# Virtual Mentor

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The Hospital Care Revolution

There’s been a quiet revolution over the past dozen years in the way patients are cared for in hospitals. Its outcome is the growing presence of the hospitalist—a physician whose focused area of practice is caring for patients while they are hospitalized. Hospitalist management of inpatient care means fewer visits to the hospital by the patient’s office-based, primary care physician. In some regions and hospital systems, so-called “outpatient” physicians transfer care of their patients to the new inpatient specialists the minute the patient becomes hospitalized and resume care when the patient is discharged.

The several efficiency- and patient safety-related reasons for the revolution are well documented in this month’s Virtual Mentor. (No one mentions that central casting challenges and plot stability demands drove daytime drama to invent the hospitalist quite some time ago. The de facto hospitalist appeared on General Hospital before he showed up at Mass. General.)

The questions of greatest interest to this month’s contributors concern the effect of the new model of hospital medicine on patients. Have patients lost something critical to their well-being now that their own primary care physicians do not stop in to visit once or twice a day? Is the loss more than offset by gains in safety and shortened length of hospital stay? What sort of relationship is possible between the patient and hospitalist, who has the best interest of many patients on his or her mind at the same time? Finally and importantly, how do these new focused-practice physicians relate professionally to their patients’ primary care physicians, and how do they demonstrate to their profession and the public that they have the special knowledge and skills needed to care for people who are very sick?

In VM’s first clinical case, two physicians, a hospitalist and primary care physician, differ on a patient’s treatment plan. Commentator Dawn Brezina, a hospitalist and educator at Duke University Health System, explains that hospitalists must constantly be on guard against conflict between the interests of the patient and those of the hospital, since a compromise in treatment plan may be a breach of obligations to the patient.

The next clinical case examines the new questions in professional relationships introduced by the hospitalist movement. When both hospitalist and family physician are involved, who is better suited to initiate a discussion about end-of-life issues? Mary Ehlenbach argues that the hospitalist may have greater skill in conducting such intense conversations, but she acknowledges and welcomes the participation of a
family physician who has a long and close association with the patients who are facing the difficult decision.

Laborists, a subset of hospitalists, are the subjects of clinical case three. Laborists’ expertise can add to patient safety in many labor and delivery cases, but they have “a duty to preserve the established relationship between the treating obstetrician and patient.” By doing so, Louise P. King and George D. Wendel Jr. maintain, laborists can preserve continuity of care even in emergent situations.

How do hospitalists demonstrate their competence? Jeffrey G. Wiese, a medical educator at Tulane University, explains the effort under way to assure that all hospitalists are trained to high standards. A “focused-practice certification” is planned by the American Board of Medical Specialties, the main tenets of which are that “physicians must (1) demonstrate competence as internists, and (2) have practice experience in hospital medicine.”

Robert M. Wachter is, by all accounts, a founder of the field. He summarized the key developments in hospital medicine in his 2008 article, The State of Hospital Medicine in 2008, which is reviewed by AMA intern Chloe White in this month’s journal discussion.

The clinical pearl guides us through the benefits and limitations of transjugular intrahepatic portosystemic shunts (TIPS) in treating portal hypertension—the source of controversy in clinical case one. A physician training to be a transplant hepatologist, Elizabeth C. Verna encapsulates the most important indications and counterindications for use of this procedure.

In the health law article, Erin A. Egan uses Domby v. Moritz to show how the limits of hospitalists’ liability are being defined—a vital step if this medical model is to survive legal challenges.

If hospitalists are so great, why not make their use mandatory? In this month’s policy forum, Marc B. Royo, Laura L. Kimberly, and Alexandria Skoufalos, all from Jefferson Medical College of Thomas Jefferson University, in Philadelphia, explore why this option was tried in some places and then modified in the course of the field’s evolution.

How far can the hospitalist concept go? C. Edward Wells confides the concerns that laborists—hospitalists who oversee labor and delivery—have about patient acceptance of their role, new in the past five years, in one of this month’s history of medicine articles.

Another historical look highlights the rapid evolution of hospitalist medicine as a “site-of-care” specialty—a rise far more rapid than that of emergency medicine, the other well-known example of site-specific practice. Joseph Ming Wah Li explains the two key reasons for its birth and growth: efficiency and patient safety.
In the medicine and society section, Elmer Abbo discusses the new paradigm of health care delivery. He argues that physicians who practice in hospitals day in and day out are best positioned to mediate the inevitable conflict between an individual patient’s needs and scarce resources. Dr. Abbo views the model of hospitalist medicine as central to a realistic medical ethics in our health care system.

While the profession has become accustomed to working with these new colleagues in the hospitalist field, there’s still an element—part nostalgia, part unease—that says, “Something’s not right. What happened to the old-time family doctor?” Robert M. Centor writes an op-ed article on the adjustments that are yet to be made. “I have heard tales of horrible hospitalists with lousy bedside manners. I have heard praise for wonderful hospitalists with superb bedside manners.” He is well placed to comment, having made the transition to hospital-based medicine himself.

We hope that this issue of Virtual Mentor helps readers understand the causes, outcomes, and ethical concerns raised by a revolution in hospital medicine so quiet that many may have not known it was occurring. Finally, we thank Erin A. Egan for the idea that led to this theme issue.

Sincerely,
Philip A. Perry, MSJ
Jenny Schooley
Faith L. Lagay, PhD
Virtual Mentor editors

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Drs. Johnson and Blake were grabbing a quick bite in the hospital cafeteria. Both were second-year residents in internal medicine, but on different teams. Dr. Johnson’s team was headed by a hospitalist (Dr. Norwood), while Dr. Blake’s team was headed by rotating attending physicians who came through for 2-week, in-house assignments and then went back to their regular academic and clinic responsibilities. For the current, 2-week block, the general internal medicine attending was Dr. White.

In conversation, Dr. Johnson brought up a patient he had been especially concerned about for several days. “Remember the patient I told you about with cirrhosis? Mr. Hanson? His ascites and edema are out of control. We tapped him just 2 days ago and the fluid’s already reaccumulating. When we rounded this morning, Dr. Norwood had us order a transjugular intrahepatic portosystemic shunt (TIPS) for him. It’s scheduled for tomorrow morning. I sure hope it gives the guy some relief; he’s not looking good.”

“Funny you should bring up that case,” his friend said. “Mr. Hanson is one of Dr. White’s clinic patients so I asked Dr. White if we had time to stop by Mr. Hanson’s room this morning, even though he isn’t assigned to our team, because you had mentioned him the other day. We did stop in and, when Dr. White saw the TIPS order, he launched into quite a lecture.”

“Why? What about?” Dr. Johnson asked.

“Oh, Dr. White said that he’s sure it’s a good decision from the hospital’s point of view; the hospital can discharge Mr. Hanson and free up a bed. But then Mr. Hanson goes home, starts getting confused and not taking his meds, and shows up in the clinic. Poor Mr. Hanson has just traded his ascites for encephalopathy.”

“That sounds like a reasonable argument against doing it. What do you think?” Dr. Johnson asked.

“I’m not sure.” Dr. Blake said. “I’d like to hear them discuss it, to be truthful.”

“Right,” said Dr. Johnson. “Like you want to be the one to go to Dr. Norwood and suggest that this is a great ‘teaching moment’ and that he and Dr. White should examine this clinical decision together for our edification.”
Commentary
This is an interesting scenario that highlights questions in ethical decision making in caring for hospitalized patients. Central to this issue, particularly for patients with very serious illnesses, are the potential risks and benefits of the specific intervention. Dr. Johnson seemed surprised to learn of the significant risk of post-TIPS portosystemic encephalopathy. And Drs. Norwood and Johnson have ordered this procedure without discussing the risk to the patient.

Until about 1990, an attending physician’s active participation on the general medicine service was limited, and the service was essentially run by house staff. The attending physician was available, reviewed all charts, and helped when asked. Nevertheless, he or she was able to bill for all interventions the patients received. In that model, not all patients routinely benefited from the more-experienced physician’s knowledge. On the other hand, senior residents and interns felt a sense of ownership and responsibility for their patients. The new legislation made it illegal for the attending physician to bill for patient care unless he or she could document having directed the care. The attending physician’s role in patient care decisions increased as a result of the new reimbursement legislation, and house staff autonomy eroded, sometimes causing residents to feel less responsible for patient-management decisions.

In our case scenario, the teaching service team appears to have a hands-on attending physician, Dr. Norwood, who ordered the TIPS intervention without discussion. One of Dr. Norwood’s residents, Dr. Johnson, discovered information at lunch with his friend that could greatly impact the clinical course for the patient—and in time to do something about it—which creates an obligation for him to act on the information. TIPS may be the correct course, but if a reasonable doubt exists, the decision should be examined.

The patient needs to have some voice in this decision also. Diuretic-refractory ascites is one indication for TIPS, but the patient must be aware of the subsequent risk for encephalopathy. The most sacred premise in medical decision making is recommending what is best for the patient—and that may not be the same for every patient. Is the patient so miserable he welcomes the relief offered by the procedure, or is he deathly afraid of encephalopathy? Presumably, it fell to Dr. Johnson to explain the TIPS decision to Mr. Hanson, but we are not told that he did.

Another aspect of hospital care is communication with the patient’s primary doctor. Unless a procedure is emergently needed, consultation with the primary care physician is always an asset to decision making. Drs. Norwood and Johnson should have routinely contacted the physician Mr. Hanson saw in the clinic—Dr. White—for recommendations at the time the decision was being considered. This is not only courtesy; it is essential for follow-up management. Dr. White was correct—the patient may very well come to the clinic with encephalopathy in 3 weeks.
Dr. White incidentally discovered that Mr. Hanson was scheduled for a procedure that he believed would adversely affect his life—but it appears he only mentioned it to the house staff team. Dr. White even suggested that the decision was made from “the hospital’s point of view” in order to “free up a bed,” and presumably he was still content to walk away and wait for the patient to show up at the clinic, “having traded his ascites for encephalopathy.” Unless Dr. White intervened after his “lecture” to the residents, his action is unconscionable. Having seen Mr. Hanson in the clinic, Dr. White had an obligation to intervene on Mr. Hanson’s behalf, if he truly believed the plan of care was not in his patient’s best interest.

Medicine is the process of diagnosis combined with therapeutic decision making. Routine illnesses, such as community-acquired pneumonia, are essentially treated by a decision tree and do not require detailed discussion. Likewise, when a patient is being evaluated, no extensive discussion, other than explaining what the anticipated work-up will entail, is needed prior to low-risk diagnostic procedures, such as ultrasound and lab work. On the other hand, therapeutic interventions that carry risks for complications or compromised lifestyle require patient understanding and agreement. No one would start chemotherapy or radiation therapy without extensively explaining to the patient the risks and benefits anticipated from this therapeutic option. Clearly, the TIPS treatment option was not discussed with Mr. Hanson before it was ordered.

Anyone’s best interest can only be assessed after considering his or her fears and desires. Some people are bold risk takers and willing to try aggressive management with high risks. Others would rather live with the illness than undergo painful procedures. Patients should be given information in a way they can understand, followed by the physician’s recommendations. With that data, the patient may express his or her personal concerns and desires for the anticipated course of treatment.

In this scenario, it appears that Mr. Hanson was not included in the risk/benefit analysis of the planned TIPS procedure. Actually, not even the house staff were included in the discussion. There are several types of shunts used in the TIPS procedure. The larger the shunt, the more likely the patient is to develop encephalopathy. In some cases, the shunt can later be reversed or, in some institutions, it can subsequently be mechanically reduced—these options might greatly influence the patient’s decision to proceed or not.

Other concerns include the reliability of the patient. If Mr. Hanson is unable to comply with the post-procedure medication regimen, as Dr. White suggested, the risk of encephalopathy increases. This is another important reason for including the primary care physician in the decision analysis—he or she may have better insights concerning the likelihood that the patient will successfully manage follow-up care.

