Medicare’s quality initiatives present new management challenges

The first wave of data for three Medicare initiatives are helping hospitals better understand quality performance measurements.

The Centers for Medicare & Medicaid Services (CMS) in recent years has been implementing three programs that adjust payment to hospitals based on selected quality measurements:

- The Value-Based Purchasing (VBP) Program, which rewards or penalizes hospitals based on their performance on 19 quality measures
- The Hospital Readmissions Reduction (HRR) Program, which penalizes hospitals that are deemed to have too many readmissions within 30 days
- The Hospital-Acquired Condition (HAC) Reduction Program, which reduces payments for hospitals with high rates of HACs such as infections and patient injuries

These programs have presented specific management challenges that are important for the nation’s hospitals to manage because of the significant risk for reduced payment that they pose, which is likely to increase over time. Moreover, even as hospitals struggle to understand the metrics used in these programs, the performance measurements are made publicly available, raising the probability that they might influence consumer perspectives, legal investigations, and other factors.

Nonetheless, only recently have sufficient data become available to guide hospitals and health systems in their internal education and performance improvement efforts to meet the requirements of these three programs.

AT A GLANCE

- Three Medicare initiatives—focusing on value-based purchasing and reducing readmissions and hospital-acquired conditions—are changing the way hospitals look at quality performance measurements.
- Recently available data indicate that 86.2 percent of hospitals participating in these three programs fell short of the performance threshold required to avoid a negative payment adjustment in FY15.
- Understanding the potential loss that could result from penalties and the possibility of adverse publicity, hospital finance leaders should support efforts within their organizations to meet the performance requirements of these programs.
Hospital finance leaders can benefit from a review of some of these data, not only to be able to better address the specific management challenges but also to provide insight that can help in efforts to educate trustees, physicians, and others about the significance of value-based purchasing.

Quality Measurements
CMS initiated the first three programs, the VBP Program, in 2012, as part of its larger ongoing effort to improve the quality of the nation’s healthcare system. Within each of the programs, performance data from individual hospitals are compared with national statistics each year and their payment rates are adjusted to provide incentives for better performance. These measurements present several management issues.

The programs use performance data that hospitals submit to the inpatient quality reporting (IQR) program, which CMS launched in 2005 in an effort to define quality measurements and collect performance data self-reported by hospitals. Hospitals that choose not to participate in IQR are subject to a 2 percent reduction in Medicare payment each year. IQR data are posted on CMS’s Hospital Compare website (medicare.gov/hospitalcompare) and are available in datasets downloadable from cms.gov.

Because many measurements are based on Medicare claims data, it is extremely important for diagnoses and procedures to be coded completely and accurately. Secondary conditions that do not affect Medicare severity-adjusted DRG (MS–DRG) assignment may nevertheless affect quality measurements. Other information, such as whether a condition is present at admission and the patient’s discharge destination, also should be accurately reported on claims.

A hospital’s quality measurements are a matter of public record and can be accessed easily through Hospital Compare. Management may be faced with public and private inquiries about quality measures. CMS may change, add, or delete some measurements from year to year. Hospitals should anticipate such changes and respond accordingly. Because new measurements must be listed on Hospital Compare for at least one year prior to being used in a value-based program, it is advisable to watch for changes on an ongoing basis.

Some quality measures are based on data sources other than Medicare claims. For example, CMS uses Medicare enrollment data to identify patient deaths outside the hospital, and the agency uses the Centers for Disease Control and Prevention’s National Healthcare Safety Network to identify certain infections. Hospitals generally have an opportunity to review and question the accuracy of their quality measurements before the data are released. Although validating the accuracy of these data may be difficult, hospitals should not discount the importance of making this effort.

In addition to these quality measurement considerations, each of three CMS programs presents its own unique management challenges for hospitals.

