Hospital Inpatient Value-Based Purchasing Program
Final Rule Fact Sheet

Introduction

The Centers for Medicare & Medicaid Services (CMS) has released its final rule that will implement a new hospital value-based purchasing (VBP) program that would provide fiscal year incentive payments to prospective payment system (PPS) acute care hospitals that meet certain performance standards. Under the program, mandated by the Affordable Care Act (ACA), hospitals would be eligible to receive these incentive payments beginning in FY13 for discharges occurring on or after October 1, 2012. Incentive payments would be made based on whether a hospital meets or exceeds the performance on certain quality measures during a specific baseline period, rather than simply reporting data for those measures. The rule is effective July 1, 2011.

The overarching goal of these initiatives is to transform Medicare from a passive payer of claims to an active purchaser of quality health care for its beneficiaries. The final rule includes the performance period, measures, performance standards, scoring methodology, and the applicability of the VBP program to hospitals.

Background

In recent years, CMS has undertaken a number of initiatives to lay the foundation for rewarding healthcare providers and suppliers for the quality of care they provide by tying a portion of their Medicare payments to their performance on quality measures. These initiatives include demonstration projects and quality reporting programs, and apply to a variety of settings.

The Deficit Reduction Act of 2005 required the development and implementation of a VBP program for Medicare payments to subsection (d) hospitals. In its 2007 report to Congress, CMS discussed its plan to implement a new Medicare hospital VBP program that would replace the Inpatient Quality Reporting (IQR) program, (formerly known as the Reporting Hospital Quality Data for the Annual Payment Update program) and include a public reporting requirement and financial incentives for better performance. CMS also analyzed criteria for selecting performance measures, considered a phased approach to transition from hospital IQR to value-based purchasing, and examined the redesign of the current data transmission process and validation infrastructure, as well as an approach to monitor the impact of value-based purchasing. A hospital's total performance score would be based on its performance on measures from different quality "domains," including clinical process of care and patient care experience. These scores

would then be translated into an incentive payment by making a portion of the base diagnosis-related group payment contingent on performance.

Affordable Care Act Provisions

The ACA requires the HHS Secretary to establish a hospital VBP program under which value-based incentive payments are made in a fiscal year to hospitals meeting performance standards established for a performance period for that year. The value-based incentive payment amount is equal to the product of the base operating DRG payment amount for each discharge for the hospital for the fiscal year and the value-based incentive payment percentage for the hospital for the fiscal year. The total amount available for value-based incentive payments for all hospitals for a fiscal year is equal to the total amount of reduced payments for all hospitals for that fiscal year. An annual increase in the funding is provided for available value-based incentive payments from FY13 to FY17, adjusting the applicable percent of base operating DRG payments available for value-based incentive payments. To calculate the total amount of reduced payments, the base operating DRG payment amount for each discharge is reduced by 1.0 percent for FY13, 1.25 percent for FY14, 1.5 percent for FY15, 1.75 percent for FY16, and 2.0 percent for FY17 and subsequent years. CMS notes that, in effect, this will tie an increasing proportion of hospital payments to performance on quality measures. CMS does not have authority to increase the base DRG operating payment withhold amount above 2.0 percent. The actual amount of reduction for an individual hospital for FY13 will be subject to further rulemaking. CMS notes that the redistributive impact of the final rule is estimated at $850 million for FY13.

Performance Period

The HHS Secretary is required to establish a performance period for a fiscal year that begins and ends prior to the beginning of that fiscal year. When considering performance periods that could work with the FY13 payment adjustments, CMS proposed that the performance period for the VBP program commence at the beginning of a quarter since hospitals submit data on the chart-abstracted measures adopted for the hospital IQR program on a quarterly basis. Further, the length of the data collection period must be balanced with the rulemaking process in order to establish a performance period and allow for public comments on that proposal. With these considerations in mind, CMS set July 1, 2011, as the earliest date that the performance period could begin.

In the rule, CMS finalized the three quarter performance period for the clinical process of care and the hospital consumer assessment of healthcare providers and systems (HCAHPS) measures that it will adopt for the FY13 hospital VBP program. As such, this performance period would include the fourth quarter of FY11 (July 1, 2011-September 30, 2011) and the first and second quarters of 2012 (October 1, 2011-March 31, 2012).

With respect to the FY14 hospital VBP program, CMS finalized a 12-month performance period of July 1, 2011, through June 30, 2012, that will apply to the three 30-day mortality measures (acute myocardial infarction, heart failure, pneumonia) that it also finalized in the rule. CMS also finalized its proposal to adopt a performance period that begins one year after any hospital acquired conditions (HACs) or Agency for Healthcare Research and Quality (AHRQ) measures that are specified for the hospital IQR program are included on Hospital Compare. In accordance

with that finalized policy, the performance period for the eight finalized HAC measures and two finalized AHRQ measures will begin on March 3, 2012. CMS intends to propose the end performance period date for the eight finalized HAC measures and two finalized AHRQ measures in the CY12 Outpatient Prospective Payment System proposed rule.

Under CMS's analysis, the total performance scores approximated using three quarters of data closely correlates with the performance scores using a full year of data, which would have been CMS's preference. Further, under the hospital IQR program, hospitals have 135 days to submit chart-abstracted data following the close of each quarter. Since the hospital VBP program would build on the hospital IQR program, CMS would like to maintain its existing hospital IQR program requirements. Based on its analysis, CMS believes that the 135 day time lag would support the adoption of a three quarter performance period. Hospitals will be scored based on how well they perform on the proposed clinical process of care and HCAHPS measures during this proposed performance period. CMS anticipates proposing to use a full year as the performance period for the clinical process of care and HCAHPS measures in the future.

Hospital VBP Program Measures

The hospital VBP program measures must be selected from the pool of measures specified for the hospital IQR program. The selected measures pertain to six specified conditions or topics: acute myocardial infarction (AMI), heart failure (HF), pneumonia (PN), surgeries as measured by the Surgical Care Improvement Project (SCIP), healthcare-associated infections (HAI), and the HCAHPS. They may only be selected if they have been included on the *Hospital Compare* website for a least one year prior to the beginning of the performance period. Currently, there are 45 measures specified under the hospital IQR program for the FY11 payment determination, all of which (with the exception of the measures of readmission) are viewed as "candidate measures" for the hospital VBP program.

CMS proposed to initially select 17 clinical process of care measures and the HCAHPS survey items that measures patients' experience of hospital care for inclusion in the FY13 hospital VBP program. The proposed list of these initial measures is provided in Table 1 of the final rule. CMS finalizes its proposal to adopt 12 of the 17 proposed clinical process of care measures for the FY13 hospital VBP program. It is not adopting the following measures:

- PN–2: Pneumococcal Vaccination
- PN–7: Influenza Vaccination
- AMI–2: Aspirin Prescribed at Discharge
- HF–2: Evaluation of LVS Function
- HF–3: ACEI or ARB for LVSD.

These measures meet CMS's proposed definition of "topped out," which means that all but a few hospitals have achieved a similarly high level of performance on them. CMS believes that measuring hospital performance on topped-out measures would have no meaningful effect on a hospital's total performance score, and that scoring a topped out measure for purposes of the Hospital VBP program would present a number of challenges.