The hospital’s interest plays a role in patient care decisions but is not the primary concern. Patient length of stay is important, especially in the present environment of
declining hospital revenues, and hospitalists are encouraged to move patients to the outpatient setting as soon as possible. That said, if this were, in fact, the motive to proceed with the TIPS rather than in-hospital diuresis, that would be a great disservice to Mr. Hanson—who is trusting that the decisions will be made in his best interest—and could be deemed unethical.

Dr. Johnson already knows the correct ethical course. He should go to Dr. Norwood—with data in hand on TIPS procedures—and suggest that this is a great “teaching moment.” Open discussion between Drs. Norwood and White would undoubtedly prove helpful to the house staff involved. Perhaps even more importantly, the discussion would be a great benefit to Drs. Norwood and White.

Dawn Brezina, MD, is a member of the Duke University clinical faculty and Hospitalist Program at Durham Regional Hospital, Duke University Health System in North Carolina. She received a medical degree from the University of Miami Miller Medical School and is ABIM board certified in internal medicine. Her areas of interest include pre-operative and peri-operative management and pre-operative clinic.

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Indications for Use of TIPS in Treating Portal Hypertension, December 2008

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CLINICAL CASE
Planning End-of-Life Conversations: Hospitalist and Primary Care Physician Roles
Commentary by Mary Ehlenbach, MD

At the end of a busy day in her pediatric clinic, Dr. Smith was going to visit the Johnson family. Even though she and her partners now admitted their patients to the pediatric hospitalist service at the nearby children’s hospital, Dr. Smith still visited her patients there whenever her clinic schedule permitted. She had been notified by the emergency department earlier that day that Claire, the Johnsons’ third child, had been admitted with a fever and dehydration. Dr. Smith knew the Johnson family well—she had taken care of their older children, both healthy, for the past 7 years, and had gotten to know Mr. and Mrs. Johnson even better during Claire’s first year of life.

Claire was born healthy, but stopped making developmental progress at age 6 months. By the time Claire was 1 year old, an extensive workup showed that she had a rare, progressive metabolic disorder. Despite strictly adhering to a special diet and routinely seeing subspecialists, Claire continued to decline. Feeding problems resulted in the need for placement of a gastric tube and Claire’s development never progressed beyond that of a 6-month old. Now 4 years of age, Claire had been hospitalized several times for metabolic crises associated with mild infections. Specialists had told the Johnsons that Claire would never walk, talk, or eat by mouth.

While Dr. Smith had never had a discussion specifically about end-of-life issues with the Johnsons, she knew that they wanted Claire to stay out of the hospital as much as possible and hoped she would not have to undergo medical interventions that would cause her to suffer. In light of this admission, Dr. Smith knew the time had come to talk with the Johnsons about goals of care and, specifically, code status for Claire.

Dr. Smith stopped at the nurses’ station to review Claire’s chart before meeting with the Johnsons. She was surprised to discover that the pediatric hospitalist caring for Claire had already documented a detailed discussion about code status and what medical interventions, if necessary, the Johnsons wanted Claire to have. Dr. Smith recognized the hospitalist, Dr. Adams, sitting at the nurses’ station, and decided to approach her. Dr. Adams was surprised that Dr. Smith was interested in this aspect of Claire’s care.

“Usually, primary care physicians leave these discussions to us,” said Dr. Adams. “It can be a bit awkward to have conversations about end-of-life issues with someone you’ve never met before, but we do it so often that it has become second nature with
families of patients like Claire. Most primary care physicians don’t like to talk about dying during a 20-minute clinic visit.”

Commentary

End-of-life discussions can be difficult for both physicians and patients. “See one, do one, teach one” is a paradigm entrenched in the culture of medical education. Some argue that this method is insufficient for mastering any skill, but studies suggest that medical students and physicians-in-training are expected to discuss end-of-life issues with patients without even experiencing the meager educational benefit of this 3-step method [1]. Medical students and housestaff generally have not acquired sufficient mentoring to conduct end-of-life conversations with patients and families even though some attending physicians believe they are the responsibility of less-experienced members of the team [1, 2].

Ill-prepared physicians who have end-of-life discussions with patients and families are at a high risk of miscommunicating. If a physician does not have a clear understanding of the likelihood of success and complications of cardiopulmonary resuscitation, he or she may inaccurately present the expected clinical course to the patient and family. The risks and benefits of other life-prolonging interventions, such as intubation and mechanical ventilation, may also be inaccurately represented. And even physicians who draw a balanced, accurate picture of the outcomes of these interventions often mistakenly assume that their sick and vulnerable patients or worried families have “heard” and understood the message, when in reality neither party understands the other.

An equally serious mistake on the part of a physician who is not equipped to have end-of-life discussions is underestimating the integral role that a family’s values and beliefs play in making goals-of-care decisions [3]. Here, it is not a matter of patients not understanding what doctors are saying, but of the doctor not hearing or understanding how the patient’s or family’s end-of-life values guide their thoughts [4]. If patients and physicians are thinking and talking about the end of life in different terms with different vocabularies, care plans are bound to be confusing to the medical team and unsatisfying to the family.

On the other hand, a physician who has had a long-term relationship with a patient and family often understands the role their belief system plays in their life. Religious, cultural, and personal convictions are key factors in helping patients and families make end-of-life decisions [3]. Here, the primary care physician has the advantage of a perspective over time and can gauge the evolution of the illness, as well as the degree to which patients and families have accepted the reality of the illness and thought about death. A trusted primary care doctor need not have up-to-the-minute information on the patient’s condition to provide valuable support and counseling to families who are overwhelmed by the decisions they confront.

Some primary care physicians may feel that discussing end-of-life wishes during a routine clinic visit is inappropriate. Barriers to the conversation in the outpatient
setting include: (1) lack of time, (2) feeling that such a dialogue will upset a patient or family if the condition is stable or improving, and (3) general discomfort or lack of skill in communicating on the topic. Yet it can be very helpful to the patient and family to introduce this subject when a crisis is not impending. Broaching this topic during a clinic visit can give surrogate decision makers more insight into a patient’s wishes [6] and make a primary care physician aware of when a patient or family (e.g., families with children with complex medical needs) may be struggling with these decisions. A multidisciplinary approach—involving a palliative care team, nurse, and social worker—can further mitigate against communication errors and help the patient and family in making a decision that accords with their values and belief system [5].

In the case of Claire Johnson, it would have been beneficial for Dr. Smith, who has known Claire’s family for several years, to have initiated a formal end-of-life discussion with the Johnsons in the outpatient setting before Claire became acutely ill. The Johnsons would have been introduced to the topic, had a chance to consider their options, and felt better prepared when Dr. Adams initiated the conversation. Dr. Adams then could have focused on explaining pertinent clinical information to guide the Johnsons through decision making in their emotionally fraught state. Alternatively, if Dr. Smith felt she could not do the best job discussing Claire’s end-of-life decisions with the Johnsons, she could have referred them to palliative-care services before this hospitalization.

Dr. Smith’s participation in the end-of-life discussion that Dr. Adams had with the Johnsons would have proved valuable. As a hospitalist, Dr. Adams’ daily practice exposes her to patients and families like the Johnsons during serious, acute illnesses, so she may have been more prepared than Dr. Smith to discuss the details of resuscitation, CPR survival, and complication statistics. She may have felt more comfortable overall having this conversation with patients and families. But Dr. Smith could have supported the Johnsons, making sure they felt comfortable in introducing their values and belief system into the goals-of-care decision making. It may be difficult to coordinate an end-of-life discussion with a hospitalist and a clinic-based primary care physician when a patient is hospitalized with an acute illness, but both parties can work to arrange such a meeting if it seems to be in the best interest of the patient and family.

References


Mary Ehlenbach, MD, is a pediatric hospitalist at Mary Bridge Children’s Hospital in Tacoma, Washington. Her research interests include the care of medically complex children, family-centered care, and teaching medical students and residents.

Related in VM
Discussing Code Status with Patients and Their Families, September 2006

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Mrs. Lawrence arrived at a large, urban hospital in active labor at 23 4/7 weeks. She was a patient of Dr. Greene but registered under the care of Dr. James, a laborist employed by the hospital. Mrs. Lawrence was carrying an extremely low-birth-weight fetus with a poor prognosis. When the fetal heart tracing became non-reassuring, Dr. James counseled her to undergo an emergent cesarean delivery. Just as Mrs. Lawrence was being prepped for the surgery, Dr. Greene arrived and took issue with the laborist’s decision. She believed her patient had been poorly counseled about the prognosis for the fetus and maternal morbidity associated with a classic cesarean section at such an early stage of gestation.

Dr. Greene questioned whether the laborist had been completely unbiased in her decision making. After all, Dr. James worked for the hospital that stood to benefit from a lengthy, yet reimbursable NICU stay. Drs. Greene and James found themselves at an impasse. Dr. Greene sought to re-establish care for her patient; but the patient, by now, was adamant that she wanted a cesarean delivery to “save her baby.”

**Commentary**

The practice of obstetrics and gynecology has changed dramatically in recent years. Traditionally, obstetricians were available at all hours for every patient’s labor and delivery. Today, patients often choose their obstetricians based on whether they are routinely available at delivery. Perhaps in response to the unique demands of obstetrics, physicians are leaving practices at younger ages, discontinuing obstetric services, and choosing other specialty training. Surveys of those in practice show an increase in professional dissatisfaction, poor personal relationships, and burnout [1]. Given the extensive demands of a traditional obstetrics practice and the higher costs of medical liability insurance for obstetrics, it is no surprise that there are fewer obstetricians and gynecologists in solo practice.

**Introduction of Laborists**

The laborist was introduced largely to address time demands. Laborists are hospitalists employed by larger hospitals to manage the care of walk-in patients, those in labor, or those with emergent gynecological issues. They are there to deliver babies of patients whose physicians are affiliated with the hospital when those physicians are unavailable. Laborists typically work in shifts but may make rounds on patients admitted to their service. Introduced primarily to reduce the workload for obstetricians, laborists may also improve hospital safety, inasmuch as they are
immediately available on the labor unit to address dysfunctional labor or a non-reassuring fetal-heart tracing. Finally, by reducing the time and stress burden on practicing obstetricians, laborists lower the risk of errors that occur when physicians are overworked [1, 2].

Despite the obvious benefits of employing laborists in hospitals, their presence can prompt ethical and legal complications, as this case illustrates. In the scenario, three separate relationships arise among the laborist, treating obstetrician, and patient. Similar complex relationships have existed before in obstetrics, namely among the certified nurse midwife, consulting obstetrician, and patient. But in the past the roles have been more easily defined, with the obstetrician providing care in an emergency or directing care as needed in an uncomplicated delivery. In many instances, the midwife works as a member of the obstetrician’s team in his or her office unless it is necessary to transfer the patient out of the birthing center and into the care of a physician [2].

But here, the laborist and treating obstetrician are both independent physicians, who, at the outset of treatment, created separate and coexistent contractual relationships with the patient. Apart from each of their ties to the hospital, they have no formal ties to each other. During an uncomplicated delivery it is likely that the hospitalist would proceed without much need to consult the treating obstetrician. In a complicated, emergent situation such as that proposed in this scenario, consulting the treating physician may be impractical. Does Dr. James have an ethical or legal duty to consult with the treating physician? How is this duty affected by Mrs. Lawrence and Dr. Greene’s patient-physician relationship? Stated another way, what duty does Dr. James have to honor the treating relationship between Dr. Greene and Mrs. Lawrence?

