The health care system is slowly evolving from fee-for-service care to other forms of payment. Pay-for-performance contracts based on quality, patient satisfaction, and utilization are an important development along the continuum. The metrics are not perfect and do not always nudge clinicians to improve their performance, but many outcomes are likely to improve.

Incentives have probably been used to reward good behavior or punish unwanted behavior since the first caveman family doled out the food that was foraged that day. Modern workplaces have elaborate schemes to measure employee performance and pay some form of bonus based on a combination of individual and organizational goals achieved during the measurement period. Nearly every large company in America now has some form of employee wellness program with incentives for healthy lifestyle behaviors, often administered through its health plan [1].

Similarly, physicians have a variety of compensation models, including many that incentivize certain behaviors. In the current fee-for-service system, physicians or their employing entities generally receive more reimbursement for each incremental clinical encounter or service rendered. Practice management systems structure the coding and billing to maximize the value of every claim. In large health systems, treating physicians are often far removed from the billing office, but their compensation may be based on net patient revenue, relative value units produced, net collections, or some other measure of productivity.

The health care system is moving toward more value-based care to better align the incentives of patients, providers, and the payers who usually finance care. Naturally, mechanisms have evolved in medicine to incentivize physicians to deliver high-quality outcomes in their patient populations. The key component of most value-measuring systems is some objective quantification of the quality of clinical outcomes derived from the services performed.

Patients have been acting more like consumers in recent years. Employers who purchase health care and health insurance for their employees and their dependents want assurances that they are getting the best value for their money. Patients want to know who the best doctor is for their particular condition. They have traditionally used word of mouth or the brand equity of the hospital to make those judgments, but they increasingly want to use comparative quality data to make those decisions. Health plans are pressured by their customers to provide cost and quality data for the physicians and other providers in their networks. Members and employer groups insured by Blue Cross and Blue Shield of North Carolina (BCBSNC) log on to our website and call our customer service center seeking information about the quality of physicians and hospitals in North Carolina.

However, physicians have always had a strong intrinsic motivation to provide high-quality health care to their patients, without needing extra financial incentives. They are required to demonstrate their competence in board certification exams and recertification processes, and they complete many hours of continuing medical education every year. State medical boards and health plan credentialing committees investigate quality-of-care concerns, and peer-review inquiries have been protected from legal discovery in many jurisdictions to promote quality improvement. Surgeons, in particular, often host morbidity and mortality meetings to learn from adverse events, and the ever-present fear of medical malpractice claims drives both attentive and defensive practice behaviors.

Most public and private payers have developed their own type of pay-for-performance (P4P) mechanism to try to nudge doctors and hospitals to close clinical care gaps and improve quality outcomes. It essentially maintains the current fee-for-service payment system with one small step forward along the value-based care continuum. It requires entities to measure quality, performance, or other mutually agreed-upon clinically relevant metrics, and it then pays the doctor or facility an extra amount of money for achieving certain thresholds or a set amount of improvement from the baseline measurement period.

There are several ways that bonuses can be earned and paid in these contracts. The standard fee schedule can be enhanced, bonuses can be aggregated and paid quarterly...
or annually, or each individual care gap closed can lead to a finite extra payment. Bonuses can accrue to individual clinicians, practices, or entire health systems, all of which have different implications for administrative burden and likelihood of changing physician behavior.

**BCBSNC Pay-for-Performance Programs**

BCBSNC has offered the providers in its networks several variations of P4P programs over the past decade. The most commonly known examples are the Blue Quality Physician Program (BQPP), the Hospital Quality Program, and accountable care organizations (ACOs).

As an early proponent of the patient-centered medical home (PCMH) concept, BCBSNC seeks to help independent primary care practices that struggle with the administrative burden of achieving PCMH certification from the National Committee for Quality Assurance (NCQA) or other accrediting bodies. It is expensive and time-consuming to truly transform a practice, to meet evolving standards, to collect and submit data, to complete the application, and to stay current with medical home criteria. In addition, the BQPP process adds a few more expectations, such as education on cultural competency, review of the practice quality reports provided by BCBSNC, and development of a plan for appropriate patient access after normal business hours.

Practices that meet these criteria are eligible for an increase in their fee schedule as a reward for becoming a more patient-centered practice. Several hundred primary care practices in North Carolina have achieved BQPP status and are enjoying higher reimbursements for their efforts. Importantly, their patients are benefitting from a better experience and a clinical environment that meets their needs. As with the NCQA PCMH program, the BQPP criteria are evolving to keep pace with the latest evidence and emerging needs of the marketplace. BCBSNC internal research has demonstrated that members getting care at BQPP practices have higher patient satisfaction, better chronic condition management, reduced emergency department utilization, and fewer hospital admissions.

A few years ago, BCBSNC launched its Hospital Quality Program, with the audacious goal that every hospital and health system contract renewal include specific quality metrics that would enable the hospital to earn a larger fee schedule increase by achieving better outcomes [2]. To date, more than 80% of total dollars paid to North Carolina hospitals are tied to a quality-based contract. Our P4P contracts are having the intended impact of supporting better outcomes and patient satisfaction scores. Although there is always concern as to whether patients are in a position to recognize quality of care, studies demonstrate validation of appropriate breast cancer screening and appropriate follow-up visits for children who have been newly prescribed medication for attention deficit hyperactivity disorder and outcome measures (such as blood pressure control in patients with diabetes).

