Journal of HOSPITAL MEDICINE www.journalofhospitalmedicine.com

EDITORIAL

The Critical Role of Hospitalists in Controlling Healthcare Costs

David M. Mitchell, MD, PhD[1,2]

[1] Internal Medicine Center of Akron, Akron General Medical Center, Akron, Ohio.
[2] College of Medicine, Northeastern Ohio Universities College of Medicine, Akron, Ohio.

Disclosure: Nothing to report.

"Let's think about what we need to do ourselves. We have to acknowledge that orders we write drive up health care costs."[1] *AMA President, Nancy H. Nielsen, MD, PhD*

As the most prominent providers of inpatient care, hospitalists should be aware that, of the total annual expenditures on US healthcare ($2.3 trillion in 2007),[2] approximately one-third goes to hospital-based medical care, over one-half of which (~57%) is covered by public funds through Medicare and Medicaid[3]; this high cost of healthcare is increasingly being blamed for unnecessarily burdening our economy and preventing our industries from being globally competitive. I believe that the high proportion of spending on inpatient care places hospitalists firmly in the center of the debate on how to reduce healthcare costs. It is well known that the United States spends about twice as much per capita as other industrialized countries on healthcare,[4] without evidence of superior health outcomes.[5] However, it is also known that remarkable local and regional variations in healthcare spending also exist within the US, again, without evidence of superior health outcomes in the higher-spending regions.[6] Both of these observations suggest that we are spending many healthcare dollars on things that evidently do not improve the health of our patients. How much of this waste is administrative, operational, or clinical is debatable and remains the focus of growing national healthcare reform efforts.[7–11] However, from the hospitalist perspective, we should be especially wary of providing so-called "flat-of-the-curve" medicine, that is, a level of intensity of care that provides no incremental health benefit.[12] The purpose of this editorial is to challenge hospitalists to collectively examine how much of our inpatient spending is potentially unnecessary, and how we, as specialists in inpatient medicine, can assume a critical role in controlling healthcare costs.

To illustrate the issue, consider the following clinical scenario, managed in different ways by different hospitalists, with approximate costs itemized in Table 1. The patient is an elderly woman who presents to the emergency room with syncope occurring at church. The first hospitalist takes time to gather history from the patient, family, eyewitnesses, and the primary care physician, and requests a medication list and outside medical records, which reveal several recent and relevant cardiac and imaging studies. He performs a careful examination, discovers orthostatic hypotension, and his final diagnosis is syncope related to volume depletion from a recently added diuretic as well as a mild gastroenteritis. The patient is rehydrated and discharged home from the emergency room in the care of her family, and asked to hold her diuretic until seen by her family physician in 1 or 2 days. The second hospitalist receives the call from the emergency room and tells the staff to get the patient a telemetry bed. He sees the patient 2 hours later when she gets to the floor. The family has gone home and the mildly demented patient does not recall much of the event or her past medical history. The busy hospitalist constructs a broad differential diagnosis and writes some quick orders to evaluate the patient for possible stroke, seizure, pulmonary embolism, and cardiac ischemia or arrhythmia. He also asks cardiology and neurology to give an opinion. The testing is normal, and the patient is discharged with a cardiac event monitor and an outpatient tilt-table test scheduled.

Although the above scenarios purposely demonstrate 2 extremes of care, I suspect most readers would agree that each hospitalist has his or her own style of practice, and that these differences in style inevitably result in significant differences in the total cost of healthcare delivered. This variation in spending among individual physicians is perhaps more easily understood than the striking variations in healthcare spending seen when different states, regions, and hospitals are compared. For example, annual Medicare spending per beneficiary has varied widely from state to state, from $5436 in Iowa to $7995 in New York (in 2004), a 47% difference.[13] Specific analysis of inpatient spending variations is presented in the Dartmouth Atlas of Health Care 2008, which reports healthcare spending in the last 2 years of life for patients with at least 1 chronic illness.[14] While the average Medicare inpatient spending per capita for these patients was about $25,000, the state-specific spending varied widely from $37,040 in New Jersey to $17,135 in Idaho. There was also significant variation in spending within individual states (ie, New York: Binghamton, $18,339; Manhattan, $57,000) and between similar types of hospitals (UCLA Medical Center, $63,900; Massachusetts General Hospital, $43,058). Yet there is no evidence that higher-spending regions produce better health outcomes.[6] Interestingly, the observed differences in spending within the US were primarily due to the volume and intensity of care, not the price of care, as has been seen in some comparisons of the US with other industrialized countries.[8,15] In overall Medicare expenditures, higher-spending locations tended to have a more inpatient-based and