VBP Program
CMS implemented the VBP program to provide hospitals with financial incentives based on selected quality metrics. Currently, the program applies only to fee-for-service Medicare patients treated in approximately 3,100 short-term acute care hospitals. Individual performance measurements are mathematically combined into a single total performance score (TPS) that determines a hospital’s adjustment to payment. The program is funded by withholding a percentage of DRG payments from all hospitals and then redistributing it to individual hospitals based on their TPS. The percentage withheld was 1 percent in 2013 when the program was first implemented and has been incrementally increased to 2 percent for FY17. The selected quality metrics have changed each year as new areas of focus are introduced and previous areas of focus are eliminated because hospitals no longer exhibit
significant variation in those previous areas. There are 14 metrics for FY17.

Here is a brief overview of the method CMS uses for calculating the TPS.a

Quality metrics are grouped into four domains, each weighted according to its contribution to the combined TPS. For FY17 the four domains are:

- Patient and caregiver-centered experience of care/care coordination (25 percent)
- Safety (20 percent)
- Clinical care outcomes and processes (outcomes, 25 percent; processes, 5 percent)
- Efficiency and cost reduction (25 percent)

Within each domain, a hospital’s individual quality metrics are scored based on the hospital’s performance compared with that of other hospitals nationally (performance measurement score) and with its own performance in a base measurement year (improvement score).

First, each metric is assigned a performance measurement score on a scale of 1 to 10. A performance measurement score reflects the decile into which the hospital’s performance falls between the lowest hospital performance measurement nationally and a benchmark representing the mean of performance among hospitals in the top decile nationally. Simply put, each decile score indicates how a hospital compares with hospitals nationally (e.g., a score of 2 indicates that a hospital is ranked in the lowest 20 percent).

Second, each hospital’s quality measurement score also is compared with that hospital’s own score in a previous base year to determine an improvement score on a scale of 1 to 9. The higher score between the performance measurement score and the improvement score is used to calculate the TPS.

Hospital finance leaders should examine their organizations’ scores for each metric to determine opportunities for improvement. They also should note that the use of an improvement score (versus a performance score) in calculating the TPS is likely to occur only once for any given metric, because even if further performance improvements were possible, it is unlikely that the improvements could be substantial enough to cause the improvement score to surpass the performance measurement score two years running.

Scores for individual quality metrics are combined to determine a domain score. The four resulting domain scores are then combined according to the weighting percentages above to determine a hospital’s TPS.

**Patient and caregiver-centered experience of care and care coordination.** This domain is based on eight measurements taken from the HCAHPS survey. This survey asks a sample of patients about their experiences with care during a recent overnight stay in the hospital. All hospitals use the same survey questionnaire and standardized data collection procedures. Data analysis is performed by CMS, not by the hospitals. Individual quality measures for 2017 are:

- Communication with nurses
- Communication with doctors
- Responsiveness of hospital staff
- Pain management
- Communication about medicines
- Cleanliness and quietness of hospital environment
- Receipt of discharge information
- Overall rating of hospital

**Safety.** The second domain, safety, is focused on the incidence of HACs. Individual quality measures include:

- Catheter-associated urinary tract infections
- Central line-associated blood stream infection
- *Clostridium difficile* infection
- Methicillin-resistant *Staphylococcus aureus* bacteremia

---
a. For additional information about the VBP Program, including a detailed explanation of the scoring methodology, see CMS, *Hospital Value-Based Purchasing*, Medicare Learning Network, September 2015.
> Surgical site infections for colon surgery or abdominal hysterectomy
> Patient safety and adverse events composite score of 10 specific patient safety indicators identified by the Agency for Healthcare Research and Quality (AHRQ PSI 90)