There is increasing interest in measuring patient-reported outcomes and patient satisfaction scores. Although there is always concern as to whether patients are in a position to recognize quality of care, studies demonstrate validation of measures such as the Consumer Assessment of Healthcare Providers and Systems [4, 5].

Inpatient facility measures often include familiar targets such as readmission rates, all-cause mortality, early elective delivery, and catheter-associated urinary tract infection rates. Targets for the contract performance periods could be measured by year-over-year progress, comparison to a hospital peer group, or national benchmarks such as the standardized infection ratios developed by the Centers for Disease Control and Prevention. To enable better statistical validation, the measures could be specific to all health plan members who use the facility or practice or to all patients cared for by a particular provider.

**Challenges and Opportunities**

Although P4P contracts are only a first step toward value-based care, they are not without controversy, and they have not yet been shown to definitely achieve the outcomes sought.

**Attribution**

Most people like freedom of provider choice within a preferred provider organization network plan, but this often leads to patients seeking care from several doctors, urgent care centers, retail clinics, emergency departments, or other practices. Often they do not tell their physicians about these other encounters. Thus, it is difficult to determine who the
different public and private payers may have duplicated greater investment. In addition, a practice that serves many outcomes-based measures often require significantly easier for a physician practice to handle, whereas at the level of the individual physician. This is easier to accomplish when aggregating all cases between 2 providers, but with enough specificity to have relevance on the consensus core set is persistent beta-blocker treatment [13]. This measure is

Administrative burden
As noted above, claims-based process measures are significantly easier for a physician practice to handle, whereas outcomes-based measures often require significantly greater investment. In addition, a practice that serves many different public and private payers may have duplicated efforts. One recent survey suggested that physician practices might spend, on average, up to 785 hours per year just to collect and submit the data required for quality programs [7]. A significant percentage of doctors forgo the incentive payments available through the CMS Physician Quality Reporting System and the Electronic Prescribing Incentive Program, particularly if they treat fewer than 100 traditional Medicare patients per year.

Mostly primary care and acute inpatient measures are used
Most early iterations of P4P contracts have focused on common conditions with highly validated clinical measures. It is much more difficult to construct measures for specialty care and ancillary services, either because the evidence base does not yet exist or because there is much clinical and practice variation.

Physician buy-in is critical
P4P bonuses are often favored by practice business managers because of the possibility of higher practice revenue. If earning these bonuses requires a change to the clinicians' patient workflow, however, they can be difficult and disruptive. If frontline physicians are not included in the negotiation, do not think they have any room for improvement, are not willing to invest the time necessary, or do not agree with the standard metrics, they are unlikely to perform the activities necessary to improve their clinical outcomes [8]. In a recent study where physicians could earn bonuses of up to $1,024 per enrolled patient for meeting goals for low-density lipoprotein cholesterol levels, the physicians did not generate a statistically significant reduction in low-density lipoprotein cholesterol levels versus control patients [9].

Progress and Future Development
These opportunities for improvement have led experts to call for a smaller universe of standard, highly impactful, actionable, outcome-oriented measures [10-12]. A group of national medical specialty organizations, the National Quality Forum, CMS, and health plans convened the Core Quality Measures Collaborative to reduce the total number of measures, refine them to reduce administrative burden, and focus on measures that truly matter to patient outcomes [12]. An example of a recommended primary care measure on the consensus core set is persistent beta-blocker treatment after a heart attack. It measures the percentage of adult patients who were discharged alive following an acute myocardial infarction and who received 6 months of persistent beta-blocker treatment [13]. This measure is validated by the National Quality Forum and the NCQA, is recommended for both PCMH and ACO measure sets, has solid evidence of clinical benefit and reduction of secondary events, has been demonstrated to be cost-saving to the system, and is relatively easy to determine through prescription claims data.
A second measure included in the core set—which demonstrates similar clinical benefits, efficiency in resource utilization, and administrative ease—is the percentage of patients/members with a primary diagnosis of lower back pain who did not have an imaging study (plain x-ray, magnetic resonance imaging, or computed tomography scan) within 28 days of the diagnosis [13]. This has also been endorsed as a validated measure by many of the medical specialty societies in their Choosing Wisely recommendations [14]. Since the first 7 sets of measures were released in February 2016, BCBSNC has been incorporating the streamlined measures into its P4P negotiations with health systems in North Carolina.

Financing of the health care ecosystem is evolving slowly from fee-for-service care to other forms of payment. P4P contracts based on quality, patient satisfaction, and utilization continue to be an important development along that continuum. The metrics are not perfect and do not always nudge clinicians to improve their performance. However, with increasing consumerism in health care and more demanding employer group purchasers, providers must be able to demonstrate the value they provide their patients, or they will not be able to compete for patient volume and higher payments. NCMJ

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