2010 Society of Hospital Medicine DOI 10.1002/jhm.581
Published online in wiley InterScience (www.interscience.wiley.com).

TABLE 1. Comparison of the Approximate Cost of Evaluating Two Patients for Syncope

Mrs. Syncope #1	Cost	Mrs. Syncope #2	Cost
Level 4 emergency room visit	$745	Level 4 emergency room visit	$745
Level 4 internal medicine consultation	$190	Level 3 history and physical	$190
		Laboratory evaluation: CBC, CMP, cardiac panel, urinalysis, D-dimer	$843
		EKG	$150
		Head CT	$1426
		Chest CT angiogram	$2120
		Brain MRI	$3388
		Echocardiogram	$687
		Carotid ultrasound	$911
		Level 4 neurology consult	$190
		Subsequent visits day 2, day 3	$150
		EEG	$520
		Level 4 cardiology consult	$190
		Nuclear stress test	$1359
		Specialist subsequent visits	$150
		Telemetry bed, 3 days	$3453
		Discharge, low-level	$90
		Cardiac event monitor	$421
		Tilt-table test	$1766
	$935		$18,749

NOTE: Akron General Medical Center "Patient Price Information List." Available at: http://www.akrongeneral.org/portal/page?=pageid=153,10350167&=dad=portal&_schema=PORTAL. Accessed July 2009.
Abbreviations: CBC, complete blood count; CMP, comprehensive metabolic panel; CT, computed tomography; EEG, electroencephalogram; EKG, electrocardiogram; MRI, magnetic resonance imaging.

specialist-oriented pattern of practice, with higher utilization of inpatient consultations, diagnostic testing, and minor procedures.[6]

Although the wide variation in spending observed is a bit baffling, the encouraging aspect of this data is that some places are apparently "doing it right"; that is, providing their patients with a much higher value per healthcare dollar. Ultimately, if the higher-spending locations modeled the lower-spending locations, we would have the potential to reduce overall healthcare costs by as much as 30% without harming health.[9]

What are the possible reasons that we are providing unnecessary care? There are both environment-dependent and physician-dependent reasons, which I will outline here. The first 3 reasons represent areas that would seem to require system-wide change, whereas the remaining 7 reasons are perhaps more amenable to local and/or national hospitalist-directed efforts.

1. Working in a litigious environment promotes unnecessary testing and consultations with the intent of reducing our exposure to malpractice liability, so-called defensive medicine.[16]
2. A reimbursement system that is primarily fee-for-service encourages physicians to provide more care and involve more physicians in the care of each patient, with little or no incentive to spend less, a core problem that was recently highlighted in a public Society of Hospital Management (SHM) statement.[17]
3. The lack of integrated medical record systems promotes waste by leading to duplicate testing, simply because we cannot easily obtain old records to confirm whether tests were previously done. Interestingly, data from the Commonwealth Fund conclude that US physicians order duplicate diagnostic tests (a test repeated within 2 years) at more than twice the rate of Canada and the United Kingdom, while the nation with the lowest rate of duplicate testing, The Netherlands, has the highest rate of electronic medical record use (98%).[18]
4. Working with patients (or families) with high expectations who insist upon aggressive testing, treatment, and referral to specialists inflates spending, especially if associated with futile and expensive end-of-life care.
5. The involvement of one or more specialists may subsequently lead to even more aggressive care ordered by each specialist.
6. The availability and promotion of new technology (diagnostic testing, medical devices, etc.) may prompt us to make use of it simply because it is there, with or without evidence of a health benefit. Our natural curiosity or fascination with information, or our desire to do an overly "complete" evaluation, works against cost containment.
7. Local trends or traditions within our specific work environment, as suggested by the variability data, may have a strong influence on our individual practice. In such a setting, inadequate knowledge of the cost-effectiveness of various tests and treatment options likely leads to unnecessary health care spending.
8. A hospitalist work environment in which a high patient load is carried will inevitably result in less time to gather a detailed history and obtain old records or other information that could help narrow a differential diagnosis and minimize unnecessary or duplicate testing.
9. Preventable readmissions resulting from inadequate coordination of care add cost,[19] a phenomenon highly dependent on efficient information systems and proper physician-physician communication.[20]
10. An overestimation of the need for inpatient evaluation and treatment (vs. outpatient) leads to unnecessary admissions and a longer average length-of-stay, each of which add dramatically to total healthcare costs. This is not only dependent on our individual threshold for admitting and discharging patients, but also on our efficiency in diagnosing and treating acute conditions. The fact that the average length-of-stay for congestive heart failure admissions, for example, ranges in different regions from 4.9 to 6.1 days (with costs of $9143 and

