Measuring Value in Health Care:
The Times, They Are A Changin'

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Policy makers struggle to measure value in health care, and yet there is the recurring question: Is our present system of quality metrics too costly and burdensome? We need to develop measures promoting shared accountability across settings and providers, identify and develop meaningful outcome measures, and reduce the burden on providers of data collection.

The simplest definition of value in health care is: Value = Quality / Cost. Typically, experts meet and develop a group of quality measures. Most of these measures are process measures with little or no patient input. From the patient's viewpoint, the definition of value may simply be, "What am I getting, and how much did it cost?"

Porter defines health care value as the "health outcomes achieved which matter to patients relative to the cost of achieving those outcomes" [1]. Others have also published opinions about the patient's perspective in the definition of value. Laskowski proposes that the patient-physician relationship matters more than anything else, as it is through this relationship that medical conditions are discussed and management plans are created. He observes that patients expect an explanation that considers their "concept of illness … including the individual patient's unique desires" [2]. He describes a specialist who spends the first 10 minutes of each consultation asking about the patient's life, work, and children before discussing treatment options. Tailoring management plans is more likely with this approach, and arguably patient compliance will be greater.

Including the patient's perspective can provide important information. The patient's perspective is not just about how much you like your doctor; it involves researched questions about complications, pain, and return to daily living activities. "If value improves, [then] patients, payers, providers, and suppliers can all benefit while the economic sustainability of the health care system increases" [3].

Berenson recently published a commentary in *JAMA Forum* titled "If you can't measure it, you can't manage it." This title was misquoted many years ago and says that we must manage value, even if it is difficult to measure. Berenson notes that the Medicare Access and CHIP Reauthorization Act (MACRA) is moving us towards value-based payments whether we are ready or not. Furthermore he said, "Now comes the hard part: actually achieving value, rather than fashion [in] an increasingly complex, intrusive and likely doomed attempt to measure value" [4]. So, before a new quality measure "monster" attacks our brains and wallets, we should find simpler sets of outcomes. These may not be perfect measures of all processes, but better measures of patient outcomes. Each year US physician practices in 4 common specialties—cardiology, orthopedics, primary care, and multispecialty practices—spend more than $15.4 billion to report quality measures [5]. Is the current system of quality metrics too costly and too burdensome? How many of the metrics are for payer benefit rather than for improvement of patient care?

How should we measure the patient's perspective and determine its value? One current set of measures are the metric specifications for quality from the 2016 accountable care organization program [6]. Of the 34 measures, 8 are from patient surveys asking about the patient or caregiver's experience, 9 are from reports of preventive care and screening, 7 are from reports of specific clinical care tasks, and 10 are related to care coordination or patient safety. The last group includes measures for preventable admissions, which addresses both quality and cost.

Quality metrics for fee-for-service care are being modified by MACRA to change the Physician Quality Reporting System, the Value Based Modifier, and the Meaningful Use program, all of which will become part of the Merit-Based Incentive Payment System (MIPS). MIPS will also include a new category called Resource Use, or risk-adjusted total cost of care, thus including quality and cost. The Centers for Medicare & Medicaid (CMS) has published a development roadmap titled *The Quality Measure Development Plan* [7]. The transition to MIPS has begun and will include a lengthy rulemaking process. Nonetheless, it is encouraging to see CMS solicit input on these strategic approaches: engaging patients in the measure development process; reducing provider burden of data collection for measure reporting;

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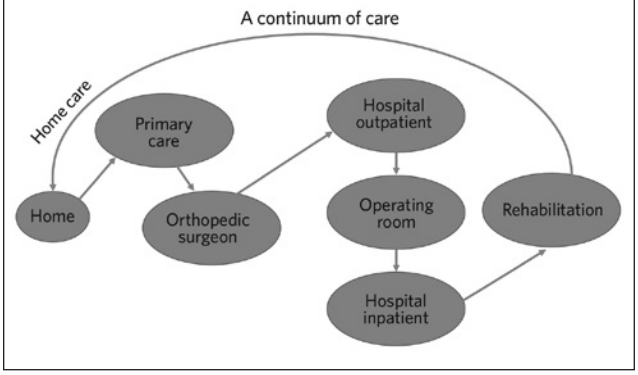
streamlining data acquisition for measure testing; developing measures promoting shared accountability across settings and providers; and most importantly, identifying and developing meaningful outcome measures. Meaningful outcome measures significantly exceed process measures.

Most of the quality measures are process measures like the Healthcare Effectiveness Data and Information Set, which captures compliance with practice guidelines. These measures do not measure outcomes. A good example of how outcome measurement could be included is to start with bundles of care. Bundles improve care by using a small set of evidence-based practices to improve patient outcomes. They are focused enough to allow all participants to define their exact role, reduce fragmentation, and optimize efficiency while only taking limited financial risks. Employers, payers, providers, and health systems see bundles as an early step to compete in value-based care delivery reform. Using bundles can result in development of clear, evidence-based, and efficient clinical pathways to improve service line value to the patient. Outcomes are then measured by a medical condition, not by one segment of a health system. Outcome measurement must operate across the full spectrum of care, including the hospital and all outpatient care (see Figure 1).

