

Defining and Implementing Value-Based Health Care: A Strategic Framework

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Abstract

Value in health care is the measured improvement in a person's health outcomes for the cost of achieving that improvement. While some descriptions conflate value-based health care and cost reduction, quality improvement, or patient satisfaction, those efforts—while important—are not the same as value, which focuses primarily on improving patient health outcomes. A decade of research into organizations that have achieved better outcomes while often lowering costs suggests a strategic framework for

value-based health care implementation that starts with identifying and understanding a segment of patients whose health and related circumstances create a consistent set of needs. An interdisciplinary team of caregivers then comes together to design and deliver comprehensive solutions to address those needs. The team measures the health outcomes and costs of its care for each patient and uses that information to drive ongoing improvements. Care provided in this way aligns delivery with how patients

experience their health and reconnects clinicians to their purpose as healers. It also asks physicians to think differently about their role within the larger care team and about the services that team provides. The authors suggest medical schools should incorporate education on the principles and implementation of value-based health care throughout the undergraduate medical curriculum to prepare their graduates to lead the transformation to value-based health care as they enter the physician workforce.

Value in health care is the measured improvement in a patient's health outcomes for the cost of achieving that improvement.¹ The goal of value-based care transformation is to enable the health care system to create more value for patients. Because value is created only when a person's health outcomes improve, descriptions of value-based health care that focus on cost reduction are incomplete. Reducing costs is important but not sufficient: If the real goal of value-based health care were cost reduction, pain killers and compassion would be sufficient.

Value-based health care is often conflated with quality, a vague concept

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that implies myriad virtues and in health care often focuses on inputs and process compliance. Quality improvement efforts may not improve patients' health outcomes, however; even given similar processes, different teams' results vary. In addition, requirements to track and report process compliance may distract caregivers from the more significant goal of improving health outcomes. Diabetes care in Italy provides one example of process compliance not ensuring better outcomes: Analysis of regional variations in process compliance and in outcome indicators showed better process compliance in the north but better outcomes for patients in the south.²

Certainly clinicians should practice with the consistency demanded by scientific methods and follow evidence-based care guidelines. But results matter. The goal of value-based health care is better health outcomes.

Value and patient satisfaction are also commonly confused. While the patient satisfaction movement has brought a much-needed emphasis on treating people with dignity and respect, the essential purpose of health care is improving health. Value is about helping patients. Satisfaction surveys ask patients, "How were we?" Value-based care providers ask, "How are you?"

Why Improving Value Matters

Improving a patient's health outcomes relative to the cost of care is an aspiration embraced by stakeholders across the health care system, including patients, providers, health plans, employers, and government organizations. Value-based health care aligns these diverse parties' goals so well that, shortly after the concept was introduced in 2006, health economist Uwe Reinhardt described it as "a utopian vision."³ While Reinhardt expressed concern about the challenges of moving to a value-based system, he lauded the larger objectives of the transformation.

By focusing on the outcomes that matter most to patients, value aligns care with how patients experience their health. In this context, health outcomes can be described in terms of capability, comfort, and calm.⁴ *Capability* is the ability of patients to do the things that define them as individuals and enable them to be themselves. It is often tracked with functional measures. *Comfort* is relief from physical and emotional suffering. In addition to reducing pain, improving patients' comfort requires addressing the distress and anxiety that frequently accompany or exacerbate illness. *Calm* is the ability to live normally while getting care. It encompasses freedom from the chaos that patients often experience in the health care delivery system, and it

is especially important for people with chronic and long-term conditions. Care that improves outcomes in all 3 of these dimensions creates a better experience for patients. Moreover, capability, comfort, and calm describe outcomes that result from the efficacy and empathy of health care, rather than its hospitality.

Value-based health care connects clinicians to their purpose as healers, supports their professionalism, and can be a powerful mechanism to counter clinician burnout. Critics who characterize value-based health care as underpinning a model of “industrial health care”⁵ distort the meaning of the term *value*, misinterpreting it as focused on cost. Instead, value-based health care’s focus on better health outcomes aligns clinicians with their patients. That alignment is the essence of empathy. Measured health outcomes demonstrate clinicians’ ability to achieve results with patients and families and drive improvement in the results that matter most to both patients and clinicians. This intrinsic motivation is often missing in the health care system, where clinicians are directed to spend countless hours on tasks that do not impact their patients’ health.