2010 Society of Hospital Medicine DOI 10.1002/jhm.581
Published online in wiley InterScience (www.interscience.wiley.com).

TABLE 2. Potential Reasons Hospitalists May Order Unnecessary Tests, Treatments, or Consultations, and the Effect of Potential Solutions on Each Area

	Spending Data	Guidelines	Patient Education	Advocacy	Professional Development
Defensive medicine	✓	✓		✓✓	
Patient expectations		✓	✓✓		
Specialist consultations	✓	✓	✓		✓✓
Fee-for-service environment				✓✓	
Availability of technology	✓✓	✓✓	✓		✓
Poor access to medical records				✓✓	
Local medical culture	✓✓	✓✓	✓		
Insufficient knowledge of evidence-based guidelines		✓✓	✓		✓✓
Lack of available value-based data		✓		✓✓	
High patient load	✓			✓✓	✓
Preventable readmissions from poor coordination			✓		✓✓
Overestimation of the need for inpatient care	✓	✓✓	✓		✓✓

Abbreviations: ✓, indirect influence; ✓✓, direct influence or most likely to succeed.

$12,528, respectively)[21] is enough to show that there is room for progress.

What joint efforts could be made to minimize unnecessary inpatient spending? The following are my personal opinions and suggestions (Table 2). Most importantly, I believe every physician deserves prompt and accurate feedback regarding their spending patterns, accompanied by valid comparisons to national and local standards, to demonstrate where they stand on the spectrum of healthcare spending. We are currently far behind other industries in our ability, as physicians, to evaluate what we are spending money on, how much, and why. If I knew, for example, that my spending was in the 95th percentile of all hospitalists in community hospitals similar to mine, I would be prompted to investigate where the differences were and why. In an informal survey of hospitalist colleagues, I found that the majority do not receive any data on the costs associated with their care, and are largely unaware of the actual cost of the inpatient tests they commonly order. Developing a secure, user-friendly database of individual physician spending patterns relative to national and local standards could be a preliminary step, and would likely require a unified effort between government agencies, professional societies, hospitals, and the insurance industry. However, once available, the increased transparency and clarity of spending variations would hopefully prompt introspection and change. In the absence of hard data, however, individual self-assessment on spending patterns could also be offered through the development of an online simulated case-based examination in which a physician could gain a general idea of how his evaluation and treatment of a case scenario compares to his hospitalist colleagues, and to what degree each of his clinical decisions affects the overall cost of care. There are many excellent quality improvement tools offered through SHM but none that specifically address the cost of care.

Second, hospitalists need quick access to current evidence-based guidelines regarding the true clinical value, or cost-effectiveness, of testing and treatment for common inpatient conditions, including specific admission criteria. A single source or clearinghouse of guidelines, sponsored by SHM, may be particularly helpful, especially if it focuses on clarifying areas of highest variability in inpatient spending. In addition, I believe that, given the critically important interface between emergency medicine and hospital medicine, joint guidelines between the 2 groups would potentially be very helpful in controlling costs by limiting unnecessary admissions. Advocacy for comparative effectiveness research to establish validity in these guidelines will be fundamental[22,23]; however, I suspect the common sense question: "Will this added cost improve my patient's outcome?" also needs to be applied more generously, since many individual clinical scenarios will not likely lend themselves to formal study. For discussion, some sample case scenarios are presented (Table 3).