**Clinical care processes and outcomes.** Within this domain, the outcomes focus is on mortality rates associated with three conditions within 30 days of a procedure or discharge, and the process focus is on three selected clinical practices. Individual quality measures include:
> Acute myocardial infarction (AMI) 30-day mortality rate (outcome)
> Heart failure 30-day mortality rate (outcome)
> Pneumonia 30-day mortality rate (outcome)
> Fibrinolytic therapy for AMI received within 30 minutes of hospital arrival (process)
> Influenza immunization (process)
> Elective delivery prior to 39 completed weeks gestation (process)

**Efficiency and cost reduction.** This domain is a price-standardized and risk-adjusted measure of a hospital’s average cost to Medicare for episodes of care, where an episode includes 3 days prior to an admission through 30 days after discharge and includes all costs paid by Medicare to any providers paid under Medicare Part A or Part B (e.g., hospitals, physicians, skilled nursing, etc.) during the episode. The Medicare spending per beneficiary (MSPB) measurement is the ratio of a hospital’s spending to the median spending across all hospitals. This spending is this domain’s sole quality measure.

The distribution of individual hospital TPSs for FY15, based on the most recent data available, is shown in the exhibit below. There is a fairly normal distribution, with a 50th percentile score of 38 among all hospitals, and with the quartile of highest scoring hospitals above 47. Any hospital wishing to compare its TPS on the basis of FY15 Hospital Compare data can use this chart to quickly locate its score within the distribution of scores for all other hospitals during the period.

CMS uses a linear exchange function to calculate a factor for calibrating incentive payments. The linear exchange function ensures that incentive payments are directly related to the TPSs for all hospitals and that total amount of incentive payments nationally equals the total amount withheld from base DRG operating payment amounts to fund the program. Base DRG operating amounts exclude indirect medical education payments, disproportionate share hospital
payments, and low-volume hospital adjustment payments. The break-even point would be an incentive payment factor of 1. Hospitals with lower factors would not recover their withhold payment. Hospitals with higher factors would receive an incentive payment above the recovery of their withhold amount.

As the withholding amount is increased over time, the amounts of hospital incentives under value-based purchasing will increase. Because of the way TPSs and incentive payments are structured and calibrated, the distribution of hospitals among TPSs will remain essentially the same while the incentive amounts increase.

The program should not be considered as a measure of overall hospital quality but as a mechanism that CMS will use to modify hospital performance in areas that it considers problematic. Some highly rated hospitals during one year may be poorly rated in the next due to changes in quality indicators, less opportunity for performance improvement over time, and actual changes in hospital performance.

It is challenging to manage hospital operations in response to the value-based program. Changes in the program often are promulgated at the end of a performance period and some measurements are outside the hospital’s span of control. Nonetheless, the best approach for hospital finance leaders may be to focus on those domains that present the most significant improvement opportunities, keeping in mind the following observations.

As an area for improvement, patient satisfaction represents 25 percent of the TPS, and it is within the hospital’s control. Many hospitals that have made improvements in patient satisfaction a priority have seen remarkable results. Having the ability to deliver exemplary service to patients raises patient satisfaction and sends a strong positive message to the community, payers, and the media.

The safety domain represents 20 percent of the TPS. High incidences of any of these HACs should be addressed as a high priority.

The clinical care domain represents 30 percent of the TPS, which is more than any other domain. It is made up of 30-day mortality statistics for three conditions (outcomes) and several process measures. If there is opportunity for improvement in any of the process measures, they should become a priority because improvements are generally achievable with management focus. A hospital’s mortality statistics may be more challenging to address. It may be helpful to examine both in-house mortalities and 30-day mortalities for all causes when examining unexpected variations.

The efficiency domain represents 25 percent of the TPS. It is based on calculations of MSPB for episodes of care that include a hospital stay. A hospital’s MSPB is its average price-standardized, risk-adjusted Medicare spending for an MSPB episode. Medicare payment amounts are price-standardized to remove the effect of geographic payment differences and additional payments for indirect medical education and disproportionate share. The MSPB measure is also risk adjusted to account for beneficiary age and severity of illness. The exhibit on page 6 shows the distribution of MSPB scores for 2015, the most recent data available.