**Laborist, Treating Physician Relationship**

To answer these questions, assume that a laborist functions like an emergency physician. According to the Code of Ethics for Emergency Physicians proposed by the American College of Emergency Physicians, when interacting with a patient’s primary care physician, the emergency physician should “cooperate with the primary care physician to provide continuity of care that satisfies the needs of the patient and minimizes burdens to other providers” [3]. Applied to the current case, this statement suggests that the laborist has an ethical and professional duty to contact the primary care physician and ascertain his or her plan regarding emergent intervention for each patient in every instance possible.

But this analogy does not completely capture the complexities of obstetrical practice. Drs. James and Greene can reasonably disagree about the best course for Mrs. Lawrence. Although the prognosis for this infant is poor, predictions of a long-term outcome for any neonate, especially one with very low birth weight early in gestation, are far from perfect [4]. In an 18-to-22-month follow-up of neonates delivered at 22 to 25 weeks gestation, Neonatal Research Network investigators found that 49 percent had died, 61 percent had died or had profound impairment, and
73 percent had died or had some impairment [5]. They concluded that consideration of multiple factors is likely to promote treatment decisions that are less arbitrary, more individualized, more transparent, and better justified than decisions based solely on gestational-age thresholds.

**Duty to Counsel the Patient?**

Presenting this type of probability data to expectant mothers is challenging. Parents want to know exactly what will happen to their child—a question that can almost never be answered. Each patient has a different cultural understanding and brings different moral values to thinking about the long-term consequences for a child born severely prematurely. Hence, counseling a patient regarding interventions at the cusp of viability is extremely difficult [5]. Ideally, the patient would have discussed her child’s prognosis and personal beliefs in detail with her treating physician. One could argue that, even in the context of an emergency, a well-informed patient has enough information at her disposal to decide between a cesarean delivery and expectant management followed by a vaginal delivery.

The most conscientious physician cannot prepare a family for every possible occurrence at each gestational age, however. Even if a family is educated about the risks of a preterm delivery, those risks and possible outcomes can change during gestation over weeks and even days. Labor and delivery situations are unlike the typical cases an emergency-medicine resident confronts in a patient at the end of life. Many patients with terminal illness have had months to prepare and educate themselves about their disease and prognosis. Although their condition changes over months and years, the disease itself is fairly static, and they have time to digest its implications. Some have living wills that make the process easier. At the very least, an emergency physician can resuscitate a patient at the end of life per a family’s request and consider withdrawal of care at a later time.

By contrast, the decision to perform an emergency-cesarean delivery for fetal distress must be made and acted upon in a matter of minutes. As described by Ann Drapkin Lyerly, the morbidity associated with a classic cesarean delivery (vertical incision involving the contractile portion of the uterus) performed at very early gestational age, as well as that associated with emergent anesthesia, are significant [6]. Dr. James presumably believed that Mrs. Lawrence’s child had “enough of a chance” to justify emergent intervention and presented the options to Mrs. Lawrence with this bias. Once given the chance to save her baby, it is unlikely that Mrs. Lawrence would be able to consider any other option as reasonable or acceptable. Dr. James would have served his patient better by allowing her to speak with her treating physician who is more familiar with her case and better equipped to counsel her.

In such an emotionally charged situation, Dr. Greene’s assertion that Dr. James may have been motivated by financial concerns is surely counterproductive and possibly inaccurate. It brings to light, however, the perception of bias that is bound to occur when a physician is employed by a hospital to deliver babies. Medicaid reimburses
care for infants sent to the neonatal intensive care unit (NICU) regardless of the mother’s funding status during her pregnancy. Thus, NICU infants might be considered by some to be a reliable source of revenue for hospitals. The addition of laborists to a hospital team could be justified financially by an increase in walk-in deliveries and the consequent reimbursement, with the knowledge that some of the babies will need prolonged, expensive NICU stays. Theoretically, there is some financial incentive, therefore, for a laborist employed by the hospital to encourage deliveries of extremely preterm infants rather than advising maternal transport to another NICU or expectant management. Even assuming that a laborist would not be unduly influenced by this possible incentive, which is likely, it is better for the treating physician to counsel the patient regarding her option to avoid even the appearance of bias.

In sum, although it adds a level of complexity to interactions between the laborist and patients in labor and delivery, the laborist has a duty to preserve the established relationship between the treating obstetrician and patient. This is especially true in emergent situations that arise early in gestation when decision making is difficult and requires an established rapport with the patient to facilitate the best possible outcome. Following this principle will allow obstetricians to retain continuity of care for their pregnant patients (long praised as a strength of our specialty field) while addressing the needs of the obstetrical workforce and alleviating some of pressures that have driven physicians from our specialty.

References
2. Wells CE. Personal communication. October 1, 2008.

Louise P. King, MD, JD, is a third-year resident at Parkland Memorial Hospital in Dallas, in obstetrics and gynecology. Prior to becoming a physician, Dr. King practiced law that specialized in constitutional, criminal, and indigent legal matters.

George D. Wendel Jr., MD, is a professor and residency program director of obstetrics and gynecology at the University of Texas Southwestern Medical Center.
in Dallas. He is a maternal-fetal medicine subspecialist with research interests in clinical obstetrics and sexually transmitted diseases.

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EFFICIENCY AND COST WERE THE INITIAL DRIVERS OF THE HOSPITALIST MOVEMENT. HAVING PHYSICIANS DEDICATED TO MANAGING THE CARE OF HOSPITALIZED PATIENTS MINIMIZED FRAGMENTATION OF THE PRIMARY CARE PHYSICIAN’S WORK DAY FORMERLY CAUSED BY FREQUENT TRIPS FROM THE CLINIC TO THE HOSPITAL AND BACK AGAIN. BY BEING ACCESSIBLE TO THEIR PATIENTS THROUGHOUT THE DAY (I.E., UNFETTERED BY CLINIC OBLIGATIONS), HOSPITALISTS COULD MAKE DISCHARGE DECISIONS EARLIER, WHICH REDUCED LENGTH OF STAY AND INCREASED HOSPITAL THROUGHPUT. IT WAS PRESUMED THAT THE CONCENTRATED FOCUS ON TASKS THAT WERE PERFORMED REPEATEDLY WOULD IMPROVE EFFICIENCY, AS IT HAD DONE IN EMERGENCY AND CRITICAL-CARE MEDICINE. EFFICIENCY AND THE INCREASING COMPLEXITY OF INPATIENT MEDICAL CARE BECAME COMPPELLING ARGUMENTS FOR THE HOSPITALIST MODEL.

TRANSITIONS OF CARE
AS HOSPITAL MEDICINE HAS EVOLVED, THE MEASUREMENT OF THE HOSPITALIST’S VALUE SHIFTED FROM THE NARROW FOCUS ON EFFICIENCY DURING HOSPITALIZATION TOWARD THE OVERALL EFFICIENCY AND QUALITY OF PATIENT CARE FROM THE AMBULATORY ARENA TO THE HOSPITAL AND BACK AGAIN. A SYSTEM THAT ENABLES HOSPITALISTS TO ESTABLISH GOOD COMMUNICATION WITH THE PRIMARY CARE PHYSICIANS DURING THESE TRANSITIONS IS BEST FOR BOTH DOMAINS OF EXPERTISE—EFFICIENT, ACCESSIBLE, AND COMPETENT INPATIENT CARE THAT REMAINS PATIENT-CENTERED AND IN-SYNCH WITH OUTPATIENT CARE FOLLOWING HOSPITALIZATION. THIS TEAM-BASED APPROACH HAS BEEN THE MEASURE OF QUALITY FOR SUCCESSFUL HOSPITALIST PROGRAMS.

PATIENT SAFETY AND SYSTEMS IMPROVEMENTS

THE ESTABLISHED LINK BETWEEN PATIENT SAFETY AND PATIENT CARE SYSTEMS GAVE A BOOST TO THE HOSPITALIST MOVEMENT. HOSPITALISTS BECOME INTIMATELY FAMILIAR WITH THEIR WORK SYSTEMS, FAR MORE SO THAN DO VISITING PRIMARY CARE PHYSICIANS, AND THEY DEVELOP PERSONAL RELATIONSHIPS WITH ALL MEMBERS OF THE HEALTH CARE TEAM. IT SEEMS NATURAL THAT, BY PRACTICING IN THE SAME VENUE DAY-IN AND DAY-OUT, HOSPITALISTS WOULD BE ABLE TO IMPROVE THE EFFICIENCY, QUALITY, AND SAFETY OF CARE DELIVERY. A REVIEW OF LITERATURE IN THE PAST 5 YEARS REFLECTS THIS SHIFT IN FOCUS: FEWER STUDIES NOW EMPHASIZE THE COST.
savings of hospitalists; more highlight hospitalists’ work in improving quality and patient safety through systems analysis and change.

**Board Certification and Public Accountability**

Like all physicians, hospitalists are accountable to society, particularly when it comes to ensuring safe, high-quality care during patients’ transition from the ambulatory clinic to the hospital and while hospitalized. The question is how will hospitalists demonstrate objective competence in the critical elements of their practice—transition of care and systems improvement—upon which success of the hospital medicine model depends?

For more than 70 years, the internist’s accountability to society has been facilitated by the work of the American Board of Internal Medicine (ABIM). The board certification process establishes that physicians who claim to be competent in their field have, in fact, demonstrated this competence. Recognizing that skills and knowledge fade over time, and that medicine is a constantly changing field, the ABIM improved this accountability by enacting the maintenance of certification (MOC) process. Internists must now demonstrate ongoing competence through a secure examination, self-assessment modules, and practice-improvement module every 10 years [4].

The certification process examines the competency of physicians who have been through a training program in their area of specialization. Those in hospital medicine recognize that it is not through training, but through practice, that the skills for competent hospitalists are developed. The current MOC process does not provide a mechanism for tracking competency of a non-training-based specialty.

ABIM is exploring a new initiative to recognize areas of “focused practice” through its MOC program in internal medicine. Here, focused practice recognizes areas within internal medicine where those maintaining certification can demonstrate proficiency. Hospital medicine is the first to be considered for focused-practice recognition; over time, ABIM will consider other areas that meet its criteria.

The focused-practice concept is currently being considered by the American Board of Medical Specialties, which oversees the certification processes of its 24 member boards. Meanwhile, the construction of the focused-practice certification program in hospital medicine has already begun, based on the dual tenets that physicians must (1) demonstrate competence as internists, and (2) have practice experience in hospital medicine. To become certified, hospitalists will have to complete specific performance-assessment requirements and take an exam in hospital medicine, with content similar to that of the current internal medicine examination but with a larger percentage of questions on inpatient care.

To successfully meet its public accountability goals, the MOC process must address two critical elements of a hospitalist’s practice: transitions of care and systems improvements. To this end, the exam will address ambulatory-based content needed
for successful transitions of care. The inpatient-based content will assess the skills necessary for the primary management of inpatient medical disease, emphasizing consultation and co-management; responsible resource utilization; and the skills necessary to effect systems improvements to further patient safety and quality.

Some have questioned the motives behind recognition of focused practice in hospital medicine, arguing that it is a scheme to increase hospitalists’ compensation. While this may be a result of the recognition, successful completion of the focused-practice requirement provides an objective means for guaranteeing that hospitalists possess the skills and knowledge necessary for quality care and patient safety in the hospital setting.

Critics of hospital medicine note that patient safety and quality of care are equally important in ambulatory medicine—a point about which there is no disagreement. But meaningful assessment of proficiency in systems improvements is best conducted in the venue in which the physician practices, and inpatient and outpatient clinical care venues differ significantly. For example, systems improvements to prevent deep-vein thrombosis, central-line infections, and ventilator-associated pneumonia are critical for the hospital medicine internist but less important for the predominantly ambulatory-based physician. Ideally, there would be a similar requirement for focused practice in ambulatory medicine, with equivalent attention to systems unique to the ambulatory settings. Perhaps as the patient-centered medical-home concept evolves, an ambulatory-care focused-practice requirement will emerge to test competence in the system skills critical to this care environment. In fact, objective certification might just demonstrate the physician accountability necessary to leverage funding the medical-home initiative.