Third, hospitalists could potentially benefit from the development of patient education materials, available through SHM, that address the cost-effectiveness of common inpatient tests and treatments with the goal of decreasing patient demand for unnecessary testing. Education regarding advanced directives and end-of-life care decision-making could be particularly valuable in minimizing futile care, as it is well-documented that transitioning to palliative care as soon as it is appropriate reduces healthcare spending greatly during the end-of-life period.[24–27] At the same time, we need to be careful to reassure our patients that we are not trying to ration care, but are instead minimizing the risks and costs for them associated with unnecessary care. In my experience, most patients, if given appropriate time, attention, and education, are willing to accept the final recommendation of their physician.

Fourth, intensified federal and state advocacy in several areas could help reduce spending. For example, advocacy for medical liability reform may reduce the atmosphere of defensive medicine, although I suspect that because "old habits die hard," it may take a full generation of decreased liability risk to actually change practice patterns. Advocacy for the development of a national, or at least more uniform, electronic medical record, may decrease duplicate testing

2010 Society of Hospital Medicine DOI 10.1002/jhm.581
Published online in wiley InterScience (www.interscience.wiley.com).

TABLE 3. Clinical Cases Designed to Stimulate Discussion Regarding Potentially Unnecessary Healthcare Costs Generated by Hospitalists

An 82-year-old nursing home patient limited to a wheelchair due to severe osteoarthritis presents with new-onset expressive aphasia and mild right-sided hemiparesis. Head CT is negative for bleed, but shows an acute left middle cerebral artery infarct.	Would your stroke workup include an MRI/MRA of the brain, carotid ultrasound, echocardiogram, and neurology consultation?
A 68-year-old with known ischemic cardiomyopathy is admitted with a CHF exacerbation clearly due to medication noncompliance. The last echocardiogram was done 18 months ago and showed an ejection fraction of 20% with moderate to severe mitral regurgitation.	Would you order a repeat echocardiogram? Would you consult cardiology?
A 35-year-old construction worker presents with sharp chest pain that is partially reproducible on examination, and no other physical findings. Vital signs, EKG, and cardiac markers are normal. The patient had a negative stress test last year. However, his D-dimer is slightly elevated.	Would you order a CT angiogram of the chest? If he had a normal one last month for the same symptoms, would you repeat it? In either case, would you admit him to the hospital?
A 42-year-old man presents with chest pain associated with recent cocaine use. His chest pain resolves in the emergency room and his repeat troponin is normal at 6 hours.	Would you order a nuclear stress test for the patient? Would your management change if a stress test was normal a year ago? Would you admit him?
A 58-year-old man admitted with community-acquired pneumonia of the right lower lobe has improved clinically with empiric treatment. Before discharge, he asks for a repeat radiograph to "make sure it is getting better."	Would you comply with the patient's request?
A 68-year-old woman who underwent left total knee arthroplasty 2 weeks ago presents with a left proximal DVT. She has no other symptoms and vitals are normal. She has no personal or family history of clotting.	Would you admit the patient to the hospital? Would you order a CT angiogram of the chest? Would you order a hypercoagulable workup?
A 43-year-old is admitted for atypical chest pain. Serial cardiac enzymes and nuclear stress test are negative. However, his transaminases are elevated at twice the normal upper limits. He takes a statin for dyslipidemia.	Would you order further laboratory tests or imaging to evaluate for hepatic disorders or discharge the patient?
A 63-year-old receiving chemotherapy for colon cancer with multiple liver metastases presents with new-onset dyspnea and is found to have a large left-sided pleural effusion on chest radiograph. You perform a thoracentesis and malignant cells are present.	Would you order a chest CT? Would you consult pulmonology and/or thoracic surgery (for chest tube and/or pleurodesis)?
A 78-year-old with severe oxygen-dependent obstructive lung disease (FEV_1 of 1.0 L) has a new 1-cm nodule on his chest radiograph when admitted for a COPD exacerbation.	Would you order a chest CT? Would you arrange for a biopsy? Would you consult oncology or pulmonology?
A 45-year-old woke up with severe low-back pain with right-sided radiculitis after shoveling heavy snow yesterday. He is unable to walk due to pain, but no focal neurologic symptoms are identified on exam.	Would you order an MRI of the spine? Would you consult orthopedics?
A 68-year-old man on coumadin for chronic atrial fibrillation is incidentally found to have an INR of 6.5 in clinic. He is currently asymptomatic without evidence of bleeding and with normal vital signs. His hemoglobin is 10.1 compared to 10.8 last month. Digital rectal exam results in a hemoccult-positive smear.	Would you admit him to the hospital? Would you give fresh frozen plasma? Would you consult gastroenterology?
A 58-year old truck driver presents with acute PE, identified on CT angiogram. There is no previous history of DVT. The patient's arterial blood gas shows a pH of 7.45, pCO_2 of 35 mmHg, and pO_2 of 55 mmHg on room air. The heart rate is 75.	Would you order a lower extremity duplex to assess for DVT? Would you ask interventional radiology to place an IVC filter if a DVT was present?
A 26-year-old presents with fever, headache, and meningismus. Head CT is normal.	Would you perform a bedside spinal tap or send the patient for a fluoroscopically-guided procedure in radiology?
A 68-year-old smoker presents with right-sided pneumonia with a small parapneumonic effusion. He is afebrile after 24 hours of IV antibiotics and clinically feels much better.	Would you order a thoracentesis? If so, would you perform it bedside or send the patient to radiology for an ultrasound-guided procedure? Would you consult a pulmonologist?
An 82-year-old severely demented nursing home resident who has required total care for the past few months presents with dehydration and a sodium of 158 after increasingly poor oral intake. No other illness is identified.	Would you begin IV fluids immediately and consider gastrostomy tube placement to maintain adequate hydration at the nursing home or would you contact family to discuss end-of-life care goals first? Would your management change if a UTI or pneumonia was diagnosed?