The following table lists the 13 measures that CMS is adopting for the FY13 hospital VBP measure set.

Final Rule Table 2 - Final Measures for FY13 Hospital VBP Program

Measure ID	Measure Description
Clinical Process of Care Measures	
Acute Myocardial Infarction	
AMI–7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival
AMI–8a	Primary PCI Received Within 90 Minutes of Hospital Arrival
Heart Failure	
HF–1	Discharge Instructions
Pneumonia	
PN–3b	Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital
PN–6	Initial Antibiotic Selection for CAP in Immunocompetent Patient
Healthcare-Associated Infections	
SCIP-Inf-1	Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time
SCIP-Inf-4	Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose
Surgeries	
SCIP-Card-2	Surgery Patients on a Beta Blocker Prior to Arrival that Received a Beta Blocker During the Perioperative Period
SCIP-VTE-1	Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery
Patient Experience of Care Measures	
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems Survey

With respect to the FY14 hospital VBP measure set, CMS will adopt the three 30-day mortality claims-based measures, (MORT–30–AMI, MORT–30–HF, and MORT–30–PN), as well as the eight proposed HAC measures. In light of the public comments CMS received regarding the proposed AHRQ measures, it is only finalizing the two composite measures: Complication/patient safety for selected indicators (composite) and mortality for selected medical conditions (composite).

The measures that CMS finalized in the final rule's Table 3 for the FY14 hospital VBP program are listed below:

Mortality Measures (Medicare Patients):

- AMI 30-day mortality rate
- HF 30-day mortality rate
- PN 30-day mortality rate

AHRQ Patient Safety Indicators (PSIs), Inpatient Quality Indicators (IQIs) Composite Measures:

- Complication/patient safety for selected indicators (composite)
- Mortality for selected medical conditions (composite)

Hospital Acquired Condition Measures:

- Foreign Object Retained After Surgery
- Air Embolism
- Blood Incompatibility
- Pressure Ulcer Stages III & IV
- Falls and Trauma (Includes: Fracture Dislocation Intracranial Injury Crushing Injury Burn Electric Shock)
- Vascular Catheter-Associated Infection
- Catheter-Associated Urinary Tract Infection (UTI)
- Manifestations of Poor Glycemic Control

Performance Standards

The established performance standards related to the measures selected under the hospital VBP program for a fiscal year's performance period must include levels of achievement and improvement, and must be established and announced no later than 60 days prior to the beginning of the performance period for the fiscal year involved. In determining which three-quarter baseline period would be the most appropriate to propose to use for the FY13 hospital VBP program, CMS selected a three-quarter baseline period from July 1, 2009, to March 31, 2010, to ensure that the baseline would be as close in time to the proposed performance period as possible.

- *Achievement Performance Standard*
  The achievement performance standard (achievement threshold) for each proposed measure will be set at the median of hospital performance (50^{th} percentile) during the baseline period. Hospitals would receive achievement points only if they exceed the achievement performance standard and could increase their achievement score based on higher levels of performance.

- *Improvement Performance Standard*
  The improvement performance standard (improvement threshold) for each proposed measure will be set at each specific hospital's performance on the measure during the proposed baseline period.

Because its process for validating the proposed baseline period of data was not complete at the time it issued the proposed rule, CMS was unable to provide the precise achievement threshold

values for what the performance standards will be. These values are specified in Table 4 of the final rule.

Final Rule Table 4: Achievement Thresholds that Apply to the FY13 Hospital VBP Program Measures

Measure ID	Measure Description	Performance Standard (achievement threshold)
Clinical Process of care Measures		
AMI–7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival	0.6548
AMI-8a	Primary PCI Received Within 90 Minutes of Hospital Arrival	0.9186
HF-1	Discharge Instructions	0.9077
PN-3b	Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital	0.9643
PN-6	Initial Antibiotic Selection for CAP in Immunocompetent Patient	0.9277
SCIP-Inf-1	Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision	0.9735
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients	0.9766
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time	0.9507
SCIP-Inf-4	Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose	0.9428
SCIP-VTE-1	Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered	0.9500
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery	0.9307
SCIP–Card–2	Surgery Patients on a Beta Blocker Prior to Arrival That Received a Beta Blocker During the Perioperative Period.	0.9399
Patient Experience of Care Measures		
HCAHPS	• Communication with Nurses • Communication with Doctors • Responsiveness of Hospital Staff • Pain Management • Communication About Medicines • Cleanliness and Quietness of Hospital Environment • Discharge Information • Overall Rating of Hospital	75.18% 79.42% 61.82% 68.75% 59.28% 62.80% 81.93% 66.02%

CMS also finalized a 12-month performance period of July 1, 2011, to June 30, 2012, for the three proposed 30-day mortality measures for the FY14 hospital VBP payment determination.

The final achievement thresholds for the three mortality measures (displayed as survival rates) in Table 5 of the final rule, based on a 12-month baseline period from July 1, 2009, to June 30, 2010, are as follows:

Final Rule Table 5 - Achievement Thresholds for the FY14 Hospital VBP Program Mortality Outcome Measures (Displayed as Survival Rates)

Measure ID	Measure Description	Performance Standard (achievement threshold)
Mortality Outcome Measures		
MORT–30–AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate	84.8082%
MORT–30–HF	Heart Failure (HF) 30-Day Mortality Rate	88.6109%
MORT–30 PN	Pneumonia (PN) 30-Day Mortality Rate	88.1795%

Performance Score Calculation Methodology

CMS believes that the performance assessment model presented and analyzed in the 2007 report to Congress provides a useful foundation for developing a FY13 hospital VBP program performance scoring methodology. Under this methodology, measures are grouped into domains. A score is calculated for each domain by combining the measure scores within that domain, weighting each measure equally.

For the hospital VPB program, CMS proposes to use a three-domain performance scoring model. This is very similar to the performance assessment model, but it incorporates an outcome measures domain in addition to the clinical process of care and patient experience of care domains. The three-domain performance scoring model includes setting benchmarks and thresholds, scoring hospitals on achievement and improvement for three domains (clinical process of care, patient experience of care, and outcomes), weighting these domains, and calculating the hospital total performance score.

CMS will calculate an achievement and an improvement score in a performance period for each quality measure. The calculation that results in the higher of the two scores is the one that will be used for determining the measure scores.

- *Achievement Score:* In determining the achievement score, hospitals will receive points along an achievement range, which is a scale between the achievement

threshold (the minimum level of hospital performance required to receive achievement points) and the benchmark (the mean of the top decile of hospital performance during the baseline period for clinical process of care measures and outcome measures).

- *Improvement Score:* In determining the improvement score, hospitals will receive points along an improvement range, which is a scale between the hospital's prior score on the measure during the baseline period and the benchmark.

Although CMS will not adopt any outcome measures for the FY13 hospital VBP program, it will adopt them as part of an outcome measures domain for FY14.