Rudolf Virchow concluded his treatise on the typhus epidemic in 1848 by saying, “Medicine has imperceptibly led us into the social field and placed us in a position of confronting directly the great problems of our time” [5]. Hospitalists are not guilty for the magnitude of system-induced medical errors, but we are responsible. Will focused practice in hospital medicine solve our patient-safety and transitions-of-care problems? The answer is “no.” But there is no doubt that a program of focused practice in hospital medicine that emphasizing these skills—both through exams and self assessments of knowledge and practice—will eventually differentiate those who wish to be perceived as advocates of patient safety and quality are those who are.

We must be accountable to society in developing safe and effective health care systems. A program of focused practice in hospital medicine that objectively demonstrates competence in these principles is the first step to re-establish our covenant with society—one that promises that eventually, we will close the quality chasm.
References


Jeffrey G. Wiese, MD, is an associate professor and the associate dean for graduate medical education at the Tulane University Health Sciences Center in New Orleans. He is also vice chairman of medicine, chief of the charity medical service, and director of the Tulane internal medicine program. Dr. Wiese serves on the board of directors for the Society of Hospital Medicine and Council for the Association of Program Directors in Internal Medicine.

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JOURNAL DISCUSSION
The Hospital Medicine Movement
Chloe White


Hospital medicine is the fastest-growing medical specialty in American medical history, now boasting more than 20,000 hospitalists. In the mid-1990s, Drs. Robert Wachter and Lee Goldman created the term “hospitalist” to refer to a new breed of physicians who spent more than 25 percent of their time caring for inpatients or whose primary focus was general inpatient care [1]. In “The State of Hospital Medicine in 2008” Dr. Wachter outlines the key reasons for this field’s remarkable growth. He also touches on some of the questions hospital medicine raises and postulates how the solutions to those questions and concerns may shape the future of the field. The article emphasizes the positive influence hospital medicine has had on inpatient care by replacing the primary care physician with the hospitalist.

A hospitalist is a physician who assumes the responsibility for managing care of hospitalized patients [2]. The hospitalist we know today emerged in response to the need to replace primary care physicians, who treated their patients in all care settings, with physicians who could focus solely on care of patients while they were in the hospital. The economic impetus for this change was first felt when Medicare started to reimburse hospitals on a fixed-payment system based on each patient’s discharge diagnosis, while the physicians continued to charge per day or per visit. Hospitals attempted to reduce the length of stays and costs of care, but primary care physicians still prescribed traditional, two-week inpatient recovery times [2]. Hospitals began to look for physicians whose incentives, motives, and clinical predilections were in line with new hospital policies. They found what they were looking for in the hospitalist.

The financial crunch was accentuated by what hospitals viewed as inefficient care routines of primary care physicians. Many of them came to the hospital on an episodic basis to visit one or two patients and frequently missed important test results and care inquiries. Time spent at the hospital proved less productive and was an economic loss for the physicians [3]. This fact of practice and the clear need for more efficient hospital care further motivated hospitals to adopt the new field of hospital medicine.

As the practice became more widespread, hospitals noted its positive influence on care. Data collected on several hospitalist programs show a vast improvement in
The value of care—quality of care divided by the cost of care [2]. The data illustrate that hospitalists are a clear economic aid to the hospitals. This is probably because, since they spend all their time at the hospital, hospitalists can help the system work more smoothly. They’re not visitors like primary care physicians, and they are not focused on one or two patients.

The hospitalist soon became more than just an economic aid. In the late 1990s, new reports of medical mistakes encouraged hospitals to take a second look at the quality of care administered throughout the system. The hospitalist movement once again produced data suggesting that the presence of hospitalists could improve the quality of care without straying from the hospital’s financial and professional interests. Recognized as more than an economic utility, hospitalist programs began to grow in number and thrive.

The system is not without hazards, however. Because of the demand, hospitalists risk being stretched in too many directions with the possibility they may burn out after a few years. This is an eventuality that can be avoided through planning. Studies in 2002 of the first 5 years of the movement showed a 13 percent rate of hospitalist burnout, a relatively low rate, particularly when compared to specialty physicians such as intensivists and emergency medicine physicians [1].

Another challenge the field faces is how to gain credibility and recognition for the competencies acquired through practice without additional specialty training [2]. While certification of hospitalists could be an effective way to strengthen recognition, it might also have an unintended consequence—if hospitals demand certification of those practicing hospital medicine, the primary care physicians who lack that certification might be further separated from patient care.

Dr. Wachter’s discussion of the basic format of hospital medicine and its issues and concerns leaves some questions unaddressed. From a narrative medicine point of view, discontinuity of knowledge and care as patients move between their primary care physician and the hospitalist could be problematic. Narrative medicine requires physicians to recognize, absorb, and interpret stories of their patients and is a skill that comes most easily through a long-term relationship. Physicians who engage in narrative medicine can better understand not only the patient but the disease itself. One reason the primary care physician has historically been responsible for both inpatient and outpatient care is that he or she knows the patient’s past and present symptoms, medical and family history, and record of past care. This physician has already absorbed and interpreted the patient’s stories. An increasing number of physicians are turning to narrative medicine to better understand their patients’ current afflictions and medical history and reach more contextual diagnoses [4]. It is difficult to imagine that, in the absence of long-term relationships with patients, hospitalists are able to engage in narrative medicine when trying to execute long-term treatment plans.
Gary Applebaum addresses this concern in “Advantages and Limitations of the Hospitalist Movement” by proposing a hybrid model that bridges the widening life-familiarity gap between primary care physician and hospitalist. The hybrid model focuses on a rotation system where one out of five or six primary care physicians in a practice is present at the hospital at least half the time. This model would relieve some of the barriers to information flow and possibly promote better communication between the hospital and the primary care physician’s office [5]. The patient’s primary care physician, who has the long-term relationship necessary to engage in narrative medicine, has access to the physician who treats the patient in the hospital and, possibly, to the patient.

A related issue not mentioned in Dr. Watcher’s article is a worry many physicians have that they may lose some clinical proficiency if they are replaced by a hospitalist. The hybrid model is a possible fix for this concern also, since the physician would still spend half of the working time during his or her rotation in the hospital, retaining many of the inpatient skills that would otherwise have been lost [5]. Further research is needed to understand this problem and its possible effects and solutions.

Clearly, the hospitalist movement has made remarkable progress in its short 20 years. With accomplishments including two dedicated textbooks, a well-read journal, and a published list of core competencies, hospital medicine is making considerable gains as a professional society [2]. To maximize economic efficiencies and ultimately improve medical professionals’ ability to deliver quality, whole-person care, this field should focus on addressing the important challenges mentioned above. Failing to do so could hinder future advancements to inpatient care by marginalizing the participation of the primary care physician and causing burnout among hospitalists.

References

Chloe White has a bachelor of arts degree in philosophy from the University of San Diego and is currently enrolled in the Bioethics and Health Policy graduate program at Loyola University Chicago. She is working as an intern for the American Medical Association’s Council on Ethical and Judicial Affairs, where she researches and
analyzes information to support the council’s ongoing projects. Her interests include end-of-life care and stem cell research.

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CLINICAL PEARL
Indications for Use of TIPS in Treating Portal Hypertension
Elizabeth C. Verna, MD

For more than 20 years, transjugular intrahepatic portosystemic shunts (TIPS) have been used to treat complications of portal hypertension and are now being introduced in an expanding number of clinical settings. The TIPS procedure involves the angiographically guided creation of a connection between the hepatic vein and the intrahepatic portal vein that allows blood to flow from the portal vein to the inferior vena cava and back to systemic circulation with little resistance. The shunt, generally put in place by interventional radiologists, is kept open by the deployment of a metal stent across the tract. The procedure and evidence for its use in specific manifestations of portal hypertension were reviewed in detail in the American Association for the Study of Liver Diseases (AASLD) guidelines [1].

Accepted indications for TIPS are:
- Multiple episodes of variceal bleeding
- Refractory variceal hemorrhage despite adequate endoscopic treatment
- Refractory ascites

Experimental and emerging indications:
- Bleeding portal hypertensive gastropathy
- Bleeding gastric varices
- Gastric antral vascular ectasia
- Refractory hepatic hydrothorax
- Hepatorenal syndrome
- Budd-Chiari syndrome
- Veno-occlusive disease
- Hepatopulmonary syndrome
- Protein-losing enteropathy due to portal hypertension

Gastrointestinal Bleeding
Portal hypertension may lead to gastrointestinal bleeding from a variety of lesions, including varices of the esophagus, stomach, small or large intestine, portal hypertensive gastropathy (PHG), and gastric antral vascular ectasia (GAVE). The role of TIPS in the treatment and prevention of these lesions has not been fully studied in most cases, but about one-third of deaths from cirrhosis are due to gastrointestinal bleeding. TIPS procedures are best studied in this patient population and have been shown to eradicate esophageal varices effectively. The shunts are successful in the treatment of esophageal variceal bleeding that is refractory to first-line endoscopic and pharmacologic therapy, especially in patients who are poor
candidates for surgery [1-5]. The procedure is more effective in secondary prevention of rebleeding than endoscopic and medical therapy, although at the expense of increased encephalopathy, the risk of procedural complications, and likelihood of no improvement in overall survival [1, 6-10]. In recent guidelines, TIPS is not recommended for prevention of rebleeding in patients who have bled only once in the past [1].

Despite its success in eradicating varices, TIPS cannot be recommended in all patients because of the risks of encephalopathy and procedural complications. TIPS should not be used for primary prophylaxis of esophageal variceal bleeding, for example, inasmuch as the large majority of patients with varices never bleed, and bleeding on initial presentation can be controlled with urgent endoscopic therapy in most cases [1]. In general, choosing among endoscopy therapy, TIPS, or surgical shunt for acute variceal bleeding or secondary prophylaxis should be based upon the individual patient’s bleeding, encephalopathy, and surgical risks. Bleeding from gastric or ectopic varices or PHG has been shown to improve with TIPS, although this is not yet well studied [5].

**Refractory Ascites and Hepatic Hydrothorax**

Ascites and hepatic hydrothorax refractory to medical treatment present significant clinical dilemmas for many hepatologists. The treatments available for refractory ascites include serial paracentesis, TIPS, surgical shunting, and liver transplant. Several randomized trials have compared TIPS to repeated large-volume paracentesis in the treatment of refractory ascites, which are summarized in at least three meta-analyses [11-13]. In general, these studies showed that TIPS is superior in preventing ascites reaccumulation but is associated with more complications such as hepatic encephalopathy, and it remains unclear whether overall mortality is improved. Current guidelines recommend that TIPS be reserved for patients with refractory ascites who are intolerant of repeated paracentesis [1]. Additional studies are needed because many of the existing studies were conducted in the early period of TIPS placement, when complications remained high, perhaps due to inexperience with the procedure. Patient selection is critical, taking into account the risk of encephalopathy and hepatic decompensation associated with TIPS. A few, small, uncontrolled studies have also shown a benefit from TIPS in patients with refractory hepatic hydrothorax, and TIPS is a consideration in these patients, especially if respiratory function is significantly compromised [14].

**Other Uses**

TIPS has been implemented in treating a variety of other disorders related to portal hypertension, such as Budd-Chiari syndrome, veno-occlusive disease, hepatorenal syndrome (HRS), and hepatopulmonary syndrome [15]. Data on TIPS in these settings is limited, however, creating a need for more controlled trials.

