what value-based purchasing means to your hospital

CMS has devised an intricate way to measure a hospital’s quality of care to determine whether the hospital qualifies for incentive payments under the Hospital Value-Based Purchasing program. But is it a fully reliable comparative measure?

On April 28, 2011, the U.S. Department of Health and Human Services (HHS) formally launched a new initiative designed to adjust Medicare reimbursement on the basis of quality measurements. The Hospital Value-Based Purchasing (VBP) program, administered by the Centers for Medicare & Medicaid Services (CMS), marks an unprecedented change in the way Medicare pays healthcare providers for their services.

The VBP seeks to reward hospitals for improving the quality of care by redistributing Medicare payment among them so that hospitals with higher performance in terms of quality receive a greater proportion of the payment than do the lower performing hospitals. Details of the program are described in a final rule published May 6, 2011, which will become effective for inpatient prospective payment system (IPPS) discharges on or after Oct. 1, 2012.

It is important that hospital finance leaders understand the quality measures already defined for the VBP and be prepared for their imminent impact on hospital payment under the inpatient prospective payment system (IPPS).

Measurements Used in the VBP Program
The exhibit on page 62 lists quality measurements from CMS’s Inpatient Quality Reporting (IQR) program that are being adopted as the initial measures for the new VBP program. It also shows the national average for each of these measures during the four prior years. Individual measures may be added, changed, or retired over time. For example, some clinical process measures may “top out” as variability among hospitals diminishes.

AT A GLANCE

> Under the new Value-Based Purchasing program, hospitals will receive incentive payments based on how well they perform on 12 clinical process measures and nine patient experience measures or on how much their performance improves relative to a baseline performance period.

> It is likely that as many hospitals will be penalized with payment reductions under the program as will benefit from payment increases from the incentive payments.

> It can be argued that the true significance of the program is not so much in the incentive payments as it is in the measurement tools it provides.

For an example illustrating the scoring method for determining whether a hospital will receive an incentive payment under the Value-Based Purchasing program and, if so, how much that payment will be, go to www.hfma.org/hfm.
### AVERAGE INPATIENT QUALITY REPORTING PERFORMANCE RATES BY COLLECTION PERIOD

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>6/30/07</th>
<th>6/30/08</th>
<th>6/30/09</th>
<th>6/30/10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Process of Care Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Myocardial Infarction:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fibrinolytic therapy received within 30 minutes of hospital arrival</td>
<td>39%</td>
<td>41%</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Primary percutaneous coronary intervention (PCI) received within 90 minutes of hospital arrival</td>
<td>60%</td>
<td>73%</td>
<td>81%</td>
<td>90%</td>
</tr>
<tr>
<td>Heart Failure:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge instructions</td>
<td>66%</td>
<td>73%</td>
<td>78%</td>
<td>88%</td>
</tr>
<tr>
<td><strong>Pneumonia:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood cultures performed in the ED prior to initial antibiotic received in hospital</td>
<td>90%</td>
<td>90%</td>
<td>92%</td>
<td>96%</td>
</tr>
<tr>
<td>Initial antibiotic selection for CAP in immunocompetent patient</td>
<td>86%</td>
<td>87%</td>
<td>88%</td>
<td>92%</td>
</tr>
<tr>
<td><strong>Healthcare Associated Infections:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prophylactic antibiotic received within one hour prior to surgical incision</td>
<td>82%</td>
<td>86%</td>
<td>91%</td>
<td>97%</td>
</tr>
<tr>
<td>Prophylactic antibiotic selection for surgical patients</td>
<td>90%</td>
<td>92%</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Prophylactic antibiotics discontinued within 24 hours after surgery end time</td>
<td>78%</td>
<td>84%</td>
<td>90%</td>
<td>94%</td>
</tr>
<tr>
<td>Cardiac surgery patients with controlled 6 a.m. postoperative serum glucose</td>
<td>N/A</td>
<td>85%</td>
<td>89%</td>
<td>93%</td>
</tr>
<tr>
<td><strong>Surgical Care Improvement:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery patients with recommended venous thromboembolism prophylaxis ordered</td>
<td>79%</td>
<td>84%</td>
<td>88%</td>
<td>94%</td>
</tr>
<tr>
<td>Surgery patients who received appropriate venous thromboembolism prophylaxis within 24 hours</td>
<td>75%</td>
<td>81%</td>
<td>86%</td>
<td>92%</td>
</tr>
<tr>
<td>Surgery patients on beta blocker prior to arrival who received beta blocker during perioperative period</td>
<td>N/A</td>
<td>N/A</td>
<td>87%</td>
<td>93%</td>
</tr>
<tr>
<td><strong>Patient Experience of Care Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses communicated well (always)</td>
<td>73%</td>
<td>74%</td>
<td>75%</td>
<td>76%</td>
</tr>
<tr>
<td>Physicians communicated well (always)</td>
<td>79%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Help received quickly (always)</td>
<td>60%</td>
<td>62%</td>
<td>63%</td>
<td>64%</td>
</tr>
<tr>
<td>Pain controlled well (always)</td>
<td>67%</td>
<td>68%</td>
<td>68%</td>
<td>69%</td>
</tr>
<tr>
<td>Staff explained medicines (always)</td>
<td>58%</td>
<td>59%</td>
<td>59%</td>
<td>60%</td>
</tr>
<tr>
<td>Room and bath kept clean (always)</td>
<td>68%</td>
<td>69%</td>
<td>70%</td>
<td>71%</td>
</tr>
<tr>
<td>Area quiet at night (always)</td>
<td>54%</td>
<td>56%</td>
<td>57%</td>
<td>58%</td>
</tr>
<tr>
<td>Given discharge instructions (yes)</td>
<td>79%</td>
<td>80%</td>
<td>81%</td>
<td>82%</td>
</tr>
<tr>
<td>Overall hospital rating (high)</td>
<td>63%</td>
<td>64%</td>
<td>65%</td>
<td>67%</td>
</tr>
<tr>
<td>Would recommend hospital (definitely)</td>
<td>67%</td>
<td>68%</td>
<td>68%</td>
<td>69%</td>
</tr>
</tbody>
</table>
The data presented in the exhibit were obtained through downloads from the Hospital Compare website. Unfortunately, the measures are expressed as whole numbers. It is to be hoped that CMS will provide fractional precision in the future to support analysis. Similarly, individual hospital rates are provided, but the actual numbers of patients are not. Although these numbers can be extrapolated, having the actual counts would be preferable for greater precision.

