

Toward Value in Health Care: Perspectives, Priorities, and Policy

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The goal of value-based care is simple: deliver care that improves the health of patients at the lowest possible cost. In recent years, concerns about health care value have led to the emergence of multiple value-based frameworks for decision-making. This commentary describes how the concept of value is defined for different stakeholders, discusses the impact of the value-based movement, and offers perspective on future directions for prioritization and policymaking.

A 50-year old, otherwise healthy man from Greenville was diagnosed with a rapidly-growing brain tumor after experiencing debilitating headaches for several months. The headaches had become so severe that he had been unable to work for some time. As a self-employed construction worker, he didn't have health insurance, which prevented him from seeking timely medical care. When he did seek care, he was shuttled from primary care to multiple specialty care providers, initially diagnosed with migraines, myalgia, and a host of other conditions before an MRI finally confirmed presence of a brain mass.

Unable to pay for his care, he delayed treatment for months until a public hospital agreed to provide neurosurgery and follow-up treatments. He spent several days in the hospital and attended pre- and post-surgical consultations where his doctors prescribed a number of medications. These drugs were intended to prepare him for surgery, limit tumor regrowth, and reduce the morbidity of his post-surgical state. To save money, some of these he took at half their prescribed amount, and some he chose not to take at all. His final medical bills totaled well over \$100,000. Unable to work, he was desperate for financial help. He sold off assets, sought out loans from family members, and fell into a depressive state. Over a year later, after multiple collections notices, the hospital wrote off his remaining debt. His symptoms have increased in severity since that time, suggesting perhaps that the tumor has returned, but he refuses to seek additional care after all that he has endured.

Who wins in this situation and the many thousands of others like it? The patient, because he averted, or at least delayed death? The hospital, because they cut their losses after recovering as much cost as they possibly could? The device and drug manufacturers, because they got paid for

at least part of the recommended regimen? The insurers/payers, because they avoided insuring him in the first place? It is hard to say.

Can we say that his care or anyone else's in a similar situation was high-value? Did it extend life or quality of life for a reasonable cost? Could a better outcome have occurred at the same cost? Again, it is hard to say, and the answer depends on whose perspective of value we are considering.

Multiple stakeholder perspectives complicate the concept of health care value in the United States. The goal of value-based care is simple: deliver care that improves the health of patients at the lowest possible cost. In recent years, as costs have subsumed an increasing proportion of the national gross domestic product (GDP) [1] and of individual budgets [2], a nationwide discussion of value has produced a large literature, as well as a number of value-based frameworks for decision-making [3]. These frameworks are evolving, and the extent to which they influence policy, provider, manufacturer, patient, or policymaker decision-making remains unclear.

Our purpose with this commentary is to describe how the concept of value is defined for different stakeholders, to discuss the impact of the value-based movement, and to offer perspective on future directions for prioritization and policymaking.

What is Value? Alternative Stakeholder Perspectives

Value in health care is defined as an assessment of health benefit relative to cost. Because costs and benefits vary across stakeholders, value can and will have different meaning to different groups, but an under-described component to the assessment of value is opportunity cost. Opportunity cost refers to the theoretical loss of opportunity to invest resources in alternative uses once consumed. Meanwhile, value can only be defined against the next best or baseline

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usual care alternative. Therefore, value is inherently relative and subjective, depending on whose perspective is used and when.

We focus on value from the perspective of 5 key stakeholders: patients, providers, payers, manufacturers, and policymakers (see Table 1).

Patient Value

Value to patients is represented by the sum total of the realized benefit of treatment relative to the sum total of realized cost. The determinants of value in this context are well-described elsewhere [4], but broadly may be categorized as “traditional”—clinical utility (eg, effectiveness, safety) and monetary cost—or “non-traditional,” referring to patient preference (eg, quality of life) and time cost.

A number of newer value-based frameworks claim to consider value from the patient’s perspective [5, 6], but it is important to recognize the different purposes behind population-level economic evaluation, which is often intended to inform large-scale decision making (for example, establishing reimbursement guidelines based on average costs and outcomes), versus patient-level decision tools, which are often intended to aid individual choice through clarifying personal preferences and treatment goals.

Provider Value

Ideally, providers act as perfect agents for patients, accounting for their needs and preferences when making medical recommendations. A number of studies, however, have indicated significant discord between patient and provider preferences [7]. In general, this work shows that providers tend to overvalue “traditional” clinical outcomes (eg, HbA1c) and undervalue “non-traditional” ones (eg, activities of daily living, sexual function) compared to their patients. Value is not a concept most physicians and other providers are trained to consider. While providers routinely consider clinical risk/benefit trade-offs, research has demonstrated the reluctance of providers to include consideration of cost when discussing treatment options with

patients—although that paradigm is shifting, especially in high-cost treatment areas such as oncology [8].

The consequences of patient/provider discordance are often greater than patient dissatisfaction, including downstream costs to the health care system and to the patient. Low-value or unaffordable care from the perspective of the patient can lead to delays in, or discontinuation of, guideline-recommended treatments, medical bankruptcy, and even higher mortality [9-11].

Payer Value

Payers in the US health care system are a heterogeneous group unto themselves. Often discussed as public versus private, there are considerable differences even within these categories. Despite these differences, and likely because payers most often bear the brunt of the cost for treatment and treatment-related consequences, value to the payer has historically received the most attention. Rigorous economic evaluations nearly always include a “payer” perspective either as primary or secondary analysis [12].