The finalized benchmarks for the clinical process of care and patient experience of care domains for the FY13 hospital VBP program, provided in Table 6 of the final rule, are listed below:

Final Rule Table 6-Benchmarks That Apply to the FY13 Hospital VBP Program Measures

Measure ID	Measure Description	Benchmark
AMI–7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival	0.9191
AMI–8a	Primary PCI Received Within 90 Minutes of Hospital Arrival	1.0
HF–1	Discharge Instructions	1.0
PN–3b	Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital.	1.0
PN–6	Initial Antibiotic Selection for CAP in Immunocompetent Patient	0.9958
SCIP–Inf–1	Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision	0.9998
SCIP–Inf–2	Prophylactic Antibiotic Selection for Surgical Patients	1.0
SCIP–Inf–3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time	0.9968
SCIP–Inf–4	Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose	0.9963
SCIP–VTE–1	Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered	1.0
SCIP–VTE–2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery	0.9985
SCIP–Card–2	Surgery Patients on a Beta Blocker Prior to Arrival That Received a Beta Blocker During the Perioperative Period	1.0
HCAHPS	Communication With Nurses Communication With Doctors Responsiveness of Hospital Staff Pain Management Communication About Medicines Cleanliness and Quietness of Hospital Environment Discharge Information Overall Rating of Hospital	84.70% 88.95% 77.69% 77.90% 70.42% 77.64% 89.09% 82.52%

The finalized benchmarks for the three 30-day mortality outcome measures for the FY14 hospital VBP program, provided in Table 7 of the final rule, are listed below.

Final Rule Table 7—Final Benchmarks for the FY14 Hospital VBP Program Mortality Outcome Measures (Displayed As Survival Rates)

Measure ID	Measure Description	Benchmark
MORT–30–AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate	86.9098%
MORT–30–HF	Heart Failure (HF) 30-Day Mortality Rate	90.4861%
MORT–30 PN	Pneumonia (PN) 30-Day Mortality Rate	90.2563%

Achievement Scoring Methodology

Hospitals will receive an achievement and improvement score for each of the clinical process of care and outcome measures that apply to them, and for each HCAHPS dimension. A hospital will earn 0 to 10 points for achievement based on where its performance for the measure falls relative to the ***achievement threshold*** (performance during the baseline period at the 50th percentile) and the ***benchmark*** (performance during the baseline period at the mean of the top decile) according to the following formula:

[9 * ((Hospital's performance period score - achievement threshold) / (benchmark - achievement threshold))] + .5, where the hospital performance period score falls in the range from the achievement threshold to the benchmark

All achievement points will be rounded to the nearest whole number, and if a hospital's score is:

- Equal to or greater than the benchmark, the hospital would receive 10 points for achievement
- Equal to or greater than the achievement threshold (but below the benchmark), the hospital would receive a score of 1 to 9 based on a linear scale established for the achievement range
- Less than the achievement threshold (that is, the lower bound of the achievement range), the hospital would receive 0 points for achievement

Improvement Scoring Methodology

Hospitals will earn 0 to 9 points based on how much its performance on the measure during the performance period improves from its performance on the measure during the baseline period, according to the following formula:

[10 * ((Hospital performance period score - Hospital baseline period score) / (Benchmark – hospital baseline period score))] - .5, where the hospital performance score falls in the range from the hospital's baseline period score to the benchmark.

All improvement points will be rounded to the nearest whole number. If a hospital's score on the measure during the performance period is:

- Greater than its baseline period score but below the benchmark (within the improvement range), the hospital will receive a score of 0 to 9 based on the linear scale that defines the improvement range
- Equal to or lower than its baseline period score on the measure, the hospital will receive 0 points for improvement

As show below in Table 8 from the final rule, CMS will adopt an HCAHPS scoring approach that does not use percentiles, and instead will finalize an approach that uses the percentage of top-box scores for scoring a hospital's HCAHPS calculations. For the patient experience of care domain, 80 points will be assigned using the Achievement/Improvement methodologies described above. An additional 20 points will be assigned based on what CMS describes as a "consistency" method that is described below.

Final Rule Table 8—Eight HCAHPS Dimensions for the FY13 Hospital VBP Program

Dimension (composite or stand-alone item)	**Constituent HCAHPS Survey Items**
Communication with Nurses (% ''Always'')	Nurse-Courtesy/Respect Nurse-Listen Nurse-Explain
Communication with Doctors (% ''Always'')	Doctor-Courtesy/Respect Doctor-Listen Doctor-Explain
Responsiveness of hospital staff (% ''Always'')	Bathroom Help Call Button
Pain management (% ''Always'')	Pain Control Help with Pain
Communication about Medicines (% ''Always'')	New Medicine-Reason New Medicine-Side Effects
Hospital Cleanliness & Quietness (% ''Always'')	Cleanliness and Quietness Discharge- Help
Overall rating (% ''9 or 10'') Overall Rating of Hospital (% ''9 or 10'')	Discharge- Systems Overall Rating

HCAHPS Consistency Measures

Hospitals will earn between 0 to 20 consistency points on the HCAHPS measure based on the lowest of its eight HCAHPS dimension scores. A hospital will receive no consistency points if its performance on one or more HCAHPS dimensions during the performance period is at least as poor as the worst-performing hospital's performance on that dimension during the baseline period. A hospital will receive a maximum score of 20 consistency points if its performance on all eight HCAHPS dimensions is at or above the achievement threshold.

Consistency points will be awarded proportionately based on the single lowest of a hospital's eight HCAHPS dimension scores during the performance period compared to the achievement threshold (the 50^{th} percentile of the baseline performance score) for that specific HCAHPS dimension. Consistency points will be awarded proportionately based on the single lowest of a hospital's eight HCAHPS dimension scores during the performance period compared to the achievement threshold for that specific HCAHPS dimension. If the lowest score is less than the

achievement threshold, then the score is based on the distance between the achievement threshold and the floor.

If all eight of a hospital's dimension scores during the performance period are at or above the achievement threshold, then that hospital will earn all 20 consistency points. If the lowest score a hospital receives on an HCAHPS dimension is at or below the floor of hospital performance on that dimension during the baseline period, then no consistency points will be awarded to that hospital. Otherwise, consistency points will be awarded proportionately according to the distance of the performance period score for that dimension between the floor and the achievement threshold.

The formula for the HCAHPS consistency points score is as follows:

(20 * (lowest dimension score) - 0.5), rounded to the nearest whole number, with a minimum of zero and a maximum of 20 consistency points

The floors, achievement thresholds, and benchmarks for HCAHPS consistency points, applicable to FY13 using a baseline period of July 1, 2009, to March 31, 2010, found in Table 9 of the final rule are as follows:

Final Rule Table 9—HCAHPS Top-Box Scores 2 Representing The Floor (Minimum), Achievement Threshold (50th Percentile) And Benchmark (Mean Of Top Decile) For Hospital Value-Based Purchasing: Baseline Period (July 1, 2009–March 31, 2010)

HCAHPS Dimension	Floor (minimum)	Achievement threshold (50th percentile)	Benchmark (mean of top decile)
Communication with Nurses	38.98	75.18	84.70
Communication with Doctors	51.51	79.42	88.95
Responsiveness of Hospital Staff	30.25	61.82	77.69
Pain Management	34.76	68.75	77.90
Communication about Medicines	29.27	59.28	70.42
Hospital Cleanliness & Quietness	36.88	62.8	77.64
Discharge Information	50.47	81.93	89.09
Overall Rating of Hospital	29.32	66.02	82.52

To achieve greater uniformity of scoring for all of the domains, CMS finalized the definition of the benchmark as the mean of the top decile of performance on the HCAHPS dimensions, rather than the 95th percentile of performance as it had proposed.

