicians explicit.

LOOKING AHEAD

Dr. Meltzer suggested more than a decade ago that optimal medical specialization as it relates to hospitalists must be understood as "reflecting a balance between the benefits of increasing expertise and the costs of coordination."[35] "Optimal" is a word few would apply to the current health care system, but it is probably safe to say that, while the balance is still being worked out, the clock will not be turned back. More recently, Dr. Meltzer has suggested that electronic records and predictive modeling technology may enable a care reconvergence. He suggests that a practice could track those patients at greatest risk of hospitalization and encourage them to see a physician who practices in both the office and the hospital setting, while patients with relatively routine or non-urgent acute needs would see staff (physicians and others) whose practice is office-based only.[36] It would seem that this approach would require a practice larger than the current norm.

Physician Laurence McMahon sees the emergence of the hospitalist as an integral part of the clinical delivery system as established fact, but emphasizes that supply and payment concerns apply in the hospital as well as the office practice. Writing in *The New England Journal of Medicine*, he suggests that payment for hospital-based evaluation and management services remains as inadequate as it is in community practice.[37]

For good or ill, the growth of hospital medicine may be viewed as one more challenge to the traditional practice of primary care and to policymakers as well. As Harold Sox has pointed out, the hospitalist system will reach its full potential only if the community has the capacity to care for patients as soon as they are ready for discharge from an acute care facility.[38] Particularly if the expansion of coverage under PPACA comes to pass, this remains an open question.

ENDNOTES

1. Dr. Wachter, still at UCSF, writes a widely read blog, "Wachter's World," available at http://community.the-hospitalist.org/blogs. Dr. Goldman moved to Columbia University in 2006.

2. Robert M. Wachter and Lee Goldman, "The Emerging Role of 'Hospitalists' in the American Health Care System," *New England Journal of Medicine*, 334, no. 7 (August 15, 1996): p. 514, available at www.nejm.org/doi/pdf/10.1056/NEJM199608153350713.

3. Society of Hospitalist Medicine, "Definition of a Hospitalist and Hospital Medicine," approved November 4, 2009, available at www.hospitalmedicine.org/AM/Template.cfm?Section=Hospitalist_Definition&Template=/CM/HTMLDisplay.cfm&ContentID=24835.

4. Katie Stevenson, Manager, Government Relations, Society of Hospital Medicine, e-mail communication with the author, March 2, 2011. The "State of Hospital Medicine" survey is available for purchase at www.hospitalmedicine.org/AM/Template.cfm?Section=Survey&Template=/CM/HTMLDisplay.cfm&ContentID=27230.

5. Adam Haley Rosenbloom and Alan Jotkowitz, "The Ethics of the Hospitalist Model," *Journal of Hospital Medicine*, 5, no. 3 (March 2010): p. 183, available with subscription at http://onlinelibrary.wiley.com/doi/10.1002/jhm.578/pdf.

6. Robert M. Wachter, "The Hospitalist Model of Care," July 14, 2009, p. 7, available at http://knol.google.com/k/the-hospitalist-model-of-care.

7. Wachter, "The Hospitalist Model of Care," p. 9.

8. For more information on maintenance of certification programs, see Lisa Sprague, "Physician Assessment: Measuring Competence and Performance," National Health Policy Forum, Background Paper No. 74, May 11, 2010, available at www.nhpf.org/library/details.cfm/2786.

9. Jason Carris, "Focused Practice in Hospital Medicine," *The Hospitalist*, May 2010, available www.the-hospitalist.org/details/article/688463/Focused_Practice_in_Hospital_Medicine.html.

10. Carol Berczuk, "A More Perfect Union," *The Hospitalist*, July 2008, available at www.the-hospitalist.org/details/article/186164/A_More_Perfect_Union.html.

11. Gary L. Freed *et al*., "Hospitalists' Involvement in Pediatrics Training: Perspectives from Pediatric Residency Program and Clerkship Directors," *Academic Medicine*, 84, no. 11 (November 2009): p. 1617, available at http://journals.lww.com/academicmedicine/fulltext/2009/11000/hospitalists__involvement_in_pediatrics_training_.45.aspx.

12. American College of Physicians, 2009 Internal Medicine In-Training Examination Resident Survey™. Used with permission.

13. *Modern Healthcare*, Special Feature, July 19, 2010, pp. 22–23.

14. Telephone conversation with the author, October 7, 2010.

15. Howard Beckman, "Three Degrees of Separation, *Annals of Internal Medicine*, 151, no. 12, (December 15, 2009): p. 891, available with subscription at www.annals.org/content/151/12/890.extract.

16. Lytton Smith, "Hospitalist, generalist: How they balance care," writing as part of an Ethics Forum in *American Medical News*, November 3, 2008, available at www.ama-assn.org/amednews/2008/11/03/prca1103.htm.

17. Carl H. Reynolds, Balazs Zsenits, and Walter A. Polashenski, letter to the editor of *Annals of Internal Medicine*, 152, no. 7 (April 6, 2010): p. 474, available with subscription at www.annals.org/content/152/7/474.2.