**Contraindications**

Placement of the shunt has a complex effect on pulmonary and systemic circulation, which results in a rapid increase in venous return to the heart as well as decreased
systemic vascular resistance. Therefore, patients with significant heart failure, valvular disease, or pulmonary hypertension are poor candidates for TIPS. The procedure may not be possible in some patients for anatomical reasons such as significant portal or hepatic vein thrombosis. Replacement of liver parenchyma with tumor, dilated biliary tracts, or cysts in the path of the shunt increases the risks of complications such as tumor spread, bleeding, and infection. Precipitating or worsening encephalopathy is common and must be taken into consideration when deciding whether to use TIPS. Finally, the decision to place a shunt should be made by a gastroenterologist or hepatologist in concert with the Interventional radiologist who will perform the procedure, and referral to a liver-transplant center should be considered in all patients who qualify for TIPS and may be transplant candidates [1].

Contraindications for TIPS

Absolute contraindications:
- Primary prevention of variceal hemorrhage
- Congestive heart failure
- Severe pulmonary hypertension
- Severe tricuspid regurgitation
- Active biliary obstruction
- Sepsis
- Multiple hepatic cysts or Caroli’s disease

Relative contraindications:
- Hepatocellular carcinoma
- Moderate pulmonary hypertension
- Portal or hepatic vein thrombosis
- Severe coagulopathy or thrombocytopenia
- Severe encephalopathy

References
5. Chau TN, Patch D, Chan YW, Nagral A, Dick R, Burroughs AK. "Salvage" transjugular intrahepatic portosystemic shunts: gastric fundal...


Elizabeth C. Verna, MD, is a fellow in gastroenterology at Columbia University Medical Center in New York City. She is a graduate of Columbia University College of Physicians and Surgeons and Columbia University Medical Center internal medicine residency program, where she spent one year teaching medical students and residents as the internal medicine chief resident. Dr. Verna conducts clinical research with Columbia's Center for Liver Disease and Transplantation and looks forward to a career as a transplant hepatologist.
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HEALTH LAW
Delimiting Hospitalist Liability
Erin A. Egan, MD, JD

As hospitalist practice becomes more widespread and expands into new areas of inpatient care, liability and scope of practice will receive greater attention. Legal liability arises from the duty that a physician has to a patient—the physician’s obligation to “possess and bring to bear on the patient's behalf that degree of knowledge, skill, and care that would be exercised by a reasonable and prudent physician under similar circumstances” [1]. The challenge in hospital medicine is that, with the variability of training, experience, and practice composition, the “reasonable and prudent physician” standard becomes elusive.

A hospitalist is a physician whose primary professional focus is the general medical care of hospitalized patients, and hospitalist practice is highly variable, adapting to the needs of an individual hospital or system.

Hospitalists have been used in U.S. hospitals for about 12 years, and, on the heels of this innovation, the question of liability has surfaced. Describing the behavior of a “reasonable and prudent” physician is always a challenge, and one that juries wrestle with. The diversity of practices that hospitalists engage in increases this challenge. Currently, hospital medicine is not a specialty and does not have a certifying board examination, although a new initiative is under way to recognize the unique skills hospitalists possess through the Recognition of Focused Practice in Hospital Medicine by the American Board of Internal Medicine (ABIM)—a development that gives credit to their expertise and contributions [2-4].

The responsibility of a hospitalist for co-managed care of a patient was examined in Domby v. Moritz [5]. This case involved Helen Domby, a patient with a cardiac condition who was admitted through the emergency department by a hospitalist, Dr. Moritz. After consultation with a cardiologist, Dr. Gordon, and the emergency department physician, Dr. Zlotnick, Dr. Moritz examined the patient and transferred her to the intensive care unit, with the understanding that the care of her cardiac condition was to be managed by cardiology. Over the course of the night Dr. Gordon was called concerning several clinical issues and gave orders in response. Early in the morning following her admission, Mrs. Domby became unresponsive and died before Dr. Mortiz could reach the hospital.

Andre Domby, Helen’s husband, filed a malpractice action against Dr. Moritz, the hospital, and Dr. Gordon. The defense entered expert testimony on behalf of Dr. Moritz which stated that he relied appropriately on cardiology for management of
Mrs. Domby’s cardiac condition, and that, since Dr. Moritz did not arrive until after
the patient’s death, his actions did not cause her death. An expert witness on the
Domby legal team testified that Dr. Moritz should have been in direct
communication with cardiology and that he failed to ensure that cardiology
examined her on the night of her admission. A revised opinion offered by Mr.
Domby’s expert specifically stated that Dr. Moritz should have recognized the
seriousness of the patient’s condition, discussed it with Dr. Gordon, and ensured that
he took appropriate action.

The court held that the testimony of Mr. Domby’s expert witness was inadmissible
under the rules of evidence. The expert speculated on the treatment that Dr. Gordon
“should” have instituted and said that Dr. Moritz should have overridden Dr.
Gordon’s if he disagreed with it. In stating this, Mr. Domby was holding a hospitalist
co-managing a patient with a specialty service to the standard of care of the
specialist. In other words, if Dr. Moritz could not rely on Dr. Gordon’s opinion for
cardiology care, he—Dr. Moritz—was being forced to act with the expertise of a
cardiologist. But the defense argued that the responsibility of hospitalists needs to be
more narrowly based on the services they provided in the specific context.

This initial foray into the appropriate scope of responsibility of a hospitalist is
reassuring. Dr. Moritz produced evidence that in treating Mrs. Domby he met the
applicable standard of care for a hospitalist (supervising and coordinating a patient’s
medical care while the patient is in the hospital) and that his actions did not cause
Mrs. Domby’s death. The court sustained Dr. Moritz’s objection, ruling in his favor.
A hospitalist co-managing a patient is only liable for the aspects of a patient’s care
for which he or she is directly responsible.

The limitations of the type of services that the hospitalist was providing in Domby v.
Moritz set the scope of the physician’s responsibility. If this becomes the precedent
for legal liability for hospitalists, responsibility will mirror the flexibility of the
hospitalist practice scope. Hospitalists functioning as consultants should only be
liable for care provided in the scope of the consultation. Care provided in skilled-
nursing and long-term-care facilities will need to conform to the standard of care of
physicians practicing in that setting.

Scope of practice is an important issue in professionalism and medical liability.
Physicians, including hospitalists, should strive to tailor the scope of their practice to
the level of competence that they actively maintain, and they should seek to meet the
competency guidelines outlined by their professional society. By upholding
professional responsibility, physicians allow courts to define the level of care a
provider is liable for and encourage courts to rely on those standards for determining
liability. As hospital medicine evolves, the commitment to high-quality, safe care is
the best protection against concerns of legal liability.

Notes and References


Erin A. Egan, MD, JD, is an assistant professor of medicine at the University of Colorado Denver, a faculty associate with the Center for Bioethics at the University of Colorado Denver (UCD), and a visiting lecturer at the Neiswanger Institute for Bioethics and Health Policy at the Loyola University Stritch School of Medicine in Maywood, Illinois. She is the ethics committee chair for the Society for Hospital Medicine, and she serves on the ethics consultation subcommittee, the ethics committee, and the organizational ethics committee at UCD, is the director of quality improvement for the Hospital Medicine Group, and the program director for the Holocaust in Contemporary Bioethics Program.

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POLICY FORUM
Hospitalist Medicine: Voluntary or Mandatory?
Marc B. Royo, Laura L. Kimberly, MSW, MBE, and Alexandria Skoufalos, EdD

The hospitalist model has evolved rapidly into an established, site-based specialization that serves as the pillar of inpatient care for a number of facilities across the country. In the 10 years since the advent of the hospitalist movement, there has been significant growth in the field, with approximately 20,000 hospitalist clinicians in the United States today [1]. Despite this remarkable expansion, questions about the model of care remain. With a growing repository of encouraging cost and outcomes data, inquiries about hospitalist medicine have slowly moved away from the merits of the model. A significant debate now centers on whether the use of hospitalists should be mandated at institutions or remain a voluntary practice.

Evolution of the Hospitalist Model
The voluntary hospitalist model represents a logical progression from the traditional physician-hospital relationship under which primary care physicians coordinated care of their office or clinic patients in hospitals where they (the physicians) had admitting privileges. Under the new model, hospitalists serve on hospital staffs in place of primary care physicians and coordinate acute care for all inpatients. In a voluntary hospitalist model, primary care physicians retain the option to manage their patients throughout each hospitalization [2]. A mandatory hospitalist model obligates primary care physicians to relinquish their inpatient-care services and transfer acute-care management to a hospitalist. Understandably, there are few mandatory models in practice.

If history is any indication, the likelihood that insurer-mandated hospitalist systems will become widespread appears slim. Major health insurance companies across the country began requiring physicians to transfer care of their hospitalized patients to hospitalists in the late 1990s, citing shared benefits for both hospitals and primary care physicians. The directive, however, did not allow for the systematic and mutual evaluation of the hospitalist model and naturally evoked physician opposition and resistance [3]. In a partial attempt to protect the interests of nonhospitalist internists, the American College of Physicians (ACP) responded by affiliating with the National Association of Inpatient Physicians—a burgeoning hospitalist medical association that is now recognized as the Society of Hospital Medicine (SHM)—and formalized an official position for both organizations that supports only voluntary patient transfers to hospitalists.

While both the ACP and SHM continue to oppose a mandatory hospitalist framework, it is interesting to note that the voluntary model appears to be declining
in favor of increased physician employment by hospitals [4]. Underlying this trend are strong economic forces, impinging on physicians and hospitals alike, that have facilitated a self-selecting progression toward a structural network that closely resembles the mandatory model originally proposed by insurers. This emerging model represents an alignment of physician and hospital interests driven by the recognition of mutual benefit.

**Contributors to the Movement**

Cost pressures have dramatically influenced primary care physicians’ willingness and ability to manage their hospitalized patients. Among the most-cited pressures are: inpatient reimbursement rates that have not kept pace with rising practice costs, heightened pressures of malpractice that accompany the delivery of care in a setting of increased liability, and costs associated with the time-based tradeoff between outpatient volume and the continuity of ambulatory and inpatient care. As a result, an increasing number of primary care physicians have recognized value in a hospitalist model [5, 6].

Health care systems, subjected to similar cost constraints, are basing decisions to invest in hospitalist programs on a growing body of literature that demonstrates the cost-effectiveness of the hospitalist model [7]. The 24-hour access to an on-site physician provides a level of care that has translated into reductions in patient length of stay and lower hospital costs, while maintaining a standard of quality equivalent to that delivered by primary care physicians [7, 8]. And, because hospitalist models limit the multiplicity of physicians who oversee inpatient care, hospital systems view the framework as an ideal means for supporting the implementation of quality and safety initiatives [5].

**Patient-Centered Initiative**

As primary care physicians elect to provide a diminishing share of inpatient services, and health care systems seek to improve quality and efficiency, we are seeing a restructuring of the traditional physician-hospital paradigm, one in which the interests of primary care physicians and hospitals seem to have found common ground. What is lost, however, in the oversight of acute inpatient care is the most critical aspect of any health care delivery model—the patient. While a hospitalist model that is built around the goals of improving quality and efficiency does not necessarily conflict with patient care interests, the potential for these goals to diverge certainly exists. A great breadth of literature has validated the hospitalist model as a means to improve the efficiency of inpatient care, but the extent to which quality outcomes truly benefit from this model remains unclear [8].

The question, then, is not whether a hospitalist model should retain its predominantly voluntary status, but rather how the hospitalist model can be designed to ensure that the patient-centered initiatives of quality and safety remain on equal footing with the economic drivers of cost and efficiency. As we adopt this new framework, physicians must evolve in a manner that preserves their ethical commitment to the patient’s well-being. Like the concerns that emerged with the introduction of the
managed care model in the 1990s, when fiscal constraints and limited patient choice impinged on physician autonomy in determining care, hospitalist systems present their own intricacies [9-11]. The hospitalist model introduces the potential for diminished patient autonomy, poses challenges for the continuity of care and patient-physician communication, and even raises possible conflicts of interest when financial incentives and patients’ interests do not align [12].