Of all the clinical process and patient experience measures currently reported under the IQR program, 12 clinical process measures and nine patient experience measures were chosen for inclusion in the VBP program for FY13. Under the new program, hospitals receive incentive payments based on how well they perform according to these measures or how much their performance improves in comparison with a baseline performance period. Hospitals are scored on each measure, and a total performance score (TPS) is calculated for each hospital to determine its incentive payments.

**Determining Performance**

Hospitals are scored for each measure according to a 10-point scale defined between the measure’s achievement threshold and a benchmark. The achievement threshold is the minimum level of performance for consideration, and the benchmark is set according to the highest levels of performance among hospitals during the baseline period. More specifically, for FY13, the achievement thresholds are set at the 50th percentile of overall hospital performance during the baseline period and the benchmarks are the mean of the top decile of overall hospital scores.

The exhibit on page 64 shows the thresholds and benchmarks for each measure as defined for the 2013 VBP program. (The final rule defines these as quotients rather than as percentages. For example, 91.91 percent is shown as 0.9191 and 100 percent is shown as 1.0.) Note also that the two IQR patient experience measures for cleanliness and quietness of the hospital have been combined into one measure for the VBP program.

Hospital scoring for the FY13 VBP program is based on the performance period July 1, 2011, through March 31, 2012. The corresponding baseline period used for setting thresholds and benchmarks is July 1, 2010, through March 31, 2011. CMS has indicated that future program years may be based on a 12-month performance period, if feasible.

Each hospital is scored based not only on its achievement, but also on its improvement for each measure. A hospital’s score on each measure is the higher of its two scores.

As noted previously, the achievement score is based on how a hospital’s current performance compares with the performance of all other hospitals during the baseline period. Points are given based on a hospital’s performance compared with threshold and benchmark scores determined for each measure as shown in the exhibit. Points are awarded for achievement based on a 10-point scale evenly calibrated between the hospital’s baseline score and the benchmark for a measure. (The scale is uniquely determined for each hospital, and an improvement score is possible only if the current performance is better than its prior performance for a measure.)

Each hospital may also earn consistency points ranging from 0 to 20 based on its scores for
### Clinical Process of Care Measures

**Acute Myocardial Infarction:**
- Fibrinolytic therapy received within 30 minutes of hospital arrival: 0.6548, 0.9191
- Primary PCI received within 90 minutes of hospital arrival: 0.9186, 1.0000

**Heart Failure:**
- Discharge instructions: 0.9077, 1.0000

**Pneumonia:**
- Blood cultures performed in the ED prior to initial antibiotic received in hospital: 0.9643, 1.0000
- Initial antibiotic selection for CAP in immunocompetent patient: 0.9277, 0.9958

**Healthcare-Associated Infections:**
- Prophylactic antibiotic received within one hour prior to surgical incision: 0.9735, 0.9998
- Prophylactic antibiotic selection for surgical patients: 0.9766, 1.0000
- Prophylactic antibiotics discontinued within 24 hours after surgery end time: 0.9507, 0.9968
- Cardiac surgery patients with controlled 6 a.m. postoperative serum glucose: 0.9428, 0.9963

