AcademyHealth

Research Insights

Paying for Value: Progress and Obstacles

Introduction

Public and private policymakers are increasingly committed to using provider payment as a tool to improve clinical quality, patients' experience of care, and efficient use of resources. Since the turn of the millennium, significant gains have been made in measuring and incentivizing improvements in quality and patient experience. More recently, payers have also stepped up efforts to collect information about costs and resource use and to devise payment strategies to encourage efficiency. The concept of value has emerged as a single metric that joins the dimensions of quality and efficiency and is now a primary focus of payment policy in Medicare, Medicaid, and private insurance.

Background

In January 2015, U.S. Health and Human Services Secretary Sylvia Burwell announced that her agency's goal was that, by 2016, 85 percent of Medicare fee-for-service payments would be "tied to quality or value," increasing to 90 percent by 2017. Burwell stated further that, by 2016, "alternative payment models" would be used for 30 percent of these value-based payments, increasing to 50 percent by 2018. Her forecast reflected an expanding range of value-based purchasing programs for hospitals in Medicare called for in the Affordable Care Act (ACA) and a comprehensive set of physician payment measures called for in the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA).

Early "pay-for-performance" (P4P) efforts focused mainly on clinical quality and patient experience. Initially, different payers tended to select their own priorities and metrics, attenuating the impact of the efforts on providers and making it difficult to assess their effectiveness. The quality of physician care was particularly difficult to gauge because small sample sizes and heterogeneous patient populations thwarted statistically reliable evaluations.

Over time, however, payers have gravitated to core measures of process and outcomes such as hospital readmissions and clinical markers for high-prevalence conditions such as diabetes and hypertension. In many cases, modest improvements in quality have resulted. A path-breaking development in physician quality assessment occurred in February 2016, when the Centers for Medicare & Medicaid Services and the private insurance trade group America's Health Insurance Plans announced consensus on the use of a core set of physician quality measures.

For the most part, however, programs that combine quality measures and incentives for cost control and prudent resource use—paying for value—have not been in operation long enough to measure their effectiveness. Experimentation is increasing through approaches such as shared savings and bundled payment, but many questions remain about how best to define and measure value.

Genesis of this Brief:
This brief is based on a meeting of federal policymakers and researchers that took place in Washington, D.C., on December 8, 2015. AcademyHealth convened the meeting as part of its Research Insights Project. Funding for the conference was made possible by Grant No. 5R13HS018888-06 from U.S. Agency for Healthcare Research and Quality (AHRQ). The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the U.S. Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government. The Research Insights Project convenes invitational meetings, holds webinars, and produces reports and issue briefs to foster discussion of existing, relevant research evidence among policy audiences that need to implement health reform and develop new policy. Additional information and publications may be found on the project's website at http://www.academyhealth.org/programs/ProgramsDetail.cfm?ItemNumber=6752&navItemNumber=6787.

In view of the many operational and implementation challenges implicit in Burwell's pledge, AcademyHealth, with the support of the Agency for Healthcare Research and Quality, convened an invitational meeting of researchers and agency officials, held in Washington, D.C., in December 2015, to discuss the state-of-the-art in ongoing value-based payment and delivery system initiatives and to identify high-priority research objectives to guide future rounds of experimentation.

Observation and comment at the meeting were not for attribution; therefore, this Research Insights brief summarizes and paraphrases the discussion and references relevant background from the health services literature and other sources. It roughly follows the meeting agenda, first considering selected examples of clinical quality measurement problems and payment issues associated with them; reviewing the development of patient experience measures; then looking more broadly at payment and incentive issues in general; and, finally, reporting on discussion at the meeting of unsettled questions about payment for value, including definitions and goals as well as outstanding research needs.

A New Physician Payment Environment—and Its Challenges

Although overshadowed by resolution of Medicare's sustainable growth rate problem, MACRA instituted a sweeping array of new performance requirements for physicians, reflecting what one meeting participant described as "a really radical shift" in physician payment policy, albeit still on a platform of traditional fee-for-service reimbursement in most cases. The foundation was laid by previous legislation establishing a physician quality reporting system, first with small bonuses for compliance and then, as of 2015, with penalties for failure to report.

