

CHOOSING WISELY[®]: NEXT STEPS IN IMPROVING HEALTHCARE VALUE

A Framework for the Frontline: How Hospitalists Can Improve Healthcare Value

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As healthcare costs continue to grow, hospitalists may be able to help patients and health system administrators make decisions that generate higher-value care. In this article, we discuss 3 ways hospitalists can contribute to the mission of delivering value-based healthcare: design innovative strategies to coordinate care, advocate for appropriate utilization of tests and treatments, and lead

local value-improvement initiatives. We also describe specific tools hospitalists can use in their daily practice, including the Choosing Wisely lists and the COST (Culture, Oversight, Systems Change, Training) framework for value-improvement initiatives. *Journal of Hospital Medicine* 2016;11:297–302. © 2015 Society of Hospital Medicine

As the nation considers how to reduce healthcare costs, hospitalists can play a crucial role in this effort because they control many healthcare services through routine clinical decisions at the point of care. In fact, the government, payers, and the public now look to hospitalists as essential partners for reining in healthcare costs.^{1,2} The role of hospitalists is even more critical as payers, including Medicare, seek to shift reimbursements from volume to value.¹ Medicare's Value-Based Purchasing program has already tied a percentage of hospital payments to metrics of quality, patient satisfaction, and cost,^{1,3} and Health and Human Services Secretary Sylvia Burwell announced that by the end of 2018, the goal is to have 50% of Medicare payments tied to quality or value through alternative payment models.⁴

Major opportunities for cost savings exist across the care continuum, particularly in postacute and transitional care, and hospitalist groups are leading innovative models that show promise for coordinating care and improving value.⁵ Individual hospitalists are also in a unique position to provide high-value care for their patients through advocating for appropriate care and leading local initiatives to improve value of care.^{6–8} This commentary article aims to provide practicing hospitalists with a framework to incorporate these strategies into their daily work.

DESIGN STRATEGIES TO COORDINATE CARE

As delivery systems undertake the task of population health management, hospitalists will inevitably play a critical role in facilitating coordination between community, acute, and postacute care. During admission, discharge, and the hospitalization itself, standardizing care pathways for common hospital conditions such as pneumonia and cellulitis can be effective in decreasing utilization and improving clinical outcomes.^{9,10} Intermountain Healthcare in Utah has applied evidence-based protocols to more than 60 clinical processes, re-engineering roughly 80% of all care that they deliver.¹¹ These types of care redesigns and standardization promise to provide better, more efficient, and often safer care for more patients. Hospitalists can play important roles in developing and delivering on these pathways.

In addition, hospital physician discontinuity during admissions may lead to increased resource utilization, costs, and lower patient satisfaction.¹² Therefore, ensuring clear handoffs between inpatient providers, as well as with outpatient providers during transitions in care, is a vital component of delivering high-value care. Of particular importance is the population of patients frequently readmitted to the hospital. Hospitalists are often well acquainted with these patients, and the myriad of psychosocial, economic, and environmental challenges this vulnerable population faces. Although care coordination programs are increasing in prevalence, data on their cost-effectiveness are mixed, highlighting the need for testing innovations.¹³ Certainly, hospitalists can be leaders adopting and documenting the effectiveness of spreading interventions that have been shown to be promising in improving care transitions at discharge, such as the Care Transitions Intervention, Project RED (Re-Engineered Discharge), or the Transitional Care Model.^{14–16}

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TABLE 1. Society of Hospital Medicine Choosing Wisely Lists

Adult Hospital Medicine Recommendations	Pediatric Hospital Medicine Recommendations
<ol style="list-style-type: none"> 1. Do not place, or leave in place, urinary catheters for incontinence or convenience, or monitoring of output for non-critically ill patients (acceptable indications: critical illness, obstruction, hospice, perioperatively for <2 days or urologic procedures; use weights instead to monitor diuresis). 2. Do not prescribe medications for stress ulcer prophylaxis to medical inpatients unless at high risk for gastrointestinal complication. 3. Avoid transfusing red blood cells just because hemoglobin levels are below arbitrary thresholds such as 10, 9, or even 8 mg/dL in the absence of symptoms. 4. Avoid overuse/unnecessary use of telemetry monitoring in the hospital, particularly for patients at low risk for adverse cardiac outcomes. 5. Do not perform repetitive complete blood count and chemistry testing in the face of clinical and lab stability. 	<ol style="list-style-type: none"> 1. Do not order chest radiographs in children with uncomplicated asthma or bronchiolitis. 2. Do not routinely use bronchodilators in children with bronchiolitis. 3. Do not use systemic corticosteroids in children under 2 years of age with an uncomplicated lower respiratory tract infection. 4. Do not treat gastroesophageal reflux in infants routinely with acid suppression therapy. 5. Do not use continuous pulse oximetry routinely in children with acute respiratory illness unless they are on supplemental oxygen.