**Surgical Care Improvement:**
- Surgery patients with recommended venous thromboembolism prophylaxis ordered: 0.9500, 1.0000
- Surgery patients who received appropriate venous thromboembolism prophylaxis within 24 hours: 0.9307, 0.9985
- Surgery patients on beta blocker prior to arrival who received beta blocker during perioperative period: 0.9399, 1.0000

### Patient Experience of Care Measures

- Communication with nurses (always): 38.98%, 75.18%, 84.70%
- Communication with physicians (always): 51.51%, 79.42%, 88.95%
- Responsiveness of hospital staff (always): 30.25%, 61.82%, 77.69%
- Pain management (always): 34.76%, 68.75%, 77.90%
- Communications about medicines (always): 29.27%, 59.28%, 70.42%
- Hospital cleanliness and quietness (always): 36.88%, 62.80%, 77.64%
- Discharge information (yes): 50.47%, 81.93%, 89.09%
- Overall rating of hospital (9 or 10): 29.32%, 66.02%, 82.52%
patient expectations. Consistency points are intended to encourage hospitals to focus on all eight measures of patient expectation. No points are earned if a hospital’s performance on any one of the eight measures is as poor as the worst-performing hospital’s performance on the same measure during the baseline period. Twenty points are earned if all eight measures are at or above their achievement thresholds. Otherwise, consistency points are awarded proportionately based on the single lowest of the eight measures when compared with its achievement threshold. The actual score is based on the distance between the achievement threshold and the floor (0th percentile of a baseline). The floors are shown in the exhibit on page 64 along with the thresholds and benchmarks for each measure of patient expectation.

The TPS is calculated for each hospital by combining its scores for all the measures, using the greater of the achievement score or improvement score for each measure. All clinical process scores are combined as one domain, and all example, a rate of 88 percent means that the hospital provided the recommended process of care 88 percent of the time. Higher scores are better and hospitals with effective quality improvement programs typically work toward the highest scores attainable.

Patient experience measures. Measures of patient experience are derived from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. This survey asks 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. (The HCAHPS survey, however, does not replace surveys that hospitals may conduct on their own.)

The HCAHPS survey was developed by a partnership of public and private organizations. Development of the survey was funded by the federal government, specifically the Centers for Medicare & Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ). Patients are selected randomly to participate in the HCAHPS survey and hospitals are not allowed to choose which patients are selected.

All short-term, acute care, non-specialty hospitals are invited to participate in the HCAHPS survey and most hospitals choose to participate. Patients complete the HCAHPS survey after they leave the hospital, and data analysis is done by CMS, rather than by the hospitals.
patient experience scores are combined as another domain. For the FY13 VBP program, the clinical process domain is weighted at 70 percent and the patient experience domain is weighted at 30 percent. The factored domain scores are then added together to arrive at the hospital’s TPS.

CMS will use a linear exchange function to calculate the incentive payment for each hospital based on its TPS. Hospitals with higher TPSs will receive higher incentive payments than those with lower scores. Each hospital will be notified of its estimated incentive payment for FY13 through its QualityNet account at least 60 days prior to Oct. 1, 2012. CMS will notify each hospital of the exact amount of its incentive payment on Nov. 1, 2012. (For a hypothetical example illustrating how the TPS is calculated and translated into an incentive payment, go to www.hfma.org/hfm.)

**Potential Impact of the Program**

The details of the TPS calculation are somewhat complicated, but yield a single, whole number that will be used for comparing the quality of different hospitals to determine the amount of incentive payment, if any, each hospital should receive. Whether this single score is a meaningful indicator of relative hospital quality is arguable. Whether redistribution of Medicare payment based on this score will result in a measurable improvement remains to be seen.

CMS has already demonstrated that public transparency has resulted in improvements for all the VBP measures reported on Hospital Compare. The IQR program provides a framework for quality measurement and hospitals appear to respond as expected. It will be interesting to learn whether Medicare payment manipulations will enhance the improvement process that is already in place.

Even though the final rule for the FY13 VBP program has been promulgated, the corresponding Medicare claims data for the baseline period were not available to the public at the time of publication. The assertive timetable for implementation of the VBP program makes it difficult to forecast its impact on hospitals. For example, it would be helpful to understand the number of hospitals that are likely to experience a net reduction in Medicare payment: How many hospitals will receive no incentive payment or an incentive payment that is less that the 1 percent reduction in DRG payment withheld by CMS to fund the program? It would also be helpful to examine more fully the operational characteristics of hospitals that will benefit from earned incentives.