The ACA added a "value-based payment modifier" for large physician groups and charged the HHS secretary with developing such a system for all Medicare fee-for-service physicians by 2017. Accordingly, MACRA created a multifaceted "merit-based incentive payment system," including implementation targets for alternative payment models, to be effective January 1, 2019. The new system is intended to "consolidate and replace several existing incentive programs" and to encourage development and participation in new "alternative payment models" such as shared savings and bundled payment.[1]

Many large physician groups and organized delivery systems are already well equipped to meet the new requirements. But, according to the latest available National Ambulatory Medical Care Survey (2012), nearly 70 percent of outpatient visits occur at practices of five or fewer physicians, which often lack the resources for full information technology adoption, care coordination, or capital to assume financial risk for their patients' care costs as required by many alternative payment models. As noted, past efforts to measure quality in smaller practices have been persistently stymied by the problem of small patient population samples that do not lend themselves to evaluation with statistical reliability.

These efforts also must address the challenge of adequate risk adjustment. Most existing risk-adjustment systems fall short of fully explaining patient health status and thus the likelihood of success for any course of treatment. "But my patients are sicker," physicians often assert when faced with subpar performance evaluations. Much work remains to be done to develop measures and the necessary data to account appropriately for differences in the patients treated and the circumstances that determine treatment costs and outcomes.

Finally, the ambitious goal of measuring provider performance by observing patient outcomes is attenuated in a fragmented health system in which patients may see several clinicians, making it impossible to attribute responsibility for ultimate results. Further, outcomes may take years to materialize as patients frequently cycle from one plan or provider to another. In addition, the process measures most widely used in the past decade's P4P programs have been criticized for capturing only narrow sets of clinical indicators, at the risk of inducing providers to focus their quality improvement efforts on what is easiest to measure—"teaching to the test"—at the expense of potentially more significant dimensions of care.[2]

E Pluribus

The variety of responses to the above challenges has been as kaleidoscopic as the health system itself. The AcademyHealth meeting participants considered examples that are poles apart in terms of their setting, scale, and sophistication but alike in their focus on identifying shortcomings in quality and value and devising pathways to improvement. Participants pointed to optimistic developments such as a group of 42 primary care clinics in New York City serving large Medicaid populations and, at the other end of the spectrum, an intensive care unit (ICU) in an elite urban teaching hospital.

An innovative approach to risk adjustment showed promise in a small-practice program in New York in 2009–2010. The Primary Care Information Project (PCIP) furnished electronic health record systems to support a tightly targeted P4P intervention to improve the quality of antithrombotic prescribing, blood pressure and cholesterol control, and smoking cessation efforts. Clinics received incentive payments for each patient who showed measurable improvement in intermediate outcomes.

After consulting with participating physicians, however, the PCIP adjusted payments upward for patients who, according to three simple indicators, were considered more difficult to treat successfully: whether they had comorbid conditions or whether they were uninsured or on Medicaid, the latter as proxies for socioeconomic status,

a significant health risk factor in the physicians' view. Improvements on all three indicators were better in participating clinics than in a control group and compared favorably with larger practices that set similar goals.[3]

Physicians' receptivity and responsiveness to incentive programs may be diminished by distrust of formulaic risk-adjustment methodologies and concerns about whether practices will be penalized for difficult-to-treat patients. Physicians worry that the expense of practice change will not be covered by the incentives they hope to earn but can't be sure of. Analysts' takeaway from the PCIP experiment demonstrated that physicians' comfort level with and buy-in to program design can be a game-changer.[4] The design spoke to their concerns. Nevertheless, even after generous subsidies made available by the American Recovery and Reinvestment Act and the outcome of programs such as the PCIP, some observers remain pessimistic about the pace of IT adoption—upon which efficient and effective quality measurement and risk adjustment may ultimately depend.[5]

Big Data

Quality improvement in the ICU of an elite teaching hospital may also depend critically on human factors, but the process for identifying improvement targets and forging interventions will look very different from the small-practice environment. "Big data" has been the watchword in a joint project of four academic health centers to harness large clinical and administrative databases that can pinpoint associations between environmental conditions in an ICU and the risk of patient harms. Real-time alerts on conditions associated with harm—staff overload is prominent among them—in turn become a management tool to mitigate risks on the unit floor. Workflows and staff training are redesigned to emphasize prompt response to the messages the data delivers.

Big data is not a new concept at Beth Israel Deaconess Medical Center (BIDMC), which uses granular clinical and demographic data on its patients to manage hospital operations and business concerns. BIDMC, however, has still taken two years to organize the available data flows into structured tools for the recent ICU safety initiative. However, since heightening focus on preventable harms, the 650-bed BIDMC has reduced the number of harm events in its ICU from as high as 90 in the second half of 2008 to fewer than 25 per six-month period throughout 2013 and 2014.[6]

Nursing workload intensity was found to be the biggest driver of elevated risk at BIDMC. Pertinently, in a sister big-data program jointly conducted by Johns Hopkins University and the University of California San Francisco, the average time needed for unit staff to conduct a daily patient harms assessment fell from 14 to 6 minutes in the Emerge program, compared to a legacy EHR-patient order entry system.