Abbreviations: CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease; CT, computed tomography; DVT, deep vein thrombosis; EKG, electrocardiogram; FEV_1, forced expiratory volume in 1 second; INR, international normalized ratio; IV, intravenous; IVC, inferior vena cava; MRA, magnetic resonance angiography; MRI, magnetic resonance imaging; pCO_2, partial pressure of carbon dioxide; PE, phycoerythrin; pO_2, partial pressure of oxygen; UTI, urinary tract infection.

and improve efficiency. Advocacy for value-based reimbursement models may help dampen costs resulting from a predominantly fee-for-service environment.[28]

Fifth, and perhaps most fundamental to the future of our specialty, encouraging the broad professional development of hospitalists as a true specialists in inpatient medicine (based on the SHM Core Competencies,)[29] could help minimize the unnecessary costs associated with specialist-oriented care.[6] With the desire to create, in the near future, a formal board-certification in hospital medicine comes an obligation to develop broad knowledge and broad skill sets that are truly unique to our profession, whereas deferring to a specialist-oriented pattern of care actually shrinks us down to something less than a traditional internist, rather than a unique entity.[30] With our 24/7 focus on inpatient care, we should easily be able to demonstrate our superiority in safety, quality, and efficiency, all of which are closely linked to increased value per healthcare dollar. If, however, our focus is blurred by an overly productivity-based practice, in which patient volume and procedures take precedence, we will not be able to claim any special value to the system.

2010 Society of Hospital Medicine DOI 10.1002/jhm.581
Published online in wiley InterScience (www.interscience.wiley.com).

