Taking Physician Performance Measures to the Next Level

Meaningfully using health care data requires a more robust infrastructure than what currently exists to leverage clinical data and support population-based payment models, according to speakers at a session entitled What We Know, Don't Know, and Need to Learn About Measuring Physician Performance at the 2016 Organizational QI Forum.

Hosted by the American Board of Medical Specialties (ABMS), in conjunction with the ABMS Multi-Specialty Portfolio Program™ (Portfolio Program), the third annual QI Forum bridged public policy, organizational and professional imperatives driving quality improvement (QI), and the ABMS Program for Maintenance of Certification (ABMS MOC®). Health care leaders, QI experts, policy makers, leading researchers, and journal editors described quality initiatives and best practices, including examples from Portfolio Program sponsors, as well as explored research, evaluation, and dissemination opportunities.

Whether a clinician chooses to engage in the Merit-Based Incentive Payment System (MIPS) or Alternative Payment Models (APMs) as part of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), performance measurement should be driven by the patient care provided, not the payment system, stated Frank Opelka, MD, FACS, Medical Director of Quality and Health Policy at the American College of Surgeons (ACS) and Executive Vice President of the Louisiana State University (LSU) Health System. “Until there are meaningful measures, clinicians will view these efforts strictly as a payment system.”

In order to have meaningful measures, clinicians need a consistent measurement infrastructure using advanced analytics, multiple data sources, and registries, all of which represent a much larger clinical data ecosystem than electronic health records (EHRs) could ever offer alone, he said. Electronic health records were needed to create a digital environment. “Now that there is a clinical data ecosystem, it’s time to notch it up to the next level, which involves getting the data to whoever needs it wherever they need it in the clinical arena,” said Dr. Opelka, who is a colorectal surgeon at LSU. “That’s where dashboards and data flows come into the picture.”

Because there are hundreds of thousands of terabytes of clinical data, large data warehouses are needed. Pulling the data up in “the cloud architecture” allows advanced analytics to be applied to the data, which is then pushed back out. “In my environment, this occurs almost in real time,” he said, referring to Louisiana’s statewide effort to create a clinical data warehouse.

Dr. Opelka reviewed examples of how clinical data can be leveraged with a more robust infrastructure, starting with the surgical dashboard that ACS is developing for its
members to use at the point of care. It will provide up-to-date clinical information on each patient with one click of the computer mouse. Surgical care is divided into phases of care, which fits with MACRA requirements because it addresses a continuum of care and interfaces with all of the providers who are linked in, he said. The continuity of care and outcomes of care related to all the phases are measured. When these measures are risk-adjusted, they could be used to identify high performing and underperforming hospitals.

Similarly, the ACS’ Trauma Quality Improvement Program (TQIP®) collects data from participating trauma centers, provides feedback about each center’s performance, and identifies institutional characteristics that trauma center staff can implement to improve patient outcomes. The program uses risk-adjusted benchmarking to provide each hospital with national comparisons. The TQIP also provides education and training to help trauma center staff improve the quality of the data and accurately interpret benchmark reports. To date, more than 500 trauma centers across the United States are participating in the TQIP, 82 percent of which have decreased trauma-related complications and 66 percent reduced trauma-related mortality. Each hospital has prevented between 250 and 500 complications each year of participation, Dr. Opelka said. They have reduced costs by millions of dollars.

At LSU, cloud architecture is being used to create a patient dashboard for its patient-centered medical home. Data sets are run across diseases such as diabetes, congestive heart failure, HIV, kidney disease, cancer, and asthma and can measure thrombogenic state, glycemic, lipid, weight, and blood pressure control, as well as exercise, diet, smoking cessation, and screening wellness. The patient dashboard, which works on all EHRs in the LSU system, lists the patient’s visit history, medications, immunizations, lab work, radiology tests, and clinical reports on one screen that pops up after the clinician signs in. “The clinicians put the data in the EHR, but they practice medicine based on the dashboard,” he said. Measures that are below the targets set for the patient-centered medical home are highlighted. So the patient comes in for a twisted ankle, Dr. Opelka explained, but the clinician sees on the dashboard that the patient also needs follow-up asthma care and must undergo tests for diabetes. “These are 20 applications running in a cloud. Imagine ten clicks per app to get this out of an EHR; that’s 2,000 steps. You’re not going to do it,” Dr. Opelka said. “This is what cloud architecture offers you. All these analytics are on the fly. You don’t wait two years to get them. It’s a push of a button.”

“All of this comes together when you move beyond the simple architecture of an EHR into the cloud environment to leverage data in real time,” he said. “If you want meaningful use, liquefy and move the data to an architecture that allows the content to be leveraged to drive better clinical care.” Institutions such as LSU, Cleveland Clinic, Mayo Clinic, Intermountain Healthcare, and Kaiser Permanente are working on this independently, but they’re also coming together in hopes to create one cloud architecture. “Once that happens,” Dr. Opelka concluded, “we start trading apps like baseball cards and this whole field moves that much faster.”