This openness to big data has direct applications to the ability to measure and reward performance, especially when linked with novel analytic techniques. Creating incentives to stimulate more hospitals to evolve their ICU care as described above requires the ability to measure improvements in outcomes of care and preferably the cost of making those measurements would be low. However, given that ICUs vary in their patient populations, intensivists would want outcome measures to be risk-adjusted and may expect all the clinical data they have—from vital signs and blood tests to seizure monitoring with electroencephalograms (EEG)—to be used to capture severity of illness. Recent research shows that big-data approaches, such as recording EEG data continuously, can accurately identify patients at risk.[7] In addition, improvements in natural language processing (NLP) have led to the ability to identify risk factors accurately from clinical text.[8] Combining a big-data philosophy of embracing the richness of the ICU data environment with innovations such as NLP offers new opportunities to adjust for risk more accurately so that clinicians are more confident that "my patients are sicker, and the outcome measures adjust for that."[9]

Even outside the ICU, in a comprehensive, IT-enabled system of clinical quality improvement, extensive data may now be captured and organized on many dimensions of care without imposing a large collection burden on clinical staff. Many of these dimensions could be adapted in quantitative detail for a P4P or global payment program.

Patient Experience

The overwhelming diversity of domains in clinical quality measurement contribute strongly to the appeal of the more integrative results found in patient surveys on the experience of care and self-reported functional outcomes—hallmarks of an era of patient-centered care. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) suite of patient experience surveys has rapidly gained widespread adoption in clinical management and value payment systems, with Medicare a notable trend-setter. It is an important tool for value-based purchasing in private insurance, and CAHPS survey results are increasingly available to consumers in public reporting programs.

In 20 years of use, CAHPS has earned acceptance as a reliable and valid source of information on questions for which patients are a preferred source, particularly with respect to access to care and information, communication skills of clinicians, responsiveness of care providers, and receiving answers to medical questions. CAHPS results are often correlated with measures of other dimensions of quality and are frequently a component of P4P systems.[10]

As with first-generation process measures of clinical care, limitations remain. Owing to expanding regulatory and reporting requirements, the cost and administrative burden of administering several

versions of CAHPS has grown, along with the response burden on patients and families. An overall response rate of 35 percent is now fairly typical, providing adequate but less-than-optimal reliability. Some physicians continue to be skeptical about the validity of patient ratings and worry that grievance-bearing patients will poison their scores, although, in practice, complaints are rare and, in any case, better captured by grievance procedures. Small practices struggle to manage collection. While essential for creating comparable metrics for assessing performance, CAHPS standardized closed-ended questions may fall short of capturing nuances in the interpersonal dimension of care.

A complementary approach to eliciting information from patients about the quality of care uses open-ended narratives about their experience. Thus far, written comments from patients, when available, "are often seen by physicians as the most useful and meaningful form of patient feedback."[11] Patient narratives have the potential to inform providers about how to improve their processes and outcomes and how to supplement the quantitative information obtained through CAHPS closed-ended surveys. Even though studies have found that consumers are not strongly influenced by CAHPS-style performance scores, advocates for greater use of patient narratives point to the consumer appeal of open-ended formats such as Yelp and Angie's List. Indeed, researchers have recently used NLP to analyze Yelp reviews of 1,352 hospitals by 17,000 consumers and found that the information may provide a useful complement to surveys such as CAHPS.[12]

That said, a proliferation of patient-comment websites has unloosed the power of narrative on consumers with only random benefits, and may tend to crowd out objective measures in consumers' perspectives and to increase physician skepticism about the websites' value. Champions of the narrative approach propose policy interventions to promote the use of more rigorous methods of narrative elicitation and to ensure their representativeness. They also argue that patient-reported information should be given a generous share of influence in incentive programs because of its potential for informing practice improvement.[13]

Considering Quality and Cost Together

Without question, measuring quality poses several challenges, but it is still only the first step in determining value. As noted above, pay-for-performance and public reporting programs have primarily helped the system correct problems of underuse, but the programs have not checked cost growth or provided incentives for efficiency, according to a 2014 report for the National Quality Forum (NQF) that was recapped at the AcademyHealth meeting.[14] Wide variation in the cost of a given service is evident both within and across regions, giving rise to the inference that many variations may be unwarranted.