One example of bundled care is knee replacement surgery, in which the full cycle of care extends from diagnosis, to prescreening, to the operating room, to post-acute care, to rehabilitation, and ends when the patient is able to return to work. The patient-determined outcomes are important to consider: complications, pain, hospital meals, the hospital staff's response to the patient's needs, and the patient's return to expected daily living activities. CMS bundled payments include patient-determined outcomes as part of the overall measure determining whether hospitals receive all or only part of the bundled payment [8].

Many common surgeries can be added to this bundle approach, including nonsurgical conditions such as congestive heart failure, chronic obstructive pulmonary disease, acute myocardial infarction, and pneumonia. CMS has announced plans to include more than 50 conditions in the bundled payment plan initiated this year for lower extremity joint replacement. These bundles include a short pre-episode period, the hospitalization, and a 90-day post-episode period, all covered under a single payment. Bundles can be effective tools to help the health care delivery system attain better measures of efficiency and value, and they can force siloed health care providers into partnerships to achieve cost and quality outcomes. This approach can also help reduce direct and administrative costs. Bundles for longer episodes of care, such as treatment of cancer or chronic back pain, can be studied to determine the outcome measures valuable to the patient and the family.

FIGURE 1.
Joint Replacement Bundle



What about other common medical conditions such as asthma, attention deficit hyperactivity disorder, or other mental health conditions? Pilot studies are under way to determine if these conditions could be bundled to define meaningful outcomes and costs. Regardless of the limitations and concerns about incentives with the rollout of CMS bundled payments, bundles will have the effect of forcing examination of care pathways and outcomes.

Cost measurement has been prominent in much of this discussion about quality. Is our cost accounting appropriate for our needs? Almost all hospital cost determination is by department and is driven by traditional fee-for-service contracts. It is not based on a full cycle of care for a medical condition. Additionally, time-driven, activity-based cost measurement can help health systems increase productivity by allowing providers to practice at the top of their license and skill set, working as a team rather than individually. This will result in better capacity utilization, more standardized processes, and the most cost-effective care.

What is the pathway to developing better measures for value? Cost remains a difficult part of the equation to quantify because we do not have easy methods for collecting appropriate cost data across the spectrum of care delivery systems. However, cost measurements for all segments of care can be developed; measures for quality and outcomes will take longer. The inclusion of patient outcomes will also be important as we expand the pool of value-based payments.

Just as we understand that bundles are useful as mechanisms for improving both delivery of care and accuracy of outcome descriptions, 2 other changes should be embraced. First, clinical integration must occur at both the level of the individual physician and at the level of the health care delivery system. Combining the 2 allows for comparison and integration of measures. Changes at the system level provide opportunities to eliminate fragmentation and duplication of services, thus creating better value for patients. The second change must be better patient engagement, with opportunities for physicians to inform patients of their health status and effective patient-oriented care plans. These approaches will result in patients partnering with their health care providers. Patients can then engage in shared decision making about acute and chronic illnesses as well as preventive

care. This empowers patients to be more involved and to take responsibility for their health. Patients can and should work with providers to accurately define their desired outcomes, thus creating better value and customized care for individuals.

How long will this transformation take? This is uncertain, but clearly Medicare is pushing health care delivery reform at a rapid pace [9], and market forces are in place to reduce fee-for-service profit. For any provider in both the fee-for-service world and value programs, it is difficult to remain balanced, as if the provider was standing in 2 different canoes. Eventually, providers will need to shift to value-based care, because fee-for-service care will sooner or later become unsustainable. NCMJ

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References

1. Porter M, Lee R. The strategy that will fix health care. Harvard Business Review website. https://hbr.org/2013/10/the-strategy-that-will-fix-health-care. Published October 2013. Accessed March 1, 2016.
2. Laskowski R. The power of "My". JAMA. 2016;315(12):1235.
3. Porter M. What is value in health care? N Engl J Med. 2010;363:2477-2481.
4. Berenson R. If you can't measure performance, can you improve it? JAMA. 2016;315(7):645-646.
5. Casalino L, Gans D, Weber R, et al. Physicians spend $15.4 billion each year on reporting quality measures. Health Aff. 2016;35(3):401-406.
6. RTI International. Accountable Care Organization 2016 Program Quality Measure Narrative Specifications. Centers for Medicare & Medicaid Services website. https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/2016-ACO-NarrativeMeasures-Specs.pdf. Published January 13, 2016. Accessed Mar 1, 2016.
7. Centers for Medicare & Medicaid Services. CMS Quality Measure Development Plan supporting the transition to the Merit-based Incentive Payment System (MIPS) and Alternative Payment Models (APMs) (Draft). Centers for Medicare & Medicaid Services website. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/Draft-CMS-Quality-Measure-Development-Plan-MDP.pdf. Published December 18, 2015. Accessed March 1, 2016.
8. Centers for Medicare & Medicaid Services. Comprehensive Care for Joint Replacement (CJR) payment model for acute care hospitals furnishing lower extremity joint replacement services. Federal Register 80 FR 73272. Federal Register website. https://www.federalregister.gov/articles/2015/11/24/2015-29438/medicare-program-comprehensive-care-for-joint-replacement-payment-model-for-acute-care-hospitals. Published November 24, 2015. Accessed March 1, 2016.
9. Centers for Medicare & Medicaid Services. The Medicare Access & CHIP Reauthorization Act of 2015 Path to Value. Centers for Medicare & Medicaid Services website. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-LAN-PPT.pdf. Published January 2015. Accessed March 1, 2016.