During recent years there has been a noticeable decline in the growth of Medicare spending both overall and per beneficiary. Average annual growth in total spending has decreased from 9 percent between 2000 and 2010 to 4.4 percent between 2010 and 2015. Similarly, average annual growth in spending per beneficiary has decreased from 7.4 percent between 2000 and 2010 to 1.4 percent between 2010 and 2015. Most of this decline probably is attributable to various effects of the ACA, but it is unlikely that hospital operations are a significant factor. Unless a hospital is part of an accountable care organization (ACO), there are probably not ways to influence care outside the hospital. Nevertheless,
CMS purports that hospitals should concentrate on cost efficiency and coordination with post-discharge services in an effort to manage their MSPB.

**HRR Program**

Since FY12, CMS has been implementing the HRR program to reduce payments to hospitals with excessive 30-day readmission rates. As defined, a readmission may be to the same hospital or to a different hospital or acute care facility. Patients may be readmitted for the same condition that necessitated his or her recent hospital stay, or for a different reason.

CMS uses three prior years of data in calculating a hospital’s readmission rate. The hospital’s predicted readmissions are the number of unplanned readmissions predicted for a hospital on the basis of its actual readmissions adjusted for patient severity and other factors. Expected readmissions are the number of unplanned readmissions expected for a hospital on the basis of an average hospital’s performance with the same case mix.

The expected readmission rate (ERR) is the ratio of the hospital’s predicted-to-expected readmission rates for a given measure. If a hospital performs better than an average hospital with a similar patient mix, its ERR will be less than 1. Conversely, if a hospital performs worse than average, its ERR will be greater than 1.

CMS calculates a hospital’s payment adjustment factor from historical data and prospectively applies it to all discharges of Medicare patients in the applicable fiscal year, regardless of their actual clinical conditions or their reason for readmission. The payment adjustment factors for all hospitals are published in the final rule for the inpatient prospective payment system each year as a supplemental data file. If an adjustment factor is 1, the hospital will not incur a payment adjustment. If an adjustment factor is less than 1, the hospital will incur a payment reduction. To
calculate a hospital’s payment reduction, the adjustment factor is subtracted from 1 and multiplied by 100 to determine the percentage.

The HRR program imposes significant financial incentives for hospitals to reduce any unnecessary hospital readmissions. As of FY15, maximum penalties can be 3 percent, having increased incrementally since FY13, but they are not currently scheduled to increase further. Between FY13 and FY15, the percentage of hospitals incurring penalties rose from 64 percent to 78 percent.

Also beginning in FY15, the program includes the additional diagnoses of chronic obstructive pulmonary disease (COPD) and hip or knee replacements. Hospitals can sometimes reduce readmissions through better coordination among transitions of care and by improving the quality of care.

Interestingly, national readmission rates began to significantly decline before penalties were first instituted in FY13. Perhaps this was due to preemptive operational changes among hospitals once they become aware of the HRR program. The exhibit below shows the ongoing decline as hospitals continue to manage readmissions.

The HRR program has onerous implications for hospitals because penalties apply to all Medicare admissions, not just to the diagnoses that are the focus of measurement. Most hospitals incur a penalty, and penalties can be significant.

Hospitals should consider steps to reduce or avoid penalties by focusing on coordination of care and communications among other providers, patients, and caregivers. Readmissions should be screened to ensure they are medically necessary and, when they are deemed so, to understand the underlying reasons. It is also important to ensure that adequate discharge planning is followed and that effective discharge instructions are provided and explained to patients. Hospitals also may want to provide follow-up for discharged patients.

---

**NATIONAL MEDICARE READMISSION RATES**

![Graph showing national readmission rates for Heart Attack, Heart Failure, and Pneumonia from 2007 to 2015.](source: American Hospital Directory)
and monitor any increases in emergency department encounters that may occur.