The University of Chicago, through funding from the Centers for Medicare and Medicaid Innovation, is testing the use of a single physician who cares for frequently admitted patients both in and out of the hospital, thereby reducing the costs of coordination.⁵ This “comprehensivist” model depends on physicians seeing patients in the hospital and then in a clinic located in or near the hospital for the subset of patients who stand to benefit most from this continuity. This differs from the old model of having primary care providers (PCPs) see inpatients and outpatients because the comprehensivist’s patient panel is enriched with only patients who are at high risk for hospitalization, and thus these physicians have a more direct focus on hospital-related care and higher daily hospitalized patient censuses, whereas PCPs were seeing fewer and fewer of their patients in the hospital on a daily basis. Evidence concerning the effectiveness of this model is expected by 2016. Hospitalists have also ventured out of the hospital into skilled nursing facilities, specializing in long-term care.¹⁷ These physicians are helping provide care to the roughly 1.6 million residents of US nursing homes.^{17,18} Preliminary evidence suggests increased physician staffing is associated with decreased hospitalization of nursing home residents.¹⁸

ADVOCATE FOR APPROPRIATE CARE

Hospitalists can advocate for appropriate care through avoiding low-value services at the point of care, as well as learning and teaching about value.

Avoiding Low-Value Services at the Point of Care

The largest contributor to the approximately \$750 billion in annual healthcare waste is “unnecessary services,” which includes overuse, discretionary use beyond benchmarks, and unnecessary choice of higher-cost services.¹⁹ Drivers of overuse include medical culture, fee-for-service payments, patient expectations, and fear of malpractice litigation.²⁰ For practicing hospitalists, the most substantial motivation for overuse may be a desire to reassure patients and themselves.²¹ Unfortunately, patients commonly overestimate the benefits and underestimate the potential

harms of testing and treatments.²² However, clear communication with patients can reduce overuse, underuse, and misuse.²³

Specific targets for improving appropriate resource utilization may be identified from resources such as Choosing Wisely lists, guidelines, and appropriateness criteria. The Choosing Wisely campaign has brought together an unprecedented number of medical specialty societies to issue “top five” lists of things “that physicians and patients should question” (www.choosingwisely.org). In February 2013, the Society of Hospital Medicine released their Choosing Wisely lists for both adult and pediatric hospital medicine (Table 1).^{6,24} Hospitalists report printing out these lists, posting them in offices and clinical areas, and handing them out to trainees and colleagues.²⁵ Likewise, the American College of Radiology (ACR) and the American College of Cardiology provide appropriateness criteria that are designed to help clinicians determine the most appropriate test for specific clinical scenarios.^{26,27} Hospitalists can integrate these decisions into their progress notes to prompt them to think about potential overuse, as well as communicate their clinical reasoning to other providers.

As an example of this strategy, 1 multi-institutional group has started training medical students to augment the traditional subjective-objective-assessment-plan (SOAP) daily template with a value section (SOAP-V), creating a “cognitive forcing function” to promote discussion of high-value care delivery.²⁸ Physicians could include brief thoughts in this section about why they chose a specific intervention, their consideration of the potential benefits and harms compared to alternatives, how it may incorporate the patient’s goals and values, and the known and potential costs of the intervention. Similarly, Flanders and Saint recommend that daily progress notes and sign-outs include the indication, day of administration, and expected duration of therapy for all antimicrobial treatments, as a mechanism for curbing antimicrobial overuse in hospitalized patients.²⁹ Likewise, hospitalists can also document whether or not a patient needs routine labs, telemetry, continuous pulse oximetry, or

other interventions or monitoring. It is not yet clear how effective this type of strategy will be, and drawbacks include creating longer progress notes and requiring more time for documentation. Another approach would be to work with the electronic health record to flag patients who are scheduled for telemetry or other potentially wasteful practices to inspire a daily practice audit to question whether the patient still meets criteria for such care. This approach acknowledges that patient's clinical status changes, and overcomes the inertia that results in so many therapies being continued despite a need or indication.

Communicating With Patients Who “Want Everything”

Some patients may be more worried about not getting every possible test, rather than concerns regarding associated costs. This may oftentimes be related to patients routinely overestimating the benefits of testing and treatments while not realizing the many potential downstream harms.²² The perception is that patient demands frequently drive overtesting, but studies suggest the “demanding patient” is actually much less common than most physicians think.³⁰

The Choosing Wisely campaign features video modules that provide a framework and specific examples for physician-patient communication around some of the Choosing Wisely recommendations (available at: <http://www.choosingwisely.org/resources/modules>).