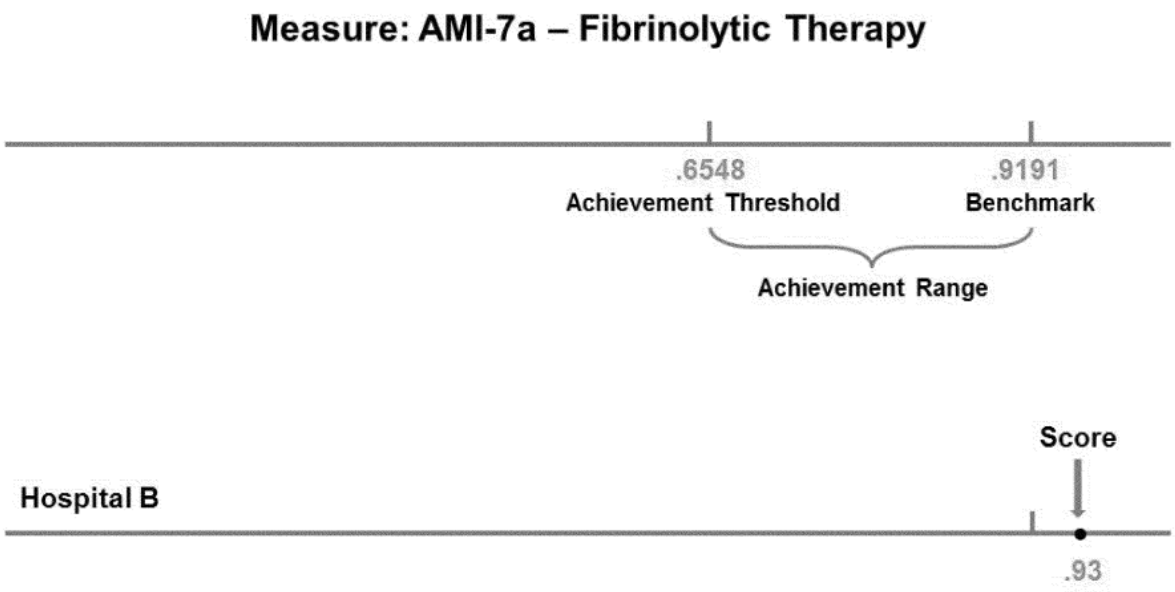
Three-Domain Performance Scoring Model Calculation Examples

In the final rule, CMS provides three examples describing how the clinical process of care and outcome measures will be scored. These examples are similar to those that were provided in the

proposed rule, but illustrate scoring on a different measure since PN–2, used in the proposed rule, is now topped-out.

- **Figure 1 – Measure Scoring for Hospital B**
  The benchmark calculated for AMI–7a in this case was 0.9191 (the mean value of the top decile during the baseline period) and the achievement threshold was 0.6548 (the performance of the median or the 50th percentile hospital during the baseline period). Hospital B's performance rate of 0.93 during the performance period for this measure exceeds the benchmark, so Hospital B would earn 10 points (the maximum) for achievement. The hospital's performance rate on a measure is expressed as a decimal. In the illustration, Hospital B's performance rate of 0.93 means that 93 percent of applicable patients received Fibrinolytic Therapy within 30 minutes of arrival. (Because Hospital B has earned the maximum number of points possible for this measure, its improvement score would be irrelevant.)

Figure 1. Example of Hospital Earning Points by Exceeding Benchmark, Clinical Process of Care and Outcome Measure Scoring Under Three-Domain Performance Scoring Model



- **Figure 2 – Scoring for Hospital I**
  The hospital's performance on this measure went from 0.4297 (below the achievement threshold) in the baseline period to 0.8163 (above the achievement threshold) in the

performance period. Applying the achievement formula, Hospital I would earn 6 points for this measure, calculated as follows:

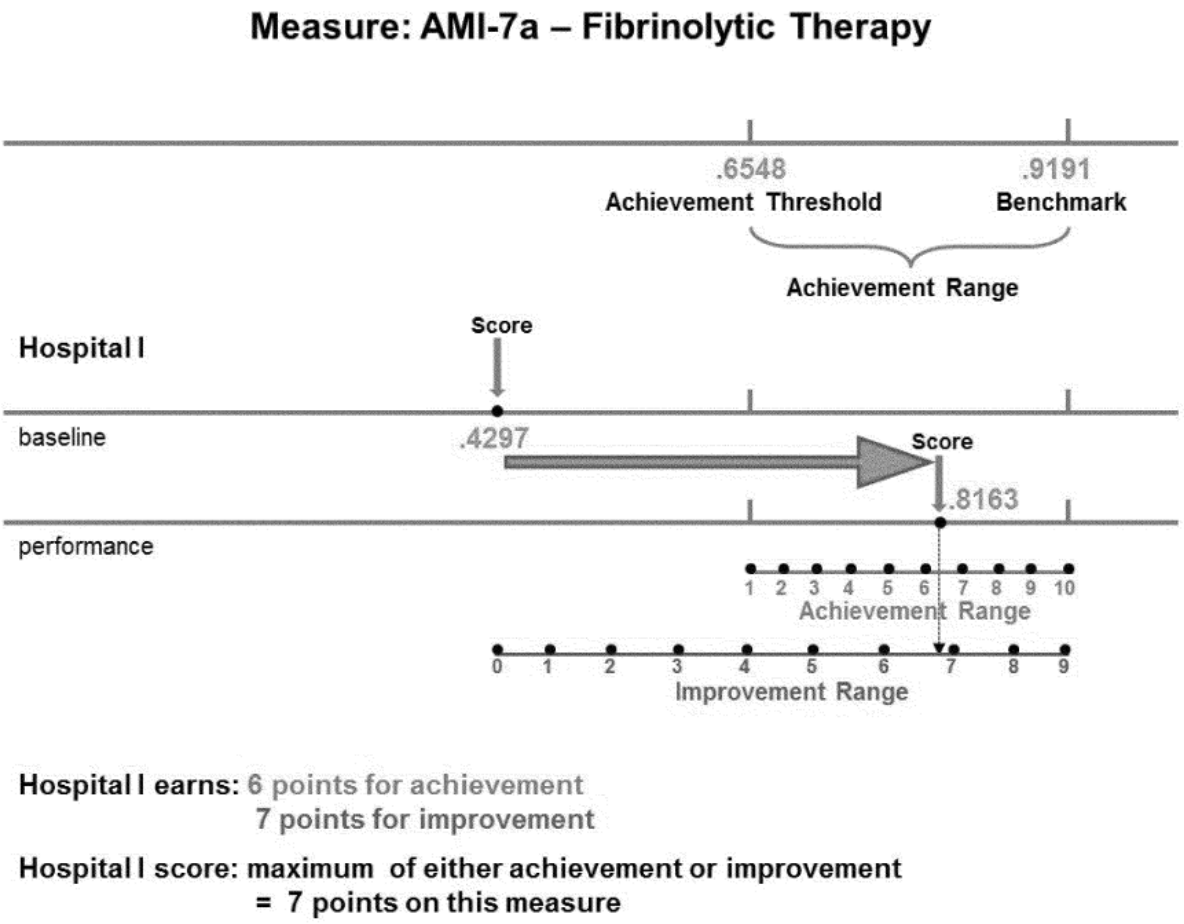
[9 * ((0.8163 - 0.6548)/(0.9191 - 0.6548))] + 0.5 = 5.5 + 0.5 = 6 points