Better outcomes also reduce spending and decrease the need for ongoing care. By improving patients’ health outcomes, value-based health care reduces the compounding complexity and disease progression that drive the need for more care. A patient whose diabetes does not progress to kidney failure, blindness, and neuropathy is, over time, dramatically less expensive to care for than a patient whose condition continually worsens.⁶

Value-based health care is a path to achieving the aspirational goals of the Institute for Healthcare Improvement’s “triple aim”—improving the patient experience of care, improving the health of populations, and reducing the per capita cost of health care—as well as improving clinician experience, a fourth aim that others have proposed.^{7,8} Patient and clinician experience improvements are described above. Population health only improves when the health outcomes of many individuals improve, which is the focus of value-based health care. Costs also cumulate from the care provided for individuals. By organizing teams to care for individuals with similar needs, a

value-based approach enables expertise and efficiency, rather than rationing, to drive costs down. This puts decisions about how to deliver care in the hands of the clinical team, rather than those of an insurance administrator, supporting the professionalism of clinicians and the power of clinician–patient relationships to deliver effective and appropriate care.

A Framework for Implementing Value-Based Health Care

Improving value in health care is not an unreachable utopian ideal. Around the globe, health care delivery organizations—in varied payment settings, with an array of regulatory structures and many different care traditions—have demonstrated dramatically better health outcomes for patients, usually at lower overall costs.^{1,4,9,10} More than a decade’s research into these organizations by 2 of the authors (E.T. and S.W.) elucidates a clear framework for value-based care transformation.¹¹

That framework, shown in Figure 1 and described below, can guide organizations in building value-based health care systems. This transformation starts when the organization identifies and understands a segment of patients whose health and related circumstances create a consistent set of needs. A dedicated, co-located, multidisciplinary team of caregivers designs and delivers a comprehensive solution to those needs. This integrated team measures meaningful health outcomes of its care for each patient and the costs of its services and then learns from that information to drive ongoing improvements in care and efficiency. Finally, as health outcomes

improve, evidence of better care creates opportunities for the team to serve more patients through expanded partnerships.

Understand shared health needs of patients

Throughout the economy, service providers organize their offerings around a defined set of customers whose needs are similar. Think, for example, of transportation providers. Transportation is an incredibly broad economic sector. Services range from jets that deliver tons of time-sensitive cargo to drones that deliver individual bags of blood, and from buses to rented electric scooters. In each case, the transportation company matches its services to the needs of its customer segment.

Health care is the outlier. In the health care system, most services are organized around the service providers. Endocrinologists practice in groups with other endocrinologists, as do cardiologists, ophthalmologists, and podiatrists. A patient with diabetes, who likely needs the coordinated—or, even better, integrated—services of these various clinicians, has to be the organizer. Health care’s general failure to structure around patient needs accounts for its inconvenience and lack of integrated services. Failing to structure for what is common and routine also increases the burden on caregivers, who too often must improvise to solve routine problems. This structural mismatch is a root cause of why health care is so expensive and does not deliver better results for patients.¹

To be effective and efficient, health care should be organized around segments of patients with a shared set of health needs, such as “people with knee pain” or “elderly people with multiple chronic

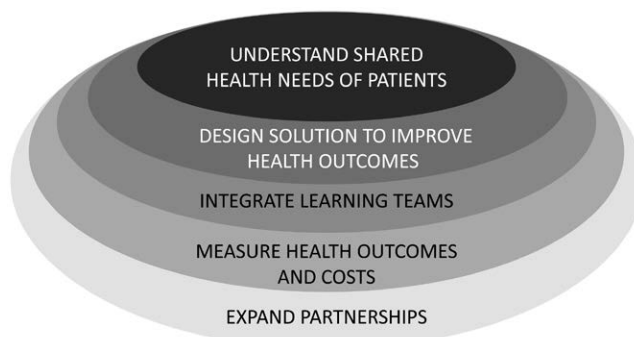


Figure 1 Strategic framework for value-based health care implementation to achieve better patient outcomes.

conditions.” Organizing care in this way allows clinical teams to anticipate consistent patient needs and provide frequently needed services efficiently, doing common things well. The efficiency afforded by structuring care around patient segments frees clinicians from scrambling to coordinate services that are needed routinely. The added bandwidth allows them to personalize services for individual patients who may have somewhat different needs.

Design a comprehensive solution to improve health outcomes

Starting by identifying the common needs of a patient segment enables teams to design and deliver care that provides a comprehensive solution for patients or families. When the goal of care shifts from treating to solving patients’ needs, care teams can both address the clinical needs of patients and begin to address the nonclinical needs that, when left unmet, undermine patients’ health. For example, a clinic for patients with migraine headaches might provide not only drug therapy but also psychological counseling, physical therapy, and relaxation training. Similarly, a clinic for patients with cancer might include transportation assistance as a service for those who have difficulty getting to their regular chemotherapy appointments. Broadening and integrating the services provided to patients achieves better outcomes by identifying and addressing gaps or obstacles that undermine patients’ health results.⁴

Integrate learning teams

Implementing multifaceted solutions requires a dedicated team drawn from an array of disciplines, many of which are not typically viewed as medical. An effective team integrates services, reducing or even eliminating the need for coordinators. Team members are often co-located, enabling frequent informal communication that supplements the formal channels of communication to ensure effective and efficient care. What is critical is thinking together to improve and personalize care and learning together so health outcomes improve with experience. The team structure can also expand across locations, extending state-of-the-art knowledge to remote clinicians and enabling world-class care to be delivered locally rather than requiring patients to travel.