As one of the creators of the Alternative Quality Contract (AQC) model, Dana Gelb Safran, ScD, Chief Performance Measurement and Improvement Officer, and Senior Vice President for Enterprise Analytics at Blue Cross Blue Shield of Massachusetts has had a lot of success with using a broad portfolio of nationally accepted measures process, outcome, and patient care experiences. A unique financial incentive model that employs behavioral economic principles, coupled with a robust performance improvement support program, has led to the widespread adoption and success of the AQC. The AQC model, which became a template for CMS’
accountable care organizations and other private sector programs, has significantly improved quality and outcomes while substantially slowing the rate of growth of medical spending. It also has transformed the use of data, data systems, and health information technology, she said.

The defining characteristic of the AQC is that providers take accountability across the whole continuum of care for their patient population. That means the total cost, quality, and outcomes of that care, Dr. Safran emphasized. The AQC measure set encompasses ambulatory and hospital care, and all measures are evaluated at the system level – never at the individual clinician or even practice site level. “We don’t measure quality, outcomes, or cost at the individual clinician level because we don’t have adequate data or sample sizes to do that in a meaningful way, other than for a small handful of preventive care measures,” she said. The 2009 cohort, which represents a quarter of the health maintenance organization (HMO) network that came into the AQC model when it launched, significantly outperformed the national benchmarks in both quality and cost from 2009 to 2012. During this timeframe, HMO network providers were able to get 74 percent of their adult patient population with serious chronic illnesses under good control, up from 62 percent, while national rates of good control did not budge from roughly 60 percent over that time period. “To achieve these high levels of chronic illness control, AQC providers had to think outside of the literal and figurative box of the office setting – to consider individual patient’s life circumstances and to address barriers to adherence in truly person-centered ways. This is one of the AQC’s proudest accomplishments,” Dr. Safran said. Today, more than 90 percent of providers in the Massachusetts Blue Cross HMO network are contracted under the AQC model. In January 2016, the model was expanded to begin including accountability for Preferred Provider Organization members in global budget quality contracts, as well.

A rate limiter to further progress, however, is paucity of robust and nationally accepted outcome measures. “We all know that the relationship between process measures and outcomes is generally quite weak. Thus, reliance on process measures alone cannot assure us achievement of improved health outcomes, and in addition, the number of measures required to comprehensively assess care if one is relying on process measures becomes enormously burdensome and costly,” she said.

There is emerging consensus about the importance of moving toward a more outcomes-oriented measure set – particularly with the emergence of value-based payment or “alternative payment models.” The process-orientation of measurement has been a logical product of fee-for-service payment – with its focus on individual services provided by a particular care setting and specialty, Dr. Safran noted. However, the move to payment models that establish broader accountability for care across the continuum demands a more holistic approach to measurement. To attain the Triple Aim, measures must be more outcomes oriented than those in a fee-for-service world, which are focused in a very granular way on clinical processes related to specialties or conditions, she said. To that end, Dr. Safran is working with the Health Care Payment Learning and Action Network, known as the LAN, which is charged with developing measures that support the long-term success and sustainability of population-based payment models nationally. The LAN maintains that future state measures must be based, as much as possible, on results that matter to patients (e.g., functional status) or the best available intermediate outcomes known to produce these results.
Total cost of care is an example of a “big dot” measure – meaning a single comprehensive indicator that can be used in population-based payment contracts, she noted. More granular measures, such as non-urgent use of the emergency room, 30-day readmissions and ambulatory sensitive admissions can be used to assist with monitoring and driving improvement on Total Cost of Care, but would not be the basis for formal reward systems. In this way, the use of “big dot” measures allows for a more parsimonious measure set in provider contracts, she said. “We don’t have to create accountability on those granular measures,” Dr. Safran said. “We have to use them to be informed and understand how to improve on our total cost of care.”

The LAN proposes working to replace the atomistic process-oriented measures of today, such as diabetic eye exam, aspirin on arrival, or mammography screening rates, with higher level outcomes-oriented measures, such as functional status improvement after procedures, improved control of chronic illness, and reduced onset of diabetes and cardiovascular disease among those at-risk. Other outcomes-oriented measures would be cross-cutting, rather than condition specific, focusing on integration of care, access to care, and care aligned with patient goals, for example. “Use of measures along these lines would enable us to reward the outcomes that are being accomplished by a delivery system, and let the systems define all the processes needed to accomplish those good outcomes,” Dr. Safran said. For condition-specific measures, there could be three broad kinds of outcome measures for acute complications from treatment, patient reported outcomes, and disease progression or mortality. The goal is to accelerate the development and validation of such measures by engaging practicing clinicians and groups. “That way, we can make the measures useful and valid at the same time that we’re developing them,” she concluded.

Opportunities exist to both develop more measures that are meaningful to patients and payers, as well as better systems to select the right data and make the data easily accessible to clinicians and teams so they can utilize it to better care for their patients. Collaboration among measurement experts, information technology experts, physicians, and health care systems is needed to help take physician performance data to the next level.

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