However, because Hospital I's performance during the performance period is also greater than its performance during the baseline period, it would be scored based on improvement as well. According to the improvement formula, based on Hospital I's period-to-period improvement, from 0.4297 to 0.8163, Hospital I would earn 7 points, calculated as follows:

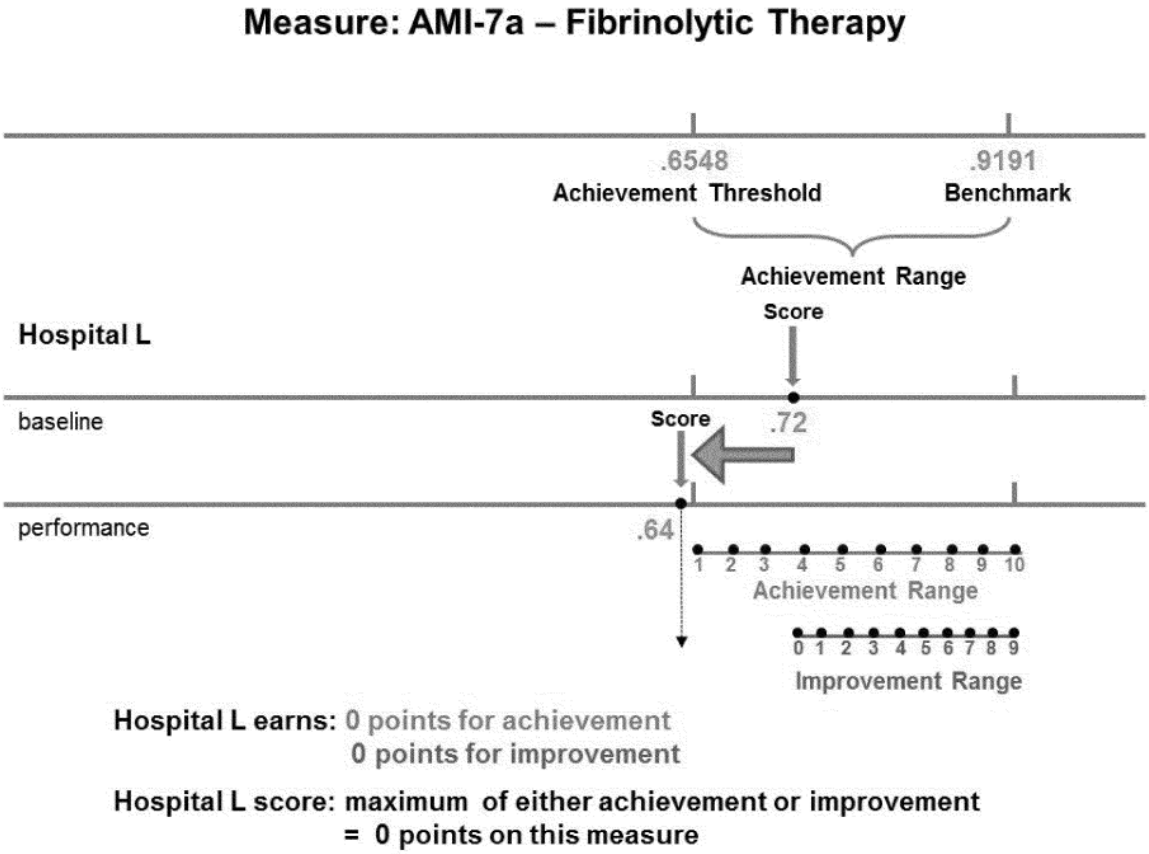
[10 * ((0.8163 - 0.4297)/(0.9191-0.4297))] - 0.5 = 7.9 - 0.5 = 7.4, rounded to 7 points

Because the higher of the two scores is used for determining the measure score, Hospital I would receive 7 points for this measure (rounded to the nearest whole number).

Figure 2. Example of Hospital Earning Points by Achievement or Improvement, Clinical Pro Care and Outcome Measure Scoring Under Three-Domain Performance Scoring Model



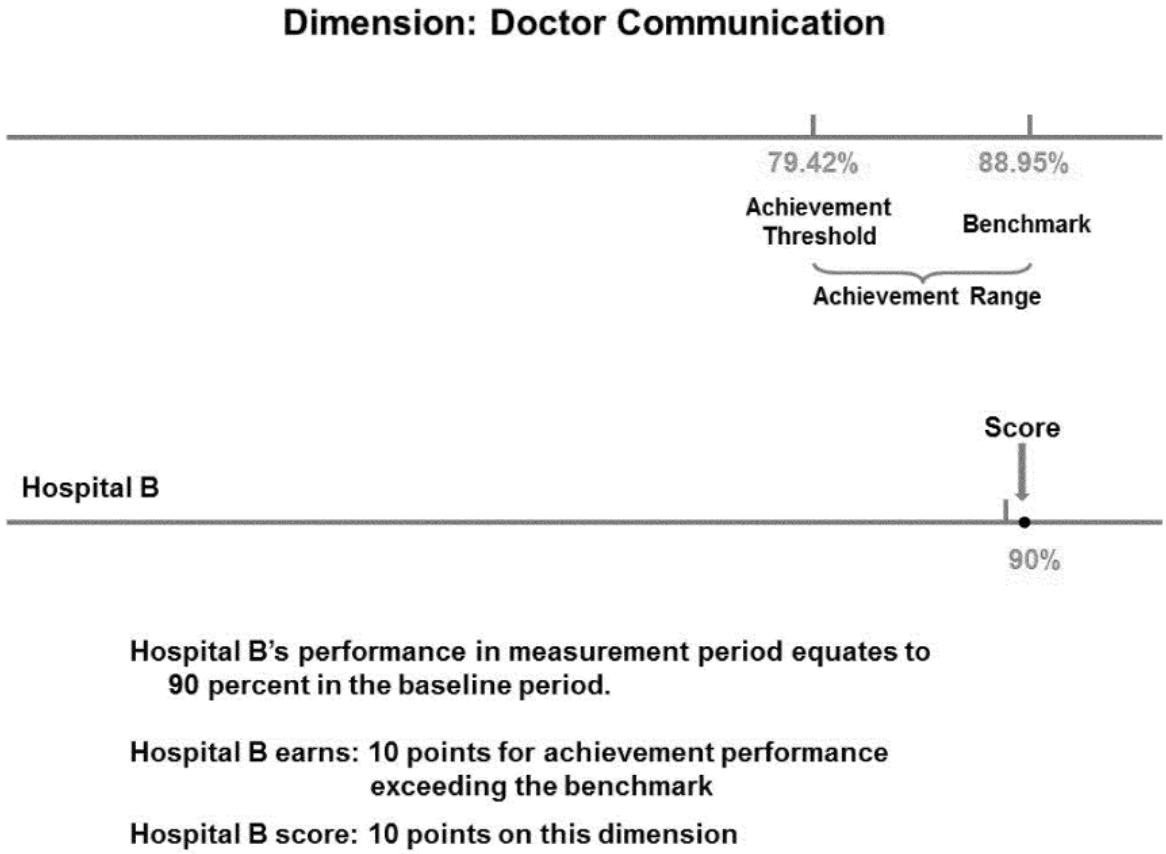
- **Figure 3 – Scoring for Hospital L**
  Hospital L's performance on AMI–7a drops from 0.72 to 0.64 (a decline of 0.08 points). Because this hospital's performance during the performance period is lower than the achievement threshold of 0.6548, it receives 0 points based on achievement. It would also receive 0 points for improvement, because its performance during the performance period is lower than its performance during the baseline period. In this example, Hospital L would receive 0 points for the measure.