**HAC Reduction Program**

CMS began implementation of the HAC Reduction Program with Medicare discharges for FY15. Hospitals in the lowest quartile of risk-adjusted quality metrics have their payment reduced to 99 percent of what would otherwise have been paid for discharges if HACs had not occurred.

Hospital performance is scored across six measures within two domains. A hospital receives 1 to 10 points for each metric based on its national percentile ranking. Points are assigned for each metric in deciles between the score of the best-performing hospital and the worst-performing hospital. Lower scores are better.

The first domain represents patient safety events as measured by the AHRQ PSI 90 composite score. This measure also is used in the value-based purchasing safety domain explained earlier, and the HAC Reduction Program’s second domain represents performance across the same five HACs that are the focus of the VBP Program’s safety domain:

- Catheter-associated urinary tract infection
- Central line-associated bloodstream infection
- *Clostridium difficile* infection
- Methicillin-resistant *Staphylococcus aureus* infection
- Surgical site infection for colon surgery and abdominal hysterectomy

The score for this domain is the numerical average of decile placements for the five metrics. The scores for the two domains are then combined for a hospital’s HAC score. For FY15, the patient safety domain was weighted as 35 percent and the HAC domain as 65 percent. For FY16, the weights are 25 percent and 75, respectively. For
FY17, the weights will be 15 percent and 85 percent, respectively.\(^b\)

HAC payment penalty adjustments occur after base DRG operating amounts have been calculated and made for the VBP and HRR programs. Payment adjustments affect hospitals that rank among the lowest-performing 25 percent with regard to HACs. These hospitals receive only 99 percent of the payment that would otherwise apply to discharges had the HACs not occurred. In other words, they are not paid for the increased costs of a HAC and incur a 1 percent reduction in payment for all Medicare patients.

HACs are clinically significant problems that are harmful to patients and increase the costs of care. Hospitals that are penalized under the HAC Reduction Program should examine why they are seeing excessive numbers of HACs and focus on improving processes to correct the problems.

**Going Forward**

These three programs were mandated by the ACA and are likely to remain in place unless the ACA is amended or replaced under the new presidential administration. They also are likely to continue to be a challenge for hospitals in the foreseeable future despite some legitimate concerns about their pertinence.

When considered together, the three programs have potential payment adjustment factors totaling up to 6 in FY17:

- Value-based purchasing, 2
- Readmission reduction, 3
- HAC reduction, 1

The exhibit on page 8 shows the distribution of total payment adjustments in FY15, and indicates that adjustment factors ranging from –0.1 to –4.4 were incurred by 72.3 percent of hospitals. Incentive payments adjustment factors ranging from 0.1 to 2.1 were paid to 23.5 percent of hospitals, and 4.2 percent of hospitals broke even. Due to the many factors that define a hospital’s Medicare payment (e.g., caseload, case mix index, wage index), it is impossible to generalize about the financial impact of a 1 percent reduction. It is, nevertheless, important to have a sense of the potential loss that could from penalties. For example, a hospital with 10,000 Medicare admissions per year, a case mix index of 1.5, and a DRG operating base rate of $4,900 would lose $784,000, for a 1 percent Medicare payment reduction.

Because the details of each quality program are complex and subject to change, hospital management should remain diligent about measuring and controlling performance under all three programs. New metrics will appear, and it is likely that the incentives and penalties will continue to increase. Healthcare organizations that stay abreast of these changes will be better prepared to meet the challenges these programs present. ■

**About the authors**

Paul Shoemaker  
is CEO, American Hospital Directory, Louisville, Ky. (shoe@ahd.com).

Jonathan York  
is senior software developer, American Hospital Directory, Louisville, Ky. (jyork@ahd.com).

\(^b\) For additional details about the HAC Reduction Program and its scoring methodology, see QualityNet, “Overview: Hospital-Acquired Condition (HAC) Reduction Program.”