Given current upheavals in the financial markets, it is likely that health care cost-containment measures, with which the hospitalist model is finding itself increasingly entwined, will take on greater importance in the national and global economies. While the long-term impact of today’s economic climate on health care delivery remains to be seen, it is clear that, as fiscal pressures grow, the significance of safeguarding patients’ best interests becomes paramount. Assessments confirm a general acceptance of the hospitalist model [13, 14]. Patients appreciate improved access to a physician dedicated to their care, even if it is one with whom they are less familiar. For their part, hospitalists, as newly devoted stewards of inpatient care resources, must expand on this opportunity to preserve the focus on the patient. Further research will gauge the hospitalist model’s capacity to improve clinical outcomes, but the parallel progression of quality, safety, cost, and efficiency, in a manner that upholds Hippocratic ideals, can only be achieved through the watchful dedication of hospitalists themselves.

References

Marc B. Royo is a third-year student at Jefferson Medical College of Thomas Jefferson University in Philadelphia, and Widener University in Chester, Pennsylvania.

Laura L. Kimberly, MSW, MBE, is director of special projects for health policy at Jefferson Medical College of Thomas Jefferson University in Philadelphia.

Alexandria Skoufalos, EdD, is vice chair for education and assistant professor for health policy at Jefferson Medical College of Thomas Jefferson University in Philadelphia.

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MEDICINE AND SOCIETY
The Ethics of Efficiency in Hospital Medicine: Developing a New Paradigm for the Patient-Physician Relationship
Elmer Abbo, MD, JD

One largely unappreciated change brought on by the emergence of hospital medicine [1, 2] has been the transformation in the ethical paradigm of the patient-physician relationship. For decades now, medical students have been taught ethics using the professional paradigm of medical ethicists: nonmaleficence, beneficence, and respect for autonomy [3]. Under this model, the doctor is to work tirelessly to promote the health of each patient to the fullest extent possible [4]. The principle of justice, though mentioned, has generally taken a secondary role in traditional teaching of medicine ethics. Of course, medical students and physicians have been instructed to treat all patients equally regardless of their race or sex, but tough questions about the allocation of scarce resources were left for ethicists, policymakers, insurers, and the purchasers of insurance to resolve—not physicians. The role for physicians has been to pursue for each patient all care that might possibly benefit him or her, regardless of cost, and rationing at the bedside was frowned upon [5, 6].

Whether this professional paradigm was ever tenable is debatable, but questioning it today is irrelevant because cost is so inescapably part of modern medical practice. Hospitalists not only accept this reality, they have embraced responsible use of resources as a core principle of the profession. In fact, the first hospitalists evolved from the experiment of managed care and developed a more efficient model for inpatient practice [2] which was then followed by an early, rapid expansion of the field, as hospitals developed hospitalist programs while they struggled to balance the needs of patients [7].

The hospitalist’s focus on efficiency is very much rooted in an ethic of justice. By spending so much time sheparding their patients through the maze of today’s hospitals, hospitalists recognize the limits on resources within the closed system and are willing to balance the medical needs of many patients against each other.

Hospital beds are scarce resources in today’s medical environment, a scarcity that will persist. In the short term, the number of beds available is fixed since the ability to scale up is severely hampered by large infrastructure costs. And when beds are available, nurses may not be. Nursing costs are easily the largest piece of a hospital’s budget, so maintaining a full nursing capacity for empty beds is financially prohibitive, particularly in light of the current nursing shortage that has driven up wages. Since length of stay is the primary driver of all hospital costs, reducing unnecessary days of hospitalization decreases costs and frees precious capacity to
care for sicker patients. Thus, expediting discharge becomes the key to more cost-effective care, and hospitalists have made discharge planning a goal early in the course of a patient’s hospitalization.

Hospitalists’ value to the hospital system is that they see themselves as part of its overall operation and, in many respects, as physician stewards of hospital resources. For example, hospitalists’ concern about expeditious discharge is at least partially motivated by their direct knowledge of patient backlog in the emergency department, an all-too-common problem today [8]. Taking care of patients boarded in the emergency room for lack of beds on the floor motivates hospitalists to identify bottlenecks in expedited discharge for their own patients and resolve them, which they can do because of their broad network of alliances within the hospital. But perhaps more importantly, since hospitalists see themselves as part of the hospital operation, they are also more likely to dedicate themselves to solving work-flow problems at the systems level by working directly with the administration.

Prior to the emergence of hospitalists, hospitals lacked physician allies who could respond to the need for greater efficiency. Primary care physicians and specialists practicing under the traditional model were essentially unaccountable for costs. For a primary care physician whose patient needed to be hospitalized, the goal was simply to marshal the resources of the hospital for the benefit of admitted patients. Beyond serving on an occasional committee and accepting ward call from the emergency room for uninsured and unassigned patients as a condition of maintaining hospital privileges, the primary care physician had little concern about overall hospital operations. In turn, the hospital had little control or recourse over the utilization patterns of individual physicians. Similarly, specialists rarely concerned themselves about efficiency and, it can be argued, have been even less beholden to hospital administrators. Administrators, willing to tolerate the decreased efficiency for patient volume, were reluctant to push specialists to improve and thus risk losing access to the lucrative revenue streams specialists provide from complex procedures. Primary care physicians and specialists, then, buttressed the traditional ethic of medical practice without consideration for efficiency.

Of course, concern for efficiency in medicine is not new. Many primary care physicians agreed to care for patients under the capitated payment mechanisms of managed care. But the hospitalist orientation is markedly different from the capitation approach tested under managed care. Doctors working in managed-care organizations were far too removed from the operational decisions of insurers that affected actual practice, and ultimately, they resisted the emphasis on efficiency in that setting because they did not have the flexibility to respond to individual patient needs. Perhaps more importantly, the benefits of the efficiency did not obviously accrue to patients in need. Hence, managed care never accomplished a change in the professional ethic of caring for patients because the concern for efficiency was not really grounded in a concern for justice by the individual physician. Hospital medicine, on the other hand, has been able to quietly transform this ethic by elevating efficiency to a concern of justice because the reality of scarcity is readily
apparent to the hospitalist. Whereas physicians resisted bureaucratic rules set by distant insurers that did not respond to the individual needs of patients, hospitalists make nuanced trade-off decisions about where to save resources, and they do so without rigid and inflexible rules. This sort of rationing exemplifies ethical decision making on the part of hospitalists working within the constraints of the relatively fixed and closed system of the hospital.

Today, hospitalist programs rarely exist without some sort of financial support from their hospital [9]. This support is provided in return for the variety of services that are not compensated through professional billing—services such as managing patients who lack insurance, providing 24-hour on-site coverage, or working on administrative matters. But some may worry that this direct financial support creates dual allegiances to the patient and the hospital system that undermine the traditional medical ethic of unfettered patient advocacy.

Sometimes allegiances do conflict, but the conflict is both necessary and desirable; it prompts development of a new layer of accountability for resource utilization that has been entirely missing from the traditional model. That is not to say that hospitalists practice in unorthodox ways that deviate from the standard of care for managing acute medical problems. The acute management of medical problems is not compromised when patients are admitted in unstable condition or develop complications. Disposition planning, however, toward the end of the hospitalization, presents an opportunity for efficiency gains without compromising medical safety. Recognizing this, hospitalists focus on developing plans that lead to a timely and efficient discharge and then work cooperatively with the larger team, including physical therapists, case managers, and social workers, to achieve this goal. One of the hallmarks of hospital medicine is the recognition that hospitalists are part of a larger team working to provide high-quality care to patients. By utilizing resources that are present within the hospital more effectively, hospitalists are able to decrease length of stay without compromising quality of care [10].

Teaching the New Professional Paradigm
If we are to prepare medical students to practice today’s medicine effectively, we must present a model of medical ethics that reflects and responds to real practice. Medical students must learn that physicians play an active role in the allocation of resources and that such a role is integral to the routine practice of medicine [11]. Resource questions cannot be addressed by policy and administrative decisions made by those who are not at the bedside. Only physicians caring directly for individual patients are in a position to understand the full needs and desires of any patient and then balance these needs against the needs of other patients. This calls for a new understanding of what it means to provide medical care justly.

At the very least, practicing medicine justly means freeing up resources that are being used unnecessarily so they can help those who truly need them. Some experts estimate that as much as 30 percent of medical spending is unnecessary, given the large variation in health care expenditures we see across geographic areas with little
benefit in outcomes in the high expenditure areas [12, 13]. As a group of physicians who have dedicated themselves toward practicing medicine safely, effectively, and efficiently, hospitalists represent a true change in the professional role of the physician and patient-physician relationship. Growth in the number of hospitalists has already helped stem the rise in hospital costs, which have decreased as a portion of total medical expenditures despite an increase in admissions and the complexity of patient illness; fuller ramifications are yet to be seen.

Hospitalists are now poised to change the practice of hospital medicine beyond the traditional domain of caring for medical patients. They are expanding their roles in hospitals and have earned the trust and credibility of their specialist peers. As a profession, hospitalists are starting to argue for stature and authority within their local institutions to assert their brand of medical decision making more broadly. Given the intensity of hospital medicine, burnout has been a persistent issue [9]. If senior hospitalists leave the profession at the time they develop this institutional authority, the reach of the hospitalist approach focused on efficiency will be more limited.

Nevertheless, the field’s improvements, with the increased intensity of services provided within a shorter timeframe [14], are unlikely to disappear. And with this change, the model of unfettered patient advocacy is rapidly becoming anachronistic. Physicians do need to care about the efficiency of the medical care they provide, and those willing to accept this reality will be rewarded, which is part of the reason for the rapid growth in hospitalists. This rapid growth is also a testament to the reality that hospitalists can effectively manage the concerns of dual loyalty to patient and system. In fact, studies have consistently shown no increase in mortality or readmission rates for patients cared for by hospitalists [10, 15]. Patients have largely embraced the new model and have benefited from greater access to a physician at the hospital. Our physician colleagues and the larger health care system of hospitals and insurers have also embraced hospitalists. So now it is time for our understanding of medical ethics to catch up to where we are today and where we will be tomorrow.

References


Elmer Abbo, MD, JD, is an assistant professor of medicine, hospitalist, and inpatient flow director for general medicine at the University of Chicago. He received both his medical and law degrees from the University of Chicago and was an internal medicine resident at the University of Pennsylvania. Dr. Abbo’s academic interests include health system management, the efficient use and allocation of medical resources, and palliative care.

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HISTORY OF MEDICINE
A Transition in Obstetrics
C. Edward Wells, MD

In 2003, Louis Weinstein proposed a new practice model for intrapartum obstetrical care, suggesting obstetricians emulate the “hospitalist model” of patient care. Weinstein defined the “laborist” as a board-certified obstetrician-gynecologist whose focus of practice is managing patients in labor and communicating with their obstetrician regarding outpatient follow-up. In this model, office-based obstetricians provide outpatient antepartum and postpartum care.

The laborist concept takes several forms depending on the type of hospital (teaching versus nonteaching), size of the hospital delivery service, number of obstetricians, and number of uninsured patients. Examples of laborist models are [1]:

- **Teaching Hospital Model.** The earliest laborist models began in the traditional academic teaching hospital which requires 24-hour, in-house faculty supervision of all obstetrical care provided by interns and residents. This represents a team-based approach, providing a clear line of communication and collaboration between the antepartum and postpartum care givers and the delivering physician (laborist). If private patients are admitted, the private physician has the option of supplying inpatient obstetrical care or allowing the laborist to assume responsibility for care.

- **Community Hospital Model.** The laborist assumes inpatient labor and delivery coverage for walk-in and uninsured obstetrical patients and obstetric emergencies and is available to care for private obstetrical patients upon their private physician’s request.