Following are examples that CMS provides to illustrate the HCAHPS measure scoring. These examples are based on the Doctor Communication dimension.

- **Figure 4 – Hospital Earning Points Exceeding Benchmark, HCAHPS Measure Scoring Under the Three-Domain Performance Scoring Model**
  Hospital B scores a 90 percent on the doctor communication dimension, which exceeded the benchmark. Thus, Hospital B would earn the maximum of 10 points for achievement. Because this is the highest number of achievement points the hospital could attain for this dimension, its improvement from its baseline period score on this measure would not be relevant.

Figure 4. Example of Hospital Earning Points by Exceeding Benchmark, HCAHPS Measure Scoring Under the Three-Domain Performance Scoring Model



- **Figure 5 - Hospital I's Performance on the Doctor Communication Dimension, HCAHPS Measure Scoring Under the Three-Domain Performance Scoring Model**
  Hospital I's performance on the dimension rose from 77.19 percent during the baseline period to 82.07 percent during the performance period. Because Hospital I's performance during the performance period exceeds the achievement threshold of 79.42 percent, Hospital I's score would fall within the achievement range. According to the achievement scale, Hospital I would earn 3 achievement points, calculated as follows:

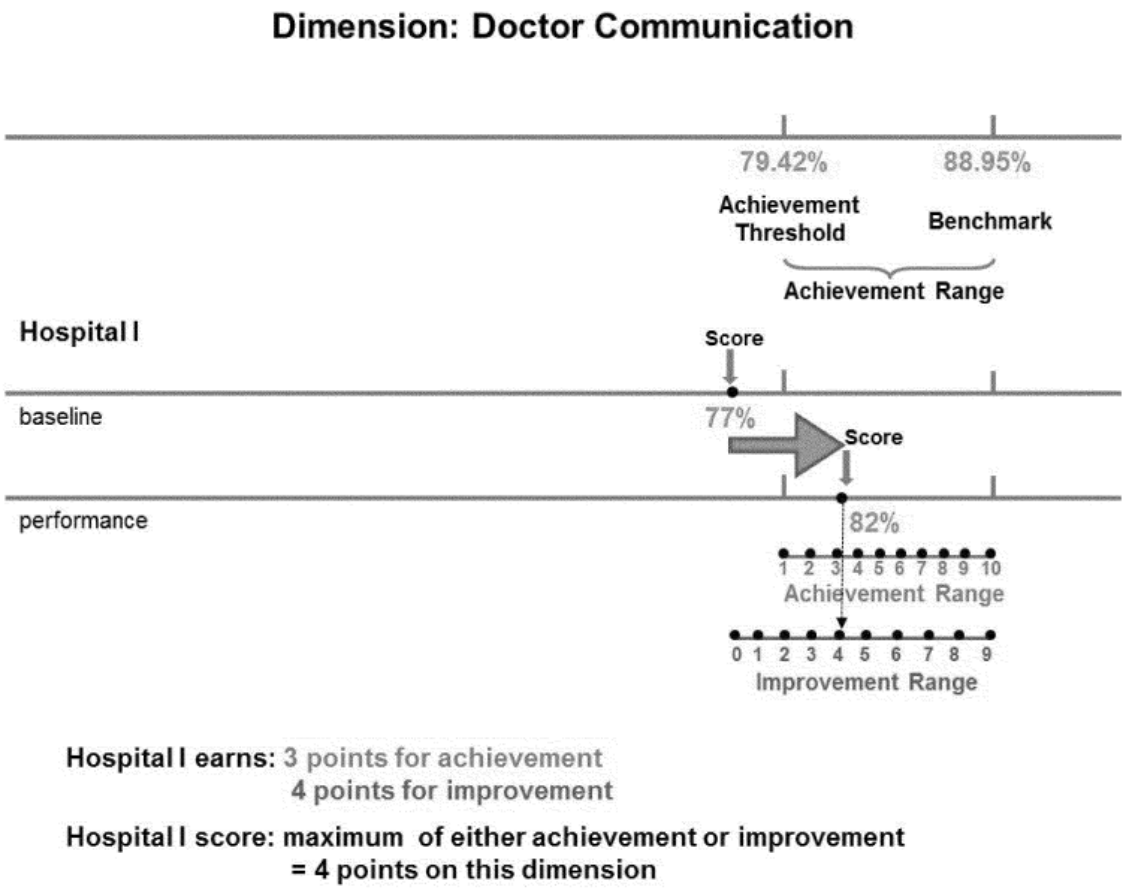
  [9 * ((82.07 - 79.42)/(88.95 - 79.42))] + 0.5 = 2.5 + 0.5 = 3

  However, in this case, the hospital's performance in the performance period has improved from its performance during the baseline period, so Hospital I would be scored based on improvement as well as achievement. Applying the improvement scale, Hospital I's period-to-period improvement from 77.19 percent to 82.07 percent would earn 3.65 improvement points, which would be rounded to 4 points calculated as follows:

  [10 * ((82.07 - 77.19)/ (88.95 - 77.19))] - 0.5 = 3.65

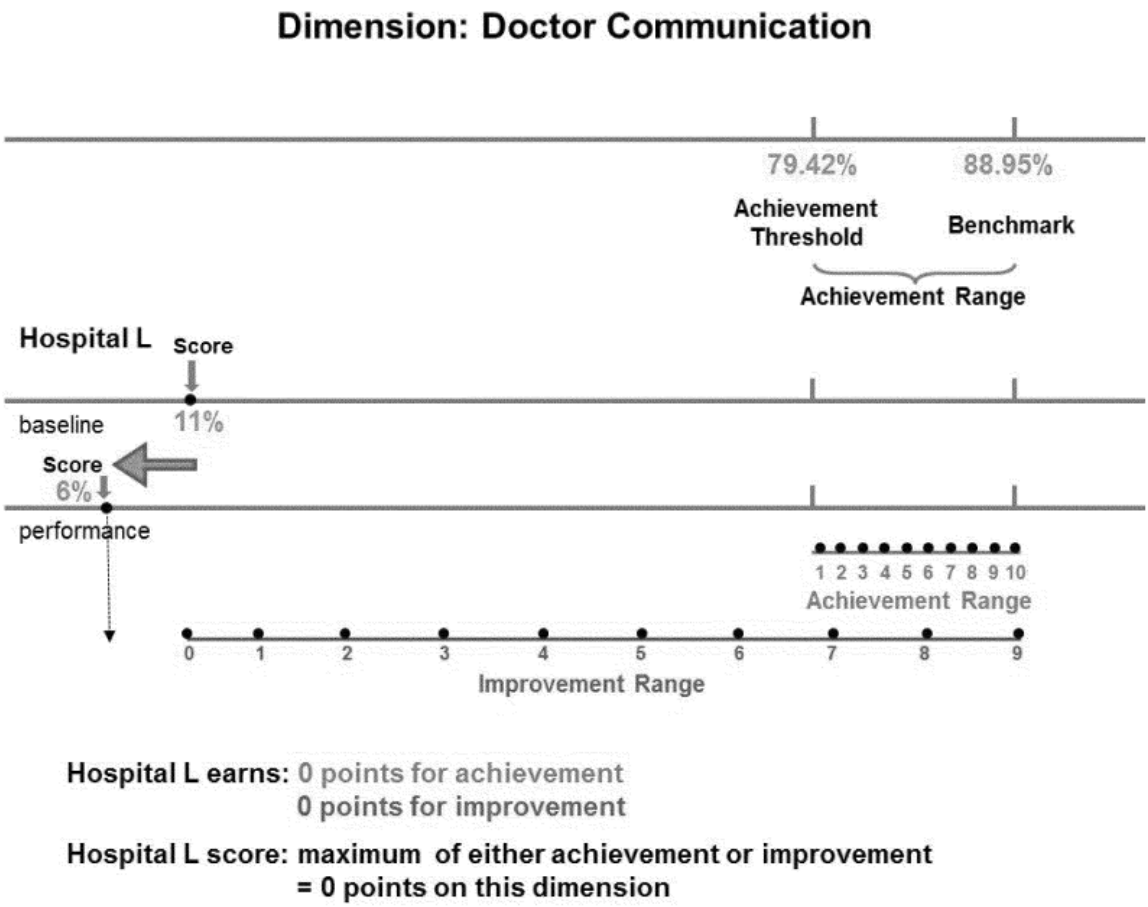
Using the greater of the two scores, Hospital I would receive 4 points for this dimension (rounded to the nearest whole
number).

Figure 5. Example of Hospital Earning Points By Achievement or Improvement, HCAHPS Measure Scoring Under the Three-Domain Performance Scoring Model



- **Figure 6 –Example of Hospital Earning Zero Points, HCAHPS Measure Scoring Under the Three-Domain Performance Scoring Model**
  Hospital L's performance in the baseline period was at 11 percent, and its performance declined in the performance period to 6 percent. Because Hospital L's performance during the performance period is lower than the achievement threshold of 79.42 percent, it would receive 0 points based on achievement. Hospital L would also receive 0 points for improvement because its performance during the performance period is lower than its performance during the baseline period.

Figure 6. Example of Hospital Earning Zero Points, HCAHPS Measure Scoring Under the Three-Domain Performance Scoring Model



Calculation of Overall Clinical Process of Care and Outcome Measure Domain Scores
Based on the comments it received, CMS finalized the calculation of the clinical process of care and outcome domain scores as follows:

1. For each domain:

   Total earned points for domain = Sum of points earned for all applicable domain measures

2. Each hospital also has a corresponding universe of total possible points for each of the clinical process and outcome domains calculated as follows:

   Total possible points for domain = Total number of domain measures that apply to the hospital multiplied by 10 points

3. For each domain, the total domain score would be calculated as a percentage, as follows:

Domain score = Total earned points for domain divided by total possible points for domain multiplied by 100 percent

In the final rule, CMS also finalizes the calculation of the patient experience of care domain score as follows:

1. For each of the eight dimensions, determine the larger of the 0–10 achievement score and the 0–9 improvement score;
2. Sum these eight values to arrive at a 0 to 80 HCAHPS base score;
3. Calculate the 0 to 20 HCAHPS consistency score;
4. To arrive at the HCAHPS total earned points, or HCAHPS overall score, sum the HCAHPS base score and the consistency score.

In summary, the overall HCAHPS performance score is calculated as follows:

HCAHPS total earned points = HCAHPS base score + consistency score.

After consideration of public comments, CMS finalized the calculation of a hospital's Total Performance Score as follows:

Multiply the hospital's performance score for each domain by the weight for that domain (70 percent clinical process of care, 30 percent patient experience of care), and add those weighted scores together

Hospital Notification and Review Procedures

With respect to the FY13 hospital VBP program, CMS will make each hospital's Hospital VBP performance measure score, condition specific score, domain-specific score, and Total Performance Score available on the hospital's QualityNet account on November 1, 2012. CMS will inform each hospital through its QualityNet account at least 60 days prior to October 1, 2012, of the estimated amount of its value-based incentive payment for FY13 discharges based on estimated performance scoring and value-based incentive payment amounts, which will be derived from the most recently available data. Each hospital participating in the hospital VBP program must establish a QualityNet account if it does not already have one for purposes of the hospital IQR program. Each hospital will be notified of the exact amount of its value-based incentive payment adjustment for FY13 discharges on November 1, 2012. CMS notes that the value-based incentive payment adjustment would be incorporated into its claims processing system in January 2013, which will allow the value-based incentive payment adjustment to be applied to the FY13 discharges, including those that have occurred beginning on October 1, 2012.

FY13 Validation Requirements for Hospital Value-Based Purchasing

CMS finalized its proposal to use the validation process it uses for the FY13 hospital IQR program to ensure that data for the FY13 hospital VBP program are accurate. CMS believes that using this process for both the hospital IQR program and the hospital VBP program is beneficial for both hospitals and CMS because no additional burden will be placed on hospitals to separately return requested medical records for the hospital VBP program.

Effective Date
The final rule is effective on July 1, 2011.

Publication Information
The final rule was published in the May 6, 2011, *Federal Register*.

Provisions Related to Value-Based Purchasing in the Proposed FY13 IPPS
Under the VBP program, hospitals will receive value-based incentive payments if they meet performance standards with respect to measures for a performance period for the fiscal year involved. The measures under the hospital VBP program must be selected from the measures specified under the hospital IQR program. The hospital IQR program is intertwined with the hospital VBP program because the measures and reporting infrastructure for both programs will overlap.

Proposed Medicare Spending Per Beneficiary Measure
For value-based incentive payments made for discharges occurring during FY14 and subsequent years, VBP program measures must include efficiency measures, including those pertaining to Medicare spending per beneficiary. CMS proposed to adopt the measure in the FY12 IPPS/ LTCH PPS proposed rule published in the May 5, 2011, *Federal Register*. The Medicare spending per beneficiary measure would be incorporated into the FY14 hospital inpatient VBP program as part of a new domain called the efficiency domain. This measure is also proposed for inclusion in the hospital IQR program.