Last, supporting efforts to improve coordination of care and transitions of care could reduce costs associated with unnecessary readmissions or posthospital complications. A recent policy statement from several professional societies, including SHM, highlights the importance of these transitions,[20,31] and within the past year, SHM has launched the successful Project BOOST (Better Outcomes for Older adults through Safe Transitions) to help in this effort.[32]

Unfortunately, there is an inherent problem with all of the above proposals: the assumption that physicians actually want to reduce healthcare spending. Since everyone who works in the medical industry benefits financially in some way from the current high levels of spending on healthcare, reducing spending is counterintuitive for many, and the incentives to spend more will likely persist until some form of spending targets or limits are set.[33] Moreover, since physicians traditionally do not like to be told how to practice medicine, history would predict that, without attractive incentives, nothing will change. This is the fundamental and unfortunate dilemma that has apparently pushed us to the eleventh hour of a healthcare crisis.

Another concern with an extreme atmosphere of cost cutting is the risk of swinging too far in the opposite direction, focusing so intently on cost that we begin to compromise quality or access to care in order to achieve spending targets. Reassuringly, however, the data suggest that there is plenty of room for us to cut costs without harming health outcomes.

Despite these obstacles, during this historic time in US healthcare, I believe hospitalists have a unique and perhaps transient opportunity to demonstrate their singular commitment to rational healthcare spending and by doing so to gain significant influence in shaping the impending healthcare reforms. If we speak and act with one voice, with transparency, and with the proper data, we could be the first and only professional society to not only demonstrate our current pattern of spending, but also our potential for reducing spending and our plan on how to get there.

Acknowledgements

Judy Knight, MLS, provided valuable research and technical support.

Address for correspondence and reprint requests:

David M. Mitchell, MD, PhD, Associate Director, Internal Medicine Center of Akron, Akron General Medical Center, Clinical Assistant Professor, Northeastern Ohio Universities College of Medicine, 400 Wabash Avenue, Akron, OH 44307; Telephone: 330-344-6000; Fax: 330-344-6820; E-mail: dmitchell@agmc.org Received 9 February 2009; revision received 22 June 2009; accepted 24 June 2009.