- **Weinstein Model.** In the model proposed by Dr. Weinstein, [2] the hospital would employ laborists to oversee obstetrical care for all patients in labor and delivery. The laborist would manage private patients in labor and give their obstetricians the option to be present for delivery [2].

Since the concept’s introduction in 2003, initial acceptance has been slow; within 2 years, 10 hospitals in the United States reported using laborists [3]. After advertising for laborists, though, hospitals and health care systems reported an overwhelming response from physicians nationwide. Some project that within 10 years most hospitals that deliver 2,000 or more babies a year will employ laborists [4, 5].

**Benefits of the Laborist Model**
Although patients and physicians may not recognize it immediately, the greatest advantage of the laborist model is the availability of an in-house obstetrician at all
A laborist can respond to emergencies instantly, evaluate a patient’s progress frequently, be available to answer questions around the clock, and offer services that might not be available without in-house coverage. For example, many clinicians are unable to offer vaginal birth after cesarean delivery (VBAC) since they would have to be present throughout labor; under the laborist model, opportunities for VBACs increase.

A growing body of literature documents that medical students and residents are increasingly taking lifestyle and workplace conditions into account when making medical-specialty career decisions. Many feel that obstetrics and gynecology is not “lifestyle friendly” compared to other medical specialties [6, 7]. Laborists, though, have the opportunity to choose to work days, evenings, or weekends and benefit from job sharing or part-time employment to balance family and professional needs. This flexibility might make obstetrics more attractive to medical students who would like to pursue that specialty but currently do not because of the demands it has traditionally made on lifestyle.

Some physicians might become laborists to avoid the burdens of running a medical practice—completion of insurance forms, billing and coding requirements, and day-to-day management of running an office or clinic. These functions would most likely be assumed by the laborist’s employer, depending on the employment model utilized.

Obstetricians who remain office-based would probably see a reduction in malpractice premiums, since labor and delivery entail greater risk than pre- and postnatal care. Career satisfaction is likely to increase since more time could be devoted to office visits and surgical procedures without distractions from labor and delivery or on-call requirements [8].

Patients might benefit from a shared model that uses a nurse-midwife and laborist. A recent Cochrane review suggests that midwife-led obstetrical care results in reduced need for regional anesthesia, with fewer episiotomies and instrument-assisted vaginal deliveries. And more women felt they were in control during labor when midwives directed the delivery [9]. A shared model of nurse-midwife and laborist care might result in similar benefits. Other benefits of having a full-time, in-house obstetrician include:

- Standardized skills to interpret fetal heart-rate monitoring.
- Standardized criteria for the use of oxytocin and instrument deliveries.
- Development and refinement of a team approach in the management of obstetrical emergencies, e.g., fetal distress, shoulder dystocia, and obstetrical hemorrhage.
- More opportunities for VBACs in accordance with ACOG guidelines that require physicians to be immediately available throughout active labor, capable of monitoring labor and performing an emergency cesarean delivery [10].
Risks and Shortcomings of the Laborist Model
The most obvious shortcoming of the laborist model is interruption of traditional patient-physician relationships in which the obstetrician provides care from the beginning of pregnancy through the postpartum period. Initially, patients and physicians may resist the laborist model because patients dislike having an unknown physician providing their intrapartum care. In reality, however, many patients whose physicians are partners in large obstetric groups have become accustomed to the idea that an unfamiliar partner may deliver their baby, so the model may not be as foreign as initially believed.

To work effectively, the laborist model requires clear, timely, and complete communication among the office-based obstetrician, patient, and laborist. Patients should be informed well in advance about the existence of the laborist system, in time to research the practice at their delivering hospital and, if desired, change their obstetric care giver. In emergency situations laborists must make treatment decisions rapidly without the benefit of a prior patient-physician relationship and may encounter difficulty in establishing patient trust. For this reason, laborists should develop a plan to introduce themselves to future obstetrical patients by, for example, providing a brochure that introduces them and explains their expectant role, offering a presentation during childbirth classes, or presenting an orientation class for upcoming patients. Patient acceptance of the laborist model remains uncertain, and hospitals that employ laborists may have difficulty attracting obstetrical patients and may lose existing patients who decide to deliver elsewhere. One survey suggests that patients might deliver elsewhere if they knew a hospitalist was going to deliver their baby, but other hospitals report positive experience with the laborist model [13-16].

Ethical Concerns of the Laborist Model
Respect for the patient’s autonomy recognizes the patient’s right to be completely informed about her condition and fully involved in therapeutic decisions. Concerns about patient autonomy demand that the laborist, office-based obstetrician, and patient herself maintain clear communication concerning all treatment options, understanding that differences in management recommendations may occur between the physicians. The expected difference of opinions in management between the laborist and the office-based obstetrician can and should be anticipated so that, when they arise, a mechanism is in place to resolve them. Several topics in labor and delivery over which obstetricians might disagree are [17]:

- Management of the periviable infant at 23-24 weeks gestation.
- Tocolytic therapy in preterm labor.
- Management of preterm, premature rupture of membranes (PPROM).
- Management of VBAC.
- Elective induction of labor at term.
• Use of operative vaginal delivery.
• Elective, non-indicated cesarean delivery.

At times, respect for patient autonomy conflicts with the principles of nonmaleficence and beneficence, such as when a patient desires an elective, non-indicated cesarean delivery. Nonmaleficence and beneficence demand that the physician discuss the risks and benefits of cesarean delivery versus vaginal delivery with the patient and then respect her right to make an autonomous decision. The office-based obstetrician with whom the patient has a long-term relationship, after informing the patient adequately, might consent to her request to pursue an elective, non-indicated cesarean delivery, only to realize that the laborist scheduled for the delivery is unwilling to implement that request. Such differences can be resolved if they are anticipated and discussed before the delivery is scheduled. If one patient is allowed to elect cesarean delivery, does the ethical principle of justice obligate the laborist to treat all those in similar circumstances the same way? While most would agree that all patients have the right to refuse unwanted treatment, do all patients then have a commensurate right to demand an elective, non-indicated cesarean delivery? Certainly medical judgment comes into play here (e.g., are the two patients’ circumstances truly “similar”?), and the office-based obstetrician and laborist must discuss differences in judgment when they exist.

Future of the Laborist Model
The laborist concept is a new and possibly improved practice model that benefits not only obstetricians but also hospitals and obstetrical patients. In the past, obstetricians attempted to deliver all of their patients’ babies, thinking that only they could provide the best care. One can question, however, whether it was truly in the patient’s best interest to have an exhausted obstetrician attend every delivery [18]. Presently, there is little research on the theoretical benefits or shortcomings of the laborist model, yet the movement presents an opportunity to improve the quality and efficiency of care. Realizing that one model will not work for all hospitals and individual situations, the laborist concept in general might allow obstetricians to “keep medicine in perspective and keep more balance in [their] lives,” [19] and in the process, improve career satisfaction, foster career longevity, and reduce burnout. As Kenneth Noller noted during the ACOG Inaugural Address in 2007, “We don’t have the best hours; we don't have the highest incomes and we certainly don't have the lowest malpractice insurance rates,” but we do have “a unique and fulfilling specialty that cannot be equaled in any other field” [20].

References


C. Edward Wells, MD, is a professor of obstetrics and gynecology at the University of Texas Southwestern Medical Center in Dallas. He maintains a private practice in
Plano, Texas. His research interests include thyroid disease, diabetes mellitus, and first-trimester complications of pregnancy.

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HISTORY OF MEDICINE
Evolution of Hospital Medicine as a Site-of-Care Specialty
Joseph Ming Wah Li, MD

Drs. Robert Wachter and Lee Goldman coined the term “hospitalist” in a 1996 *New England Journal of Medicine* article to refer to a physician who assumes the responsibility for managing the care of hospitalized patients [1]. Hospitalists are relative newcomers in the American health care system—internists have been around for over 100 years, and emergency-department physicians, for approximately 50 years. But hospitalists are not an American innovation; they have existed in other countries (e.g., United Kingdom and Canada) for decades. While some physician specialists are defined by the population they serve (geriatricians), the procedures they perform (orthopedic surgeons), or the organs they treat (dermatologists), hospitalists, like emergency-department physicians, are defined by their work location.

Who Are They?
In the late 1990s, the majority of hospitalists were general internists, but a significant number also had subspecialty fellowship training (e.g., in pulmonology, nephrology, etc.). Today, roughly 80 percent of hospitalists are general internists; smaller numbers (about 10 percent) have medical subspecialty training or other postgraduate training (about 5 percent in family medicine and 5 percent in pediatrics) [2]. The average hospitalist is 38 years of age with roughly 5 years or less experience in the field [2]. In academic medical centers, it is common for a physician to work as a hospitalist for one or more years between residency and fellowship training, but the majority of hospitalists view hospital medicine as a career. While most work full time, many do not, since the defined schedule appeals to physicians who wish to spend time with families or in nonclinical activities like research.

How Many Are There?
Since 1996, the number of hospitalists in the United States has grown rapidly. Their numbers predominate on both coasts and in large hospitals but are found throughout the country in hospitals of all sizes. In a little over 10 years, their estimated number has increased more than tenfold—from 2,000 to more than 20,000 [2]. No one is certain how many hospitalists are needed, but some believe that the number will double again in the next 10 years.

What Are Hospitalists’ Clinical Roles?
Early in the movement, hospitalists routinely cared for unassigned, hospitalized medical patients, working with the primary care physicians of these patients. Today, in addition to working with primary care physicians, most hospitalists co-manage
inpatients with medical and surgical subspecialists (e.g., nephrologists, gastroenterologists, or orthopedic surgeons), deliver care in hospital short-stay units, provide inpatient medical consults, and lead hospital rapid-response teams. Particularly in community hospitals, they deliver care for patients in intensive care units and post-discharge settings such as transitional-care units and rehabilitation hospitals. A small but growing number work as proceduralists, performing traditional bedside procedures.

In community hospitals, where fellowship-trained, critical-care physicians are often in short supply, hospitalists provide much of the care in intensive care units, either along with or in lieu of critical-care physicians.

**What are Hospitalists’ Nonclinical Roles?**

In teaching hospitals, hospitalists have assumed responsibility for teaching medical students and residents in internal medicine programs, and some participate in the education of allied health professionals (e.g., nurses, physician assistants, and pharmacists). Medical students are typically introduced to hospitalists early in their third year of medical school and become familiar with them as influential teachers during the third and fourth (i.e., clinical) years. In internal medicine training programs, hospitalists teach throughout residency. The role of hospitalist as teacher will only expand.

Hospitalists are often integral care team members and leaders of quality initiatives; they sit on hospital committees and assume leadership roles on committees such as health information management, pharmacy, and therapeutics.

**What Is Driving this Growth?**

In the late 1990s and early in this century, cost savings was the predominant force behind the development of many hospitalist programs. Hospitals and payers recognized that hospitalist care was linked to decreased length of stays and resource use. Greater patient throughput correlated with hospital revenue, giving managed care and hospital executives reasons to develop hospitalist programs.

Over the past few years, improvements in patient safety and health care quality prompted hospital executives to conclude that safer care does not necessarily mean more costly care. But safer care often requires greater availability and participation by physicians as integrated team members. As a group, hospitalists meet those requirements. They are uniquely positioned to recognize opportunities for improvement and able to develop more effective systems of care, thus helping hospitals comply with the growing number of quality mandates set forth by payers.

The development of the hospitalist model has increased the availability to outpatients of primary care physicians who no longer want to provide inpatient care. Primary care physicians can establish their outpatient practices knowing that hospitalists will care for their patients when they are hospitalized. The number of primary care
physicians who personally coordinate hospital care for their patients has declined dramatically throughout the country.

The Accreditation Council for Graduate Medical Education’s (ACGME) resident work-hour restrictions have markedly curtailed the number of hours residents can work in the hospital. Violation of ACGME rules is not an option; a violation puts a program at risk of losing ACGME accreditation, which, in turn, would jeopardize the availability of the relatively inexpensive resident workforce and could mar an institution’s reputation.