Yet, there are reasons to believe that value to the payer does not always align with value to the patient. Payer value is defined at the population level, usually as net average benefit versus net average cost. Averages obscure patient heterogeneity, creating a disconnect between patient and payer. Value to the payer, especially for new treatments, is often calculated a priori based on expected benefits and costs. Over time, these can and should be adjusted, but we see little evidence of this as standard practice. Finally, difference in insurance design, including out-of-pocket maximums, cost-sharing, and other regulations can result in wildly different estimates of value to an individual patient with only mild fluctuations in payer value.

Manufacturer Value

Manufacturers (including pharmaceutical and medical device manufacturers) derive value primarily from profit. Many firms, however, have secondary targets for value-based initiatives such as brand loyalty, satisfaction, or mar-

TABLE 1.
Stakeholder Assessment of Value: Benefits and Costs

	Benefits	Costs
Patients	Clinical Quality of life Patient satisfaction	Monetary Non-monetary
Providers	Clinical Quality of life Patient satisfaction	Traditionally not a focus
Payers	Clinical Limited quality of life	Monetary
Manufacturers	Revenue Brand loyalty Patient satisfaction Market share/demand	Monetary
Policymakers	Clinical Quality of life	Monetary Non-monetary

ket share optimization. Manufacturers also must account for product demand, social desirability, and product competition when negotiating prices. The result is a definition of value that is more complex and transient than initially perceived.

Policyholder Value

The policymaker perspective on value could be seen as a combination of patient and payer perspectives. In the economic evaluation literature, this is often termed the “societal” perspective, which seeks to capture aspects of costs and benefits to society that are common to welfare analyses but are not traditionally captured in economic evaluation under the payer perspective, including travel time or productivity loss. Recent recommendations indicate that all economic evaluation studies should reference a societal perspective [12]. Like the payer, the policymaker may have a different assessment of value than individual patients due to an emphasis on population-level cost/benefit trade-offs.

Current Value Initiatives

Many ongoing so-called “value-based” initiatives do not explicitly evaluate value. The term has largely evolved to mean any alternative to volume-based reimbursement, usually with a focus on rewarding outcomes improvement. Still, value is often implicit, rather than explicit, at best in these models. Unsurprisingly, these initiatives tend to employ a payer perspective and focus on a small set of easily measurable clinical outcomes.

Medicare has been active in the area of value-based payment design. Programs like the Hospital Value-Based Purchasing Program and the Value Modifier Program for physicians tie a portion of reimbursement to a composite measure, including both per-beneficiary average cost and performance on a number of specific outcome and process measures [13]. Theoretically, these programs incentivize providers to select higher value services by incentivizing low-cost care while penalizing or rewarding based on care quality. However, preliminary evidence suggests little effect, with both quality measures and costs stagnating [14, 15].

Bundled payments also work to shift incentives by reimbursing a fixed amount for an entire episode of care, regardless of services provided. This means providers can maximize profits through performing a procedure for lower cost with fewer complications. Evidence suggests this strategy may be effective for procedures like joint replacement [16], but other types of procedures show zero or negative improvement in outcomes [17]. The Oncology Care Model, a specific type of bundled payment in cancer, incorporates quality measures to modify the episode-based payments [18, 19]. Early results of this program are not yet available, so it remains to be seen whether this integrated approach will be effective at promoting high-value care in the particularly high-cost field of oncology.

Additionally, there are several informational initiatives targeted at both patients and providers. The DrugAbacus is a tool developed to compare manufacturer prices against value-based prices derived, in part, from personalized preferences [6]. The goal of this tool is to facilitate conversations between patients, providers, and payers about how these value criteria should be incorporated into drug pricing [6]. Notwithstanding this and other important efforts, many payers, providers, and manufacturers have resisted making prices more transparent, which contributes to information asymmetry for patients and is in clear conflict with informed decision-making, thereby defying the application of traditional economic theory in health care settings.

Looking Ahead

The ongoing national discussion of value is unlikely to fade. Enthusiasm for cost-efficient care is strong and bipartisan, but its implementation is not without barriers. We briefly discuss a few key areas that can facilitate a larger transition from discussion to practice.

First, we see a need for larger consideration of the patient perspective on value. Much of the current work is designed to improve population outcomes from the perspective of payers, masking individual needs and patient preferences. Increased appreciation for patient heterogeneity and increased utilization of patient-reported outcomes and preference data offer the potential to better align societal and patient value needs. Second, we believe in open and honest discussion of trade-offs. In health care, there is no give without take. “Whose preferences matter?” and “what are we willing to trade off?” should be asked at each attempt at value-based reform. Third, we call for a concerted effort to dissuade and reduce low-value treatment, equal to the effort placed on rewarding providers for positive outcomes. Finally, we must continue to embrace objective evidence on value. The negative rhetoric surrounding large discussions of value as “rationing” is often misguided and counterproductive. A more constructive approach considers real trade-offs in medical decision-making with the primary goal of protecting, both medically and financially, the most important stakeholder: the patient.

Conclusion

Value-based reforms in health care are the topic du jour, but challenges remain in operationalizing value in a way that addresses the concerns of varied and sometimes conflicting perspectives. The explosion in health care costs, relative to marginal health benefit, is unsustainable and untenable for many stakeholders, including patients. As we move forward into new territory where multiple perspectives, frameworks, and value initiatives battle for terrain, we must remember that at the center of this milieu is the patient—patients like the man from Greenville whose brain tumor was absolutely crippling from a health and financial perspective. Our efforts

are wasted if any one of the other perspectives on value (eg, the provider, the payer, the manufacturer, the policy-maker) trumps that of the perspective of the patient. **NCMJ**

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