18. Bernard Lo, "Ethical and Policy Implications of Hospitalist Systems," *Disease-A-Month*, April 2002, p. 282, available at www.sciencedirect.com/science?_ob=MImg&_imagekey=B75BF-4C0CW71-W-1&_cdi=12981&_user=1193445&_pii=S0011502902900374&_origin=search&_zone=rslt_list_item&_coverDate=04%2F30%2F2002&_sk=999519995&wchp=dGLbVzb-zSkWA&md5=edb10a7761b9ea143afbf1255a1c6e50&ie=/sdarticle.pdf.

19. David Meltzer, "Hospitalists and the Doctor-Patient Relationship," *Journal of Legal Studies*, 30 (June 2001): p. 604.

20. Robert M. Wachter, letter to the editor of *Annals of Internal Medicine*, 152, no. 7 (April 6, 2010), available with subscription at www.annals.org/content/152/7/474.1.full.

21. Robert M. Wachter, "Reorganizing an Academic Medical Service," *Journal of the American Medical Association*, 279, no. 19 (May 20, 1998): p. 1560, available with subscription at http://jama.ama-assn.org/content/279/19/1560.full.pdf+html.

22. Peter K. Lindenauer *et al*., "Outcomes of Care by Hospitalists, General Internists, and Family Physicians," *The New England Journal of Medicine*, 357, no. 25 (December 20, 2007): p. 2589, available at www.nejm.org/doi/pdf/10.1056/NEJMsa067735.

23. Andrew D. Auerbach and Steven Z. Pantilat, "End-of-Life Care in a Voluntary Hospitalist Model: Effects on Communication, Processes of Care, and Patient Symptoms," *The American Journal of Medicine*, 116, no. 10 (May 15, 2004): p. 669, available with subscription at www.amjmed.com/article/S0002-9343(04)00064-6/abstract.

24. Wachter, "The Emerging Role of 'Hospitalists'," p. 516.

25. Sunil Kripilani *et al*., "Deficits in Communication and Information Transfer Between Hospital-Based and Primary Care Physicians," *Journal of the American Medical Association*, 297, no. 8, (February 28, 2007): p. 831, available with subscription at http://jama.ama-assn.org/cgi/content/full/297/8/831.

26. Ann S. O'Malley and James D. Reschovsky, "Referral and Consultation Communication Between Primary Care and Specialist Physicians," *Archives of Internal Medicine*, 171 no. 1 (January 10, 2011): p. 56, available with subscription at http://archinte.ama-assn.org/cgi/reprint/171/1/56.

27. Vincenza Snow *et al*., "Transitions of Care Consensus Policy Statement," *Journal of Hospital Medicine*, 6, no. 4 (2009): p. 971, available with subscription at http://onlinelibrary.wiley.com/doi/10.1002/jhm.510/pdf.

28. Stephen F. Jencks, Mark V. Williams, and Eric A. Coleman, "Rehospitalizations among Patients in the Medicare Fee-for-Service Program," *New England Journal of Medicine*, 360, no. 14 (April 2, 2009): p. 1418, available at www.nejm.org/doi/pdf/10.1056/NEJMsa0803563.

29. For more information, see "Project BOOST Mentoring Program," available at www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/Boost_vanity_landing.cfm.

30. See for example Edward Salsberg *et al*., "U.S. Residency Training Before and After the Balanced Budget Act," *Journal of the American Medical Association*, 300, no. 10 (September 10, 2008): pp. 1174-1180, available with subscription at http://jama.ama-assn.org/content/300/10/1174.full.pdf+html.

31. Mark Ault, "The Relationship Between Hospitalists and Primary Care Physicians," letter to the editor of *Annals of Internal Medicine*, 152, no. 7 (April 6, 2010): p. 475, available with subscription at www.annals.org/content/152/7/474.2.full.pdf+html.

32. Lo, "Ethical and Policy Implications of Hospitalist Systems," p. 285.

33. John Commins, "A Better Way to Pay Hospitalists," *Health Leaders Media*, September 13, 2010, available at www.healthleadersmedia.com/print/HR-256315/A-Better-Way-to-Pay-Hospitalists. (Note: the survey itself is available for purchase at www.hospitalmedicine.org/AM/Template.cfm?Section=Survey&Template=/CM/HTMLDisplay.cfm&ContentID=27230.)

34. Robert M. Wachter, "Response to David Meltzer's Paper 'Hospitalists and the Doctor-Patient Relationship,'" *Journal of Legal Studies*, 30 (June 2001): p. 615, available at www.jstor.org/stable/10.1086/339296.

35. David Meltzer, "Hospitalists and the Doctor-Patient Relationship," *Journal of Legal Studies*, 30 (June 2001): p. 605, available at www.jstor.org/stable/pdfplus/10.1086/339294.pdf?acceptTC=true.

36. Telephone conversation with the author, December 15, 2010.

37. Laurence F. McMahon, "The Hospitalist Movement – Time to Move On," *New England Journal of Medicine*, 357, no. 25 (December 20, 2007): p. 2627, available at www.nejm.org/doi/full/10.1056/NEJMe078208.

38. Harold Sox, "Commentary of 'Hospitalists and the Doctor-Patient Relationship,'" *Journal of Legal Studies*, 30 (June 2001): p. 609, available at www.jstor.org/stable/10.1086/324669.