Value-based purchasing programs in the ACA and MACRA represent an extensive effort to factor quality and cost together. Private insurers, too, have experimented with tiered networks based on performance efficiency as part of "a range of increasingly sophisticated approaches to combine indicators of cost and quality," the NQF report says. Relentless increases in cost-sharing have also made even insured consumers much more sensitive to cost issues than in the past. As a matter of public concern, costs acquire growing policy importance, as they do in competitive insurance markets such as the new state marketplaces, where price matters.

Incentivizing efficiency can be a tricky proposition. If a provider learns how to deliver a given service of a given quality but using fewer resources than her peers do, or gets better at holding down prices in her supply chain, who should reap the benefit? In a capitated payment system, the answer is unambiguous: the savings accrue to the provider organization, although Medicare Advantage requires the organization to plow the savings back into the plan in the form of enriched benefits. Private market HMOs often do much the same to gain market share or otherwise burnish their product and prestige.

If a payer wants to incentivize efficiency on a fee-for-service platform, the choices are more complicated. In the Medicare Shared Savings Program or the Physician Group Practice Demonstration, payer and provider agree on a target cost and then share savings if actual costs are less, and in two-sided risk contracts, losses are shared as well. Even after extensive experimentation, it is not yet clear whether this formula can produce incentives sufficiently large to cover the expense or compensate for the disruptions associated with the practice redesigns usually necessitated by such programs.

Another alternative is to design a method for assessing efficiency and pay an incentive premium for plans that achieve benchmark scores or outperform their peers. Such an approach, however, returns to the difficult questions of (1) whether providers should be paid extra for what they should have been doing all along and (2) who should benefit from improvements in quality, cost, and value. In any case, it will be essential to define and somehow measure all of these terms and integrate them into a common framework. Thus, an important part of the future research agenda will be developing methods to measure value, just as methods to measure quality were needed to lay a foundation for pay-for-performance.

The NQF Report

The NQF report analyzed 25 value-based purchasing programs involving both public and private payers. Some apply only to specified services or provider types—specialties, surgery, hospitals, primary care—while others pertain to all covered services and providers. Quality measures vary widely among these programs. They address organizational structures as well as clinical process and

increasingly register levels of IT use, care teams, handoff protocols, and other characteristics of integrated care. Some also include payments to support the development of medical homes and accountable care organizations (ACOs). Costs are frequently defined on a per episode basis but may also be measured in terms of resource use, or globally, as per member per month or year.

Authors Andrew Ryan and Chris Tompkins identified four basic types of approaches for combining cost and quality assessments to determine incentive payments. In the first approach, cost and quality may be measured separately, with composite scores for each, then grouped into performance levels for each—usually low, average, or high—to determine payment adjustments. Medicare uses this model for its physician value-based payment modifier.

The second approach combines quality and cost scores into a single metric. Blue Cross Blue Shield of Michigan has adopted this model for its hospital P4P program, and Medicare's Value-Based Purchasing program for hospitals follows the same approach. In the third approach, programs may establish hurdles or gates requiring providers to meet specified performance for quality or cost or both. The Medicare Shared Savings Program is an example of this model. It requires participating organizations to pass muster on measures of patient experience, care coordination, and clinical standards to be eligible for a cut of savings.

The fourth approach does not attempt to combine cost and quality in a single framework but reports performance for each with a star rating system. It is used by the National Committee for Quality Assurance and two Minnesota organizations: HealthPartners and the pioneering Buyers' Health Care Action Group Purchasing Initiative.

The Alternative Quality Contract

An acknowledged leader among these value-based efforts and an example of effectively integrated cost and quality initiatives is the Alternative Quality Contract (AQC) in Massachusetts. The state's Blue Cross Blue Shield plan has operated the AQC since 2009 with about a dozen provider organizations that are ACO-like groups ranging from large physician-hospital organizations to small-practice clusters. Contracting providers receive a risk-adjusted global payment for all their attributed enrollees, who numbered about 700,000 in 2015. The payment covers all services, and the provider organization is at risk for its contracted share of losses and gains—two-sided risk that the Medicare Shared Savings Program (MSSP) does not yet require.

The contracts run for three to five years in order to provide a stable platform for the provider groups. Real-time information-sharing between the parties is considered an essential supporting mechanism, as it is in the MSSP, with which the AQC shares its basic approach. Spending growth rates declined by 50 percent in the program's first four years, according to a 2015 report from the Avalere analytics firm. The report concludes that provider behavior may be changed with a combination of strong incentives: putting providers at risk for high costs and offering generous rewards for measured quality.[15]

Limitations

Several limitations are associated with all the above approaches and models. To begin, adequate measures of overtreatment or excess resource use are lacking.[16] For large organizations with advanced data systems, big-data solutions for this problem may be at hand. Even so, detailed clinical information will be needed to reach conclusions about appropriateness. Smaller organizations probably cannot afford the type of risk-sharing that most of the alternative payment models envisioned by Secretary Burwell would entail, and are likely to stay on a fee-for-service basis for the foreseeable future.[17] The AcademyHealth group was cautioned that no consensus exists on how to identify high-value performers with consistency in the absence of robust measures of long-term patient health outcomes.