References

1. Medicare pay overhaul can no longer wait. American Medical News. 2009. Available at: http://www.ama-assn.org/amednews/2009/01/12/edsa0112.htm. Accessed July 2009.
2. Keehan S, Sisko A, Truffer C, et al. Health spending projections through 2017: the baby-boom generation is coming to Medicare. *Health Aff (Millwood)*. 2008;27(2):w145–w155.
3. *Health, United States, 2007: Chartbook on Trends in the Health of Americans*. Hyattsville, MD: National Center for Health Statistics; 2007:380.
4. *Health, United States, 2007: Chartbook on Trends in the Health of Americans*. Hyattsville, MD: National Center for Health Statistics; 2007:374.
5. *National Scorecard on U.S. Health System Performance, 2008 Chartpack*. New York, NY: The Commonwealth Fund; 2008:6.
6. Fisher ES, Wennberg DE, Stukel TA, Gottlieb DJ, Lucas FL, Pinder EL. The implications of regional variations in medicare spending. Part 1: The content, quality, and accessibility of care. *Ann Intern Med*. 2003;138(4):273–287.
7. Bentley TG, Effros RM, Palar K, Keeler EB. Waste in the U.S. health care system: a conceptual framework. *Milbank Q*. 2008;86(4):629–659.
8. Anderson GF, Reinhardt UE, Hussey PS, Petrosyan V. It's the prices, stupid: why the United States is so different from other countries. *Health Aff (Millwood)*. 2003;22(3):89–105.
9. Orszag PR. Health Care and the budget: issues and challenges for reform. 2007. Available at: http://www.cbo.gov/ftpdocs/82xx/doc8255/06–21-HealthCareReform.pdf. Accessed July 2009.
10. Brownlee S. Overtreated*: Why Too Much Medicine Is Making Us Sicker and Poorer*. 1st ed. New York, NY: Bloomsbury; 2007.
11. Davis K, Schroen C, Guterman S, Shih T. Slowing the growth of U.S. health care expensitures: what are the options? 2007. Available at: http://www.commonwealthfund.org/publications/publications_show.htm?doc_id=449510. Accessed July 2009.
12. Fuchs V. More variation in use of care, more flat-of-the-curve medicine. *Health Aff (Millwood)*. 2004;(Suppl Web Exclusives):VAR104–VAR107.
13. *Health, United States, 2007: Chartbook on Trends in the Health of Americans*. Hyattsville, MD: National Center for Health Statistics; 2007:419.
14. Wennberg JE, Fisher ES. *Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008*. Lebanon, NH: Dartmouth Institute for Health Policy and Clinical Practice, Center for Health Policy Research; 2008:25–32.
15. Wennberg JE, Fisher ES. *Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008*. Lebanon, NH: Dartmouth Institute for Health Policy and Clinical Practice, Center for Health Policy Research; 2008:2–4.
16. Kessler D, Summerton N, Graham J. Effects of the medical liability system in Australia, the UK, and the USA. *Lancet*. 2006;368(9531):240–246.
17. Comments on the centers for Medicare and Medicaid services plan to transition to a Medicare value-based purchasing program for physicians and other professional services. 2008. Available at: http://www.hospitalmedicine.org/AM/Template.cfm?Section=Issues_in_the_Spotlight1&Template=/CM/ContentDisplay.cfm&ContentID=21201. Accessed July 2009.
18. *National Scorecard on U.S. Health System Performance, 2008 Chartpack*. New York, NY: The Commonwealth Fund; 2008:62,73.
19. Jack B, Chetty V, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. *Ann Intern Med*. 2009;150(3):178–187.
20. Snow V, Beck D, Budnitz T, et al. Transitions of Care Consensus Policy Statement American College of Physicians-Society of General Internal Medicine-Society of Hospital Medicine-American Geriatrics Society-American College of Emergency Physicians-Society of Academic Emergency Medicine. *J Gen Intern Med*. 2009;24(8):971–976.
21. Hospitals like mine: 2006 national statistics. 2006. Available at: http://www.hcupnet.ahrq.gov. Accessed July 2009.
22. Brown MM, Brown GC, Sharma S. *Evidence-Based to Value-Based Medicine*. Chicago, IL: AMA Press; 2005.
23. *Improved Availability of Comparative Effectiveness Information: An Essential Feature for a High-Quality and Efficient United States Health Care System*. Philadelphia, PA: American College of Physicians; 2008.
24. Morrison R, Meier D. Clinical practice. Palliative care. *N Engl J Med*. 2004;350(25):2582–2590.
25. Payne S, Coyne P, Smith T. The health economics of palliative care. *Oncology (Williston Park)*. 2002;16(6):801–808; discussion 808, 811–802.

2010 Society of Hospital Medicine DOI 10.1002/jhm.581
Published online in wiley InterScience (www.interscience.wiley.com).

26. Emanuel E. Cost savings at the end of life. What do the data show? *JAMA*. 1996;275(24):1907–1914.
27. Morrison R, Penrod J, Cassel J, et al. Cost savings associated with US hospital palliative care consultation programs. *Arch Intern Med*. 2008; 168(16):1783–1790.
28. Arrow K, Auerbach A, Bertko J, et al. Toward a 21st-century health care system: recommendations for health care reform. *Ann Intern Med*. 2009; 150(7):493–495.
29. Dressler DD, Pistoria MJ, Budnitz TL, McKean SCW, Amin AN. Core competencies in hospital medicine: development and methodology. *J Hosp Med*. 2006;1(1):48–56.
30. Mitchell DM. The expanding or shrinking universe of the hospitalist. *J Hosp Med*. 2008;3(4):288–291.
31. Kripalani S, Jackson A, Schnipper J, Coleman E. Promoting effective transitions of care at hospital discharge: a review of key issues for hospitalists. *J Hosp Med*. 2007;2(5):314–323.
32. Project BOOST. 2009. Available at: http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/CT_Home.cfm. Accessed July 2009.
33. Marmor T, Oberlander J, White J. The Obama administration's options for health care cost control: hope versus reality. *Ann Intern Med*. 2009; 150(7):485–489.

 DOI 10.1002/jhm.581
Published online in wiley InterScience (www.interscience.wiley.com).