Most hospitals have relied on hospitalists to fill gaps in patient care and medical student teaching caused by the mandated shorter work week for residents.

**What Are Some Adverse Effects of this Growth?**
The number of physicians who complete postgraduate physician training programs in the United States has not risen significantly over the past 10 years. During this time, however, a growing number of graduates have chosen hospital medicine positions over traditional practice fields. In many training programs, the number who opt for positions in hospital medicine dwarfs the number choosing positions in primary care and nearly rivals the number who choose to pursue additional subspecialty training. The availability of hospital medicine is cited as one of many reasons why fewer trainees than in the past are selecting careers in primary care.

After cognitive skills, communication is often named as the most important quality for hospitalists. Any system becomes more complicated with each additional step, and the hospitalist model has injected another clinician into patients’ health care delivery system. While a primary care physician may “know” a patient for 30 years, the hospitalist typically sees a patient 4 to 5 days. Hence, the model of care demands that the hospitalist and primary care physician transmit patient information in a timely manner at the beginning, throughout, and end of a patient’s hospital stay. Patient privacy laws (e.g., Health Insurance and Portability and Accountability Act or HIPAA) and the lack of a uniform platform for electronic medical records make effective, efficient communication a challenge. Without communication and an infrastructure to address these issues, patients are at risk for medical error.

**What Does the Future Hold for Hospital Medicine?**
The person who set foot in a hospital emergency room 50 years ago was more likely to be greeted by a nurse than a doctor. The role of an emergency-department physician—indeed the comprehensive emergency department itself—was not commonplace. If a patient went to an emergency department today and did not see a physician, he or she would be surprised and outraged. The hospitalist movement, while following this trajectory, is catching on far more quickly. Hospitalists routinely care for the majority of patients in many hospitals across the country, even though most patients are not familiar with the role of hospitalists. In the near future, I think patients will see hospitalists in all of our nation’s hospitals.
As hospital medicine matures, research will contribute to the growing literature and body of knowledge that will push hospitalists toward acquiring new competencies. The 2-year-old *Journal of Hospital Medicine* became listed by MEDLINE within the past year, and the American Board of Internal Medicine is developing an examination for a certification in hospital medicine. The internist of the future will most likely be able to receive board certification with a focus on hospital medicine. Whether it is patient care, teaching, or research, the future of hospital medicine is bright.

**References**


Joseph Ming Wah Li, MD, is an assistant professor of medicine at Harvard Medical School, director of the hospital medicine program, and associate chief for the Division of General Medicine and Primary Care at Beth Israel Deaconess Medical Center in Boston. Dr. Li is a charter member of the Society of Hospital Medicine (SHM) and an elected member of its board of directors. He was the 2005 recipient of the SHM Outstanding Service to Hospital Medicine Award and was named 2008 Top Hospitalist by the American College of Physicians.

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Securing Patient Satisfaction
Robert M. Centor, MD

Over my 30-year career, I have delivered both outpatient and inpatient care—always in an academic setting. For the past 8 years, however, I have restricted my clinical work to inpatient attending as a hospitalist. The role has prompted me to be cautious about how my interaction with patients impacts their satisfaction with the health care system, their outpatient physician, and me. To my knowledge, data on these concerns are unobtainable, so I need resort to conjecture in this article.

I use the term “satisfaction” with some trepidation. Classic patient-satisfaction questionnaires do not provide the granularity needed to explore these questions adequately. Imagine having had a physician for many years, with whom you developed a strong patient-doctor relationship. Your physician knows you and your medical history and understands your health-belief system. Now, for the first time you need hospitalization, but your physician (whom you adore) no longer delivers inpatient care, so the hospital assigns you a different physician. Having been a hospitalist for 8 years, I understand the stresses inherent in this new relationship. As a patient you might feel abandoned by your outpatient physician. “How dare he (she) not continue my care when I am sick enough for hospitalization?” You might rail at the health care system or the hospital for the absence of physician choice—after all, we can blame the system (or lack thereof) for insisting on this discontinuity of care. Finally, you might direct your anger at me since I am your hospitalist.

I have heard all these concerns expressed in conversations with friends and listened to tales of horrible hospitalists with lousy bedside manners. I have heard pain in the voices of relatives who are angry that the physician they chose and trusted did not come to the hospital. Hospitalist work occurs in a field with many emotional land mines. Patients are vulnerable because of their illness, and we have to develop relationships with them quickly to overcome the lack of a history together.

Parenthetically, this critique is not unique to hospitalists. Too often my hospital patients ask whether I am accepting new patients. They are not satisfied with their primary care physician and believe that I would be better. They are disappointed when I tell them I no longer see outpatients.

There is no denying that the arrangement of predominantly outpatient physicians and hospitalists has added stress to the patient-doctor relationship. The obstacles are surmountable, however, when hospitalists practice with a full understanding of the patient perspective.
Patient-doctor interactions benefit when physicians listen carefully. When meeting new patients, we should take extra time to learn about them—who is this patient, what is his or her belief system, and what are his or her expectations? We should sit down, relax, conduct our initial (and daily) interviews in an attentive fashion; we should allow patients to tell their stories without interruptions, and remember that our conversation is about the patient and the patient’s problems.

How we support colleagues who treat our patients when they are not hospitalized is also critical. Patients often ask (either directly or indirectly) about the quality of their outpatient care, and our answers must be careful, honest, and have the patient’s best interest in mind.

Many new hospitalists have the disadvantage of coming to hospital medicine directly from residency. While residency prepares them with the scientific knowledge they need to deliver competent patient care, it too often neglects patient-interaction skills. Outpatient practice represents a wonderful training ground for developing patient-relationship skills. I worry that new hospitalists don’t develop these skills. They are often torn among many tasks, admitting new patients from the emergency department and discharging patients promptly. In this environment, patients desire their time and comfort. The system can push us toward inadequate patient attention. The best hospitalist groups limit their patient census to a number that allows their physicians to deliver the highest-quality bedside attention.

Hospitalists have a great responsibility in health care delivery. They attend patients who are emotionally vulnerable and shepherd them through the mechanical beast that our hospitals can become. Excellent hospitalists can help patients greatly with comforting words and body language, such as explaining each day’s plans and test results—efforts that build the patient-doctor relationship. These relationships can quickly become intense and require much skill.

With its complexity and speed, hospital medicine poses great dangers and great opportunities. Properly trained hospitalists can help patients clinically and emotionally. We must learn to impart and evaluate these skills in order to secure the best hospital care for our patients.

Robert M. Centor, MD, is the associate dean of the Huntsville Regional Medical Campus at the University of Alabama at Birmingham School of Medicine. He spent 22 years as a division chief of general internal medicine. For 5 months each year he is an attending physician, supervising students, interns, and residents in a VA hospital and community teaching hospital.

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Casalino LP, November EA, Berenson RA, Pham HH. Hospital-physician relations: two tracks and the decline of the voluntary medical staff model. *Health Aff (Millwood).* 2008;27(5):1305-1314.


*Domby v Moritz,* D050165 (Cal 2008).


Noller KL. We are the champions (of women’s health). *Obstet Gynecol.* 2007;109(6):1268-1269.


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About the Contributors

Elmer Abbo, MD, JD, is an assistant professor of medicine, hospitalist, and inpatient flow director for general medicine at the University of Chicago. He received both his medical and law degrees from the University of Chicago and was an internal medicine resident at the University of Pennsylvania. Dr. Abbo’s academic interests include health system management, the efficient use and allocation of medical resources, and palliative care.

Dawn Brezina, MD, is a member of the Duke University clinical faculty and Hospitalist Program at Durham Regional Hospital, Duke University Health System in North Carolina. She received a medical degree from the University of Miami Miller Medical School and is ABIM board certified in internal medicine. Her areas of interest include pre-operative and peri-operative management and pre-operative clinic.

Robert M. Centor, MD, is the associate dean of the Huntsville Regional Medical Campus at the University of Alabama at Birmingham School of Medicine. He spent 22 years as a division chief of general internal medicine. For 5 months each year he is an attending physician, supervising students, interns, and residents in a VA hospital and community teaching hospital.

Erin A. Egan, MD, JD, is an assistant professor of medicine at the University of Colorado Denver, a faculty associate with the Center for Bioethics at the University of Colorado Denver (UCD), and a visiting lecturer at the Neiswanger Institute for Bioethics and Health Policy at the Loyola University Stritch School of Medicine in Maywood, Illinois. She is the ethics committee chair for the Society for Hospital Medicine, and she serves on the ethics consultation subcommittee, the ethics committee, and the organizational ethics committee at UCD, is the director of quality improvement for the Hospital Medicine Group, and the program director for the Holocaust in Contemporary Bioethics Program.

Mary Ehlenbach, MD, is a pediatric hospitalist at Mary Bridge Children’s Hospital in Tacoma, Washington. Her research interests include the care of medically complex children, family-centered care, and teaching medical students and residents.

Laura L. Kimberly, MSW, MBE, is director of special projects for health policy at Jefferson Medical College of Thomas Jefferson University in Philadelphia.
Louise P. King, MD, JD, is a third-year resident at Parkland Memorial Hospital in Dallas, in obstetrics and gynecology. Prior to becoming a physician, Dr. King practiced law that specialized in constitutional, criminal, and indigent legal matters.

Joseph Ming Wah Li, MD, is an assistant professor of medicine at Harvard Medical School, director of the hospital medicine program, and associate chief for the Division of General Medicine and Primary Care at Beth Israel Deaconess Medical Center in Boston. Dr. Li is a charter member of the Society of Hospital Medicine (SHM) and an elected member of its board of directors. He was the 2005 recipient of the SHM Outstanding Service to Hospital Medicine Award and was named 2008 Top Hospitalist by the American College of Physicians.

Marc B. Royo is a third-year student at Jefferson Medical College of Thomas Jefferson University in Philadelphia, and Widener University in Chester, Pennsylvania.

Alexandria Skoufalos, EdD, is vice chair for education and assistant professor for health policy at Jefferson Medical College of Thomas Jefferson University in Philadelphia.

Elizabeth C. Verna, MD, is a fellow in gastroenterology at Columbia University Medical Center in New York City. She is a graduate of Columbia University College of Physicians and Surgeons and Columbia University Medical Center internal medicine residency program, where she spent one year teaching medical students and residents as the internal medicine chief resident. Dr. Verna conducts clinical research with Columbia's Center for Liver Disease and Transplantation and looks forward to a career as a transplant hepatologist.

C. Edward Wells, MD, is a professor of obstetrics and gynecology at the University of Texas Southwestern Medical Center in Dallas. He maintains a private practice in Plano, Texas. His research interests include thyroid disease, diabetes mellitus, and first-trimester complications of pregnancy.

George D. Wendel Jr., MD, is a professor and residency program director of obstetrics and gynecology at the University of Texas Southwestern Medical Center in Dallas. He is a maternal-fetal medicine subspecialist with research interests in clinical obstetrics and sexually transmitted diseases.

Chloe White has a bachelor of arts degree in philosophy from the University of San Diego and is currently enrolled in the Bioethics and Health Policy graduate program at Loyola University Chicago. She is working as an intern for the American Medical Association’s Council on Ethical and Judicial Affairs, where she researches and analyzes information to support the council’s ongoing projects. Her interests include end-of-life care and stem cell research.
Jeffrey G. Wiese, MD, is an associate professor and the associate dean for graduate medical education at the Tulane University Health Sciences Center in New Orleans. He is also vice chairman of medicine, chief of the charity medical service, and director of the Tulane internal medicine program. Dr. Wiese serves on the board of directors for the Society of Hospital Medicine and Council for the Association of Program Directors in Internal Medicine.

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