Measure health outcomes and costs

It is a truism of business that management requires measurement. Recognizing that the essential purpose of health care is improving the health of patients, it is axiomatic that health care teams must measure the health results as well as the costs of delivering care for each patient. Leaders cannot align health care organizations with their purpose without measurement of health outcomes. In addition, the current dearth of accurate health outcomes and cost data impedes innovation.

Measurement of results allows teams to know they are succeeding. Measuring health outcomes also provides the data needed to improve care and efficiency. Although caregivers are burdened with reporting reams of information, they rarely consistently track the health outcomes that matter most to patients and thus to themselves as clinicians. Cost and health outcomes data also enable condition-based bundled payment models, empowering teams of caregivers to reclaim professional autonomy and practice clinical judgment—two integral elements of professional satisfaction and powerful antidotes to the affliction of burnout.^{1,12–14}

Measuring health outcomes is not as complex as it is often perceived to be. Routine clinical practice does not dictate, nor can it support, the voluminous health outcome measure sets used in clinical research. Instead, clinicians need to focus on measuring the outcomes that define health for their patients. Those outcomes cluster by patient segment—the outcomes that matter most to patients with congestive heart failure are strikingly consistent while also markedly different from the outcomes that matter most to women who are pregnant. Within any given patient segment, though, patients define *health* in terms of capability, comfort, and calm, as described above, and these dimensions can be usually captured in 3 to 5 measures. For example, men undergoing prostate cancer surgery are most concerned about the common impairments from that procedure—incontinence, impotence, and depression—as well as time away from work for recovery.

In addition to health outcomes, teams must measure the costs of their services

for every patient. Cost-grouping methodologies like the one developed at the University of Utah¹⁵ or applications of time-driven activity-based costing¹⁶ can provide the data teams need both to demonstrate the value of their care and to identify areas for improving their efficiency.

Expand partnerships

Organizing around patients with shared needs and demonstrating better value in care create opportunities to expand partnerships and improve health outcomes for more people. For example, with evidence of care that has fewer complications and allows employees to return to work more quickly, employers are increasingly willing to contract directly with providers and even to pay more per episode of care than they had previously, because faster and fuller recovery reduces other employer costs such as those associated with absenteeism.¹⁷ Partnerships among clinical organizations may also expand as teams gain expertise and the ability to work across more stages of the care cycle or more locations. Integrated teams may work with partners for an array of reasons, such as using new technology to share information with patients, supporting rural clinicians as they provide patients with care close to home, or offering services to support lifestyle changes in a community. These are natural partnerships because the shared goals of creating high value and achieving better health outcomes for patients align the interests of patients, family members, employers, health plans, and clinicians, as well as medical technology suppliers whose services may facilitate these relationships.

Value-Based Health Care in Medical Education

Moving to a system of value-based health care requires that physicians and physicians-in-training learn to think differently about their role within the larger care team, about what constitutes an effective care solution, and about the importance of measuring the health outcomes that matter most to patients. That learning should begin during medical school.

The University of Texas at Austin’s Dell Medical School (DMS) offers an example

of how education about value-based health care can be incorporated into undergraduate medical education. Throughout the 4 years of medical school, DMS students study the principles of value-based care delivery described above. During their clinical rotations, they also see these principles in practice in UT Health Austin's affiliated clinics, which are organized around segments of patients with shared needs and designed to provide comprehensive solutions delivered by interdisciplinary, outcomes-focused teams.

In the joint pain clinic, for instance, DMS students observe interdisciplinary care teams providing comprehensive care to alleviate pain and improve functioning. Treatment may entail joint replacement surgery, but surgery is used less frequently than in other orthopedic care settings. Those who are not seen as good candidates for surgery might instead receive physical therapy, care for depression or other mental health conditions, and/or weight loss support. The clinic tracks health outcomes for all patients and has found that while the rate of patients receiving lower extremity surgery is 30% lower than that of patients in conventional care settings, more than 60% of patients report significant reductions in pain and improvements in function 6 months after the initial appointment.¹⁸

DMS' curriculum also allows third-year medical students (and other interested health professionals) to complete a master's degree in health care transformation, focused on the principles and implementation of value-based health care. We encourage other medical schools to incorporate similar training

throughout their curricula to prepare their graduates to lead the transformation to value-based health care as they enter the physician workforce.

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