Although the final rule provides some cursory statistics, the data are insufficient to provide a

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**New Measures to Be Included in the FY14 Value-Based Purchasing Program**

**Mortality Measures**
- Acute myocardial infarction 30-day mortality rate
- Heart failure 30-day mortality rate
- Pneumonia 30-day mortality rate

**Hospital-Acquired Condition Measures**
- Foreign object retained after surgery
- Air embolism
- Blood incompatibility
- Pressure ulcer stages III and IV
- Falls and trauma (specific diagnoses such as fracture, dislocation, etc.)
- Vascular catheter-associated infections
- Catheter-associated urinary tract infections
- Manifestations of poor glycemic control

**AHRQ Patient Safety Indicators, Inpatient Quality Indicators**
- Complication/patient safety for selected indicators (composite)
- Mortality for selected medical conditions (composite)
basis for accurately projecting the effects of the program. It appears that any reliable study of the program’s effects must wait to be performed on a retrospective basis after data become available. The cursory statistics seem to indicate that smaller hospitals will fare better than larger hospitals, but this effect is far from certain.

Because the thresholds for earning incentive points are set at the 50th percentile, it would be reasonable to expect that about half of all participating hospitals will experience reduced Medicare payment. In other words, the “average” hospital will be expected to experience reduced margins as Medicare seeks to drive improvements in selected measures of quality.

**Increasing DRG Payment Reductions to Fund Incentives**

Following the 1.0 percent DRG payment reduction to fund incentive payments in 2013, the VBP program will increase the reductions in subsequent fiscal years. The percentage of DRG payment reduction will be 1.25 percent for 2014, 1.5 percent for 2015, 1.75 percent for 2016, and 2.0 percent for 2017. This approach will increase the amounts of incentive payments but will not affect the redistribution. Conceptually, the same number of hospitals will experience greater net reductions in Medicare payment and the same number of hospitals will receive greater incentive payments.

The VBP program could be more correctly characterized as a program built on penalties rather than as a program built on incentives. According to a CMS news release that accompanied the announcement of the VBP program, Medicare will link hospital payments with patient care in several ways. Beginning in FY13, hospitals will receive reduced payment if their 30-day readmissions for patients with heart attacks, heart failure, and pneumonia exceed a threshold. By FY15, most hospitals will face reductions in their Medicare payments if they do not meaningfully use IT in delivering care. In addition, beginning in FY15, hospitals with high rates of certain hospital-acquired conditions (HACs) will receive further payment reductions.

The final rule for the FY13 VBP program establishes a 12-month performance period of July 1, 2011, through June 20, 2012, as the performance period for the mortality measures listed in the sidebar on page 66. The rule also describes CMS’s intention to adopt a performance period that begins one year after any measures for HACs and/or AHRQ measures are added to Hospital Compare. In accordance with that policy, the performance period for the eight finalized HAC measures and two finalized AHRQ measures listed in the sidebar will begin on March 3, 2012.

Every responsible healthcare worker wants to ensure that patients receive high-quality care in a compassionate setting. Healthcare workers also acknowledge that there are ongoing opportunities for improvement in the quality of care provided. Any concerns expressed about the new VBP program are not arguments about the importance of pursuing quality; they are concerns about the consequences of payment reductions. For example, it may be that excessive readmissions are the result of premature discharges prompted by a
payers’ reluctance to pay for the full costs of inpatient care (i.e., the costs of quality).

**Responding to the VBP Program**

Every hospital has a quality management process in place to measure and control the care provided to its patients. The effectiveness of these programs, however, may vary among facilities depending on their priorities and resources. The VBP program will promote measurable levels of quality and provide specific measurements for that purpose. Every hospital should make certain that its quality management process includes these measures and continually monitors performance against them. Where indicated, every hospital also should promote improvement and correct any deficiencies.

The previously implemented IQR program published individual hospital performance measurements on Hospital Compare, providing hospitals with comparative information and an incentive to make improvements. The new VBP will accelerate the development of measurements and will result in further public scrutiny as well as payment penalties inflicted for substandard performance as defined by the measurements.

Hospitals have long been accustomed to negotiating with commercial payers with a focus primarily on price. With implementation of the VBP program, these other payers are likely to follow Medicare in tying payment to quality. Why not? It can only reduce their payments.

In such circumstances, it can help hospitals to be self-assertive. Some hospitals already publish and promote their quality measurements as a way of demonstrating their commitment to and achievements in delivering high-quality care. The IQR and VBP program data are already public, so hospitals should already be diligently managing their performance against these measurements. If they do so effectively, they can use their accomplishments as a basis not only for promoting the facility, but also for negotiating more favorable contracts with payers.

The simple truth is that the financial incentives of the VBP program are not the program’s most significant feature. The true significance of the program is in the measurement tools it provides. Hospitals should seize the opportunity to use these tools constructively. Initial incentive payments of the VBP program will not be known until November 2013, so there’s still time for hospitals to ensure that their measurements reflect a strong commitment to high-quality care.

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About the author

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