These modules highlight key skills for communication, including: (1) providing clear recommendations, (2) eliciting patient beliefs and questions, (3) providing empathy, partnership, and legitimation, and (4) confirming agreement and overcoming barriers.

Clinicians can explain why they do not believe that a test will help a patient and can share their concerns about the potential harms and downstream consequences of a given test. In addition, Consumer Reports and other groups have created trusted resources for patients that provide clear information for the public about unnecessary testing and services.

Learn and Teach Value

Traditionally, healthcare costs have largely remained hidden from both the public and medical professionals.^{31,32} As a result, hospitalists are generally not aware of the costs associated with their care.^{33,34} Although medical education has historically avoided the topic of healthcare costs,³⁵ recent calls to teach healthcare value have led to new educational efforts.^{35–37} Future generations of medical professionals will be trained in these skills, but current hospitalists should seek opportunities to improve their knowledge of healthcare value and costs.

Fortunately, several resources can fill this gap. In addition to Choosing Wisely and ACR appropriateness criteria discussed above, newer tools focus on how to operationalize these recommendations with

patients. The American College of Physicians (ACP) has launched a high-value care educational platform that includes clinical recommendations, physician resources, curricula and public policy recommendations, and patient resources to help them understand the benefits, harms, and costs of tests and treatments for common clinical issues (<https://hvc.acponline.org>). The ACP's high-value care educational modules are free, and the website also includes case-based modules that provide free continuing medical education credit for practicing physicians. The Institute for Healthcare Improvement (IHI) provides courses covering quality improvement, patient safety, and value through their IHI Open School platform (www.ihio.org/education/ihioopenschool).

In an effort to provide frontline clinicians with the knowledge and tools necessary to address healthcare value, we have authored a textbook, *Understanding Value-Based Healthcare*.³⁸ To identify the most promising ways of teaching these concepts, we also host the annual Teaching Value & Choosing Wisely Challenge and convene the Teaching Value in Healthcare Learning Network (bit.ly/teachingvaluenetwork) through our nonprofit, Costs of Care.³⁹

In addition, hospitalists can also advocate for greater price transparency to help improve cost awareness and drive more appropriate care. The evidence on the effect of transparent costs in the electronic ordering system is evolving. Historically, efforts to provide diagnostic test prices at time of order led to mixed results,⁴⁰ but recent studies show clear benefits in resource utilization related to some form of cost display.^{41,42} This may be because physicians care more about healthcare costs and resource utilization than before. Feldman and colleagues found in a controlled clinical trial at Johns Hopkins that providing the costs of lab tests resulted in substantial decreases of certain lab tests and yielded a net cost reduction (based on 2011 Medicare Allowable Rate) of more than \$400,000 at the hospital level during the 6-month intervention period.⁴¹ A recent systematic review concluded that “charge information changed ordering and prescribing behavior” in the majority of studies.⁴² Some hospitalist programs are developing dashboards for various quality and utilization metrics. Sharing ratings or metrics internally or publically is a powerful way to motivate behavior change.⁴³

LEAD LOCAL VALUE INITIATIVES

Hospitalists are ideal leaders of local value initiatives, whether it be through running value-improvement projects or launching formal high-value care programs.

Conduct Value-Improvement Projects

Hospitalists across the country have largely taken the lead on designing value-improvement pilots, programs, and groups within hospitals. Although value-

“COST” Framework for High-Value Care Interventions



Interventions	Description	Example	List Predisposing Factors (Barriers or Assets) in Your Local Clinical Environment	List Potential Strategies to Apply in Your Local Clinical Environment
C	Culture	Valuing cost-consciousness and resource stewardship as practiced standards of medical professionalism at the individual and team level.	Hospital-wide campaign led by peer-champions to raise awareness regarding appropriate transfusion practices	<input type="checkbox"/>
	Oversight	Requiring accountability for cost-conscious decision-making at both a peer and organizational level	Regular audit and feedback, using data visualization strategies, regarding individual and team-based transfusion practices	<input type="checkbox"/>
S	Systems Change	Creating supportive systems to make cost-conscious decisions using institutional policy, decision-support tools, and evidenced-based clinical guidelines.	Ordering system in the electronic health record that provides default options and advice based on pre-transfusion hemoglobin level	<input type="checkbox"/>
T	Training	Providing the knowledge, skills, and tools clinicians need to make cost-conscious decisions in their clinical environments.	Lecture or workshop providing the evidence behind appropriate transfusion practices and harms of excessive transfusions	<input type="checkbox"/>

“COST” framework developed by the Costs of Care team, including Drs. Andrew Levy, Neel Shah, Christopher Moriates, and Vineet Arora

FIG. 1. Worksheet for designing COST (Culture, Oversight, Systems Change, Training) interventions for value-improvement projects. Adapted from Moriates et al.⁴⁶ Used with permission.

improvement projects may be built upon the established structures and techniques for quality improvement, importantly these programs should also include expertise in cost analyses.⁸ Furthermore, some traditional quality-improvement programs have failed to result in actual cost savings⁴⁴; thus, it is not enough to simply rebrand quality improvement with a banner of “value.” Value-improvement efforts must overcome the cultural hurdle of “more care as better care,” as well as pay careful attention to the diplomacy required with value improvement, because reducing costs may result in decreased revenue for certain departments or even decreases in individuals’ wages.