Further, research has found only weak correlations between cost and quality of care, so this essential feature of performance is not yet understood. Consumers, though, may be apt to get this wrong and equate the two. At the same time, steep increases in cost-sharing are heightening consumers' sensitivity to cost but leave them with only limited ability to obtain intelligible information about what costs for their care will be, much less any comparative information about the prices they are charged. It is not clear how high-deductible plans marketed under the banner of consumer-driven care can succeed in bringing consumers' market power to bear in holding down costs or prices.

Much is still to be learned about how financial incentives and other influences affect provider behavior. Some have raised concerns about how penalties and bonuses may "crowd out" intrinsic motivation, suggesting that the development of a supportive culture and environment that nourish professionalism and cooperation may be more important.[18] In addition, behavioral economics has introduced fresh insights into loss aversion and the tendency of short-term considerations to trump rational calculation.[19] For provider organizations, weighing the cost of practice redesign against the uncertain future benefits of performance incentives poses uncomfortable choices, especially for small organizations that may not be able to absorb significant losses.

Paying for Value: Progress and Obstacles

This review of issues in measuring clinical quality, patient experience, and efficiency documents significant gains on the path to measuring value but highlights unsettled questions and outstanding research needs. A proliferation of clinical process measures, used differently by different payers, threatens to overwhelm provider

organizations and blunt the effect of any single incentive program. Meeting participants expressed divided views about whether the measure sets should be whittled down or whether to let a thousand flowers bloom and build an IT-enabled measurement infrastructure to make the burden bearable.

At the same time, some sensed that provider organizations perceived an inevitable increase in accountability for both quality and cost and a growing focus on meeting evolving performance standards, such as they are.

Nonetheless, the evidence is mixed on how closely process measures are associated with patient outcomes, the gold standard for system performance. Patient-reported outcome measures (PROM) hold some promise as provisional measures, but reliable systems for constructing and collecting PROMs are in the embryonic stages of development.

Moreover, it is the assumed goal of the overall health system to achieve optimal health outcomes for entire populations, not just for individuals. Integrated delivery organizations paid by capitation have assumed this responsibility, and ACOs are designed to do likewise. But ACOs are not yet a proven model and capitated HMOs account for only a limited share of the insured population.

AcademyHealth discussants suggested that the structure of provider organizations may have to be the focus of some future efforts to improve performance among smaller entities, as the push for patient-centered medical homes would indicate. MACRA, it was noted, gives physicians flexibility in how they approach quality improvement and should create opportunities for smaller practices to embrace change proactively. MACRA makes a ramp, in one participant's metaphor, but the landing strip for change will be alternative payment models, which are still under construction. An awkward but germane coinage— "systemy-ness"—was proposed as a measuring stick for such structural changes, presumably including IT adoption, care teams, registries, collaborative care arrangements, and the like. Meeting participants concluded that unremitting experimentation is the necessary and inevitable direction in which the value imperative now drives the system.

Conclusion

The complexity of the measurement universe reflects the fractured nature of the health care system and of the society that it serves. A twin problem looms large: the challenge of capturing long-term outcomes and attributing them appropriately to the responsible provider or providers. Perhaps what is needed, some participants said, is a way to assess outcomes in the aggregate, on a community-wide scale, with rewards, penalties, and other incentives also distributed to providers on a community-wide basis. ACOs are a step in this direction; they offer potential for harnessing the tools of quality measurement and payment for value to the goal of population health. But, as noted, ACOs are not a proven concept, and some fear potential ill effects from further increases in provider consolidation.

In the meantime, what has been accomplished in health care quality and safety since publication of the Institute of Medicine's 1999 *To Err Is Human* is considerable. Patient-reported outcome measures have the potential to counter-balance the centrifugal effects of proliferating clinical indicators. As slow as progress has been, IT adoption is gradually building a measurement infrastructure that could help bring smaller practices up to speed with 21st-century quality improvement technology. Experiment and experience are gradually bringing about a better understanding of provider attitudes and behavior and what it takes to change them. Policy conversations such as the discussion at the AcademyHealth meeting described here are beginning to come to grips with imponderably difficult issues like the paradox of paying for efficiency and the question of how value for payers translates into value for patients and consumers.

About the Author

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