One framework that we have used to guide value-improvement project design is COST: culture, oversight accountability, system support, and training.⁴⁵ This approach leverages principles from implementation science to ensure that value-improvement projects successfully provide multipronged tactics for overcoming the many barriers to high-value care delivery. Figure 1 includes a worksheet for individual clinicians or teams to use when initially planning value-improvement project interventions.⁴⁶ The examples in this worksheet come from a successful project at the University of California, San Francisco aimed at improving blood utilization stewardship by supporting adherence to a restrictive transfusion strategy. To address culture, a hospital-wide campaign was led by physician peer champions to raise awareness about appropriate transfusion practices. This included posters that featured prominent local physician leaders displaying their support for the program. Oversight was provided through regular audit and feedback.

Each month the number of patients on the medicine service who received transfusion with a pretransfusion hemoglobin above 8 grams per deciliter was shared at a faculty lunch meeting and shown on a graph included in the quality newsletter that was widely distributed in the hospital. The ordering system in the electronic medical record was eventually modified to include the patient’s pretransfusion hemoglobin level at time of transfusion order and to provide default options and advice based on whether or not guidelines would generally recommend transfusion. Hospitalists and resident physicians were trained through multiple lectures and informal teaching settings about the rationale behind the changes and the evidence that supported a restrictive transfusion strategy.

Launch High-Value Care Programs

As value-improvement projects grow, some institutions have created high-value care programs and infrastructure. In March 2012, the University of California, San Francisco Division of Hospital Medicine launched a high-value care program to promote healthcare value and clinician engagement.⁸ The program was led by clinical hospitalists alongside a financial administrator, and aimed to use financial data to identify areas with clear evidence of waste, create evidence-based interventions that would simultaneously improve quality while cutting costs, and pair interventions with cost awareness education and culture change efforts. In the first year of this program, 6 projects were launched targeting: (1) nebulizer to inhaler transitions,⁴⁷ (2) overuse of proton pump inhibitor stress ulcer prophylaxis,⁴⁸ (3) transfusions, (4)

telemetry, (5) ionized calcium lab ordering, and (6) repeat inpatient echocardiograms.⁸

Similar hospitalist-led groups have now formed across the country including the Johns Hopkins High-Value Care Committee, Johns Hopkins Bayview Physicians for Responsible Ordering, and High-Value Carolina. These groups are relatively new, and best practices and early lessons are still emerging, but all focus on engaging frontline clinicians in choosing targets and leading multipronged intervention efforts.

What About Financial Incentives?

Hospitalist high-value care groups thus far have mostly focused on intrinsic motivations for decreasing waste by appealing to hospitalists' sense of professionalism and their commitment to improve patient affordability. When financial incentives are used, it is important that they are well aligned with internal motivations for clinicians to provide the best possible care to their patients. The Institute of Medicine recommends that payments are structured in a way to "reward continuous learning and improvement in the provision of best care at lower cost."¹⁹ In the Geisinger Health System in Pennsylvania, physician incentives are designed to reward teamwork and collaboration. For example, endocrinologists' goals are based on good control of glucose levels for all diabetes patients in the system, not just those they see.⁴⁹ Moreover, a collaborative approach is encouraged by bringing clinicians together across disciplinary service lines to plan, budget, and evaluate one another's performance. These efforts are partly credited with a 43% reduction in hospitalized days and \$100 per member per month in savings among diabetic patients.⁵⁰

Healthcare leaders, Drs. Tom Lee and Toby Cosgrove, have made a number of recommendations for creating incentives that lead to sustainable changes in care delivery⁴⁹: avoid attaching large sums to any single target, watch for conflicts of interest, reward collaboration, and communicate the incentive program and goals clearly to clinicians.

In general, when appropriate extrinsic motivators align or interact synergistically with intrinsic motivation, it can promote high levels of performance and satisfaction.⁵¹

CONCLUSIONS

Hospitalists are now faced with a responsibility to reduce financial harm and provide high-value care. To achieve this goal, hospitalist groups are developing innovative models for care across the continuum from hospital to home, and individual hospitalists can advocate for appropriate care and lead value-improvement initiatives in hospitals. Through existing knowledge and new frameworks and tools that specifically address value, hospitalists can champion value at the bedside and ensure their patients get the best possible care at lower costs.

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