The proposed approach to scoring this measure and including it in the hospital inpatient VBP program is as follows:

A hospital's performance score is determined using the higher of its achievement or improvement score for each measure. Therefore, CMS would calculate each hospital's achievement score and improvement score on the proposed Medicare spending per beneficiary measure, in order to determine which score will be used to calculate the total performance score for the hospital.

Scoring Based on Achievement
CMS proposes to calculate a Medicare spending per beneficiary ratio of the Medicare spending per beneficiary amount for each hospital to the median Medicare spending per beneficiary amount across all hospitals during the performance period. A hospital would earn between 1 and 10 achievement points on the Medicare spending per beneficiary measure if its individual Medicare spending per beneficiary ratio during the performance period falls at or between the achievement threshold and the achievement benchmark for the measure. The achievement threshold would be set at the median Medicare spending per beneficiary ratio across all hospitals during the performance period. The benchmark would set at the mean of the lowest decile of Medicare spending per beneficiary ratios during the performance period. A hospital whose

individual Medicare spending per beneficiary ratio falls below the achievement threshold would score no achievement points on the measure, and a hospital whose individual Medicare spending per beneficiary ratio falls at or above the achievement benchmark would score the maximum of 10 achievement points on the measure. A hospital whose individual Medicare spending per beneficiary ratio falls at or above the achievement threshold, but below the benchmark, would score between 1–9 points according to the following formula:

[((Hospital's performance period score - achievement threshold)/ (benchmark - achievement threshold))] + .5

Scoring Based on Improvement

CMS proposes that a hospital would earn between 1 and 9 improvement points on the proposed Medicare spending per beneficiary measure if its individual Medicare spending per beneficiary ratio during the performance period falls within the improvement range. The threshold for improvement would be set at the hospital's own Medicare spending per beneficiary ratio calculated during the baseline period. A baseline period of May 15, 2010, through February 14, 2011, would be established for the Medicare spending per beneficiary measure. The improvement benchmark would be equal to the achievement benchmark for the performance period, which is the mean of the lowest decile of Medicare spending per beneficiary ratios across all hospitals. A hospital whose Medicare spending per beneficiary ratio is equal to or lower than its baseline period Medicare spending per beneficiary ratio would score no improvement points on the measure. If a hospital's score on the measure during the performance period was greater than its baseline period score but below the benchmark (within the improvement range), the hospital would receive a score of 0–9 according to the following formula:

[10 * ((Hospital performance period score - Hospital baseline period score)/(Benchmark - Hospital baseline period score))] - .5

The Medicare spending per beneficiary measure score would be the efficiency domain score for purposes of the FY14 hospital inpatient VBP program. CMS is proposing to determine the total earned points for the efficiency domain in general by adding the points earned for each domain measure and dividing by the total possible points, then multiplying that number by 100 percent. Because CMS proposes to adopt only one measure for the efficiency domain for the FY14 hospital inpatient VBP program, the total points earned for the domain would be the points earned on the Medicare spending per beneficiary measure. CMS proposes that the total possible points that a hospital could earn for the efficiency domain for FY14 would be 10, which is equal to the total possible points that the hospital could earn for the Medicare spending per beneficiary measure. CMS is proposing that the efficiency domain percentage score would be calculated for FY14 as follows:

Efficiency domain score = Total points earned on the Medicare spending per beneficiary measure divided by 10, then multiplied by 100 percent

Once the efficiency domain score has been determined, CMS would assign it a weight for use in the calculation of the total performance score. CMS intends to propose FY14 domain weighting, any additional FY14 measures, and other FY14 proposals for the hospital inpatient VBP program in the CY12 hospital OPPS proposed rule. Measures cannot be selected for the hospital inpatient VBP program with respect to a performance period unless it has been specified under the hospital IQR program and included on the *Hospital Compare w*ebsite for at least 1 year prior to the beginning of the performance period. Hospitals must be notified of the calculation of their value-based incentive payment no later than 60 days prior to the fiscal year involved.

In order to comply with these statutory requirements for the FY14 hospital inpatient VBP program, CMS proposes to adopt a 9-month period of performance from May 15, 2012, through February 14, 2013, for the proposed Medicare spending per beneficiary measure. If the measure is adopted, this would allow for a one-year display period on *Hospital Compare*, a 60-day notification period, and would allow the time needed for administrative processes. For the purposes of calculating improvement points on the proposed Medicare spending per beneficiary measure, it is necessary to establish the baseline period to which the performance period score will be compared. For purposes of the FY14 hospital inpatient VBP program, CMS proposes to adopt a baseline period of May 15, 2010, through 90 days prior to February 14, 2011, for this proposed measure.

The proposed baseline period is consistent with the baseline period that has been proposed for the FY13 clinical process of care and patient experience of care measures in the VBP program proposed rule because it precedes the performance period by two years.

Applicability of the Value-Based Purchasing Program to Hospitals

For purposes of the hospital VBP program, the term ‘‘hospital’’ is defined as a subsection (d) hospital, which is a hospital located in one of the fifty States or the District of Columbia. Therefore, hospitals located in the territories or in Puerto Rico are not included. The statutory definition of a subsection (d) hospital does, however, include inpatient, acute care hospitals located in the state of Maryland, which are not currently paid under the IPPS. The statutory definition of a subsection (d) hospital does not apply to hospitals excluded from the IPPS, such as psychiatric, rehabilitation, long term care, children’s, and cancer hospitals. Since critical access hospitals are designated under section 1820(c), they are ineligible to participate in the Hospital VBP program. Hospitals that participate in the Rural Community Hospital Demonstration Program are subsection (d) hospitals, and therefore, the Hospital VBP program would apply to them.

The Secretary is granted discretion to exempt hospitals paid under the section 1814(b)(3) waiver from the hospital VBP program, but only if the state which is paid under such section submits an annual report to the Secretary specifically describing how a similar program in the state for a

participating hospital or hospitals achieves or surpasses the measured results in terms of patient health outcomes and cost savings established under the VBP program. A state must submit the state report, in writing and electronically, no later than October 1, 2011, which is the beginning of the fiscal year prior to the beginning of FY13.

CMS finalized its policy to exclude from a hospital's total performance score its score on any clinical process measure for which it reports fewer than 10 cases, and to exclude from the hospital VBP program any hospital to which less than four of the clinical process measures apply. CMS also finalizes its proposal to exclude from the FY13 hospital VBP program a hospital that reports fewer than 100 HCAHPS surveys during the performance period. Finally, CMS will score hospitals based only on achievement if it has measure data from the performance period but no measure data from the baseline period.
Under 1886(o)(1)(C)(ii)(II) of the Social Security Act, a hospital is excluded from the VBP program if it has been cited for deficiencies during the performance period that pose immediate jeopardy to the health or safety of patients. CMS interprets this provision to mean that any hospital that is cited by CMS through the Medicare State Survey and Certification process for deficiencies during the performance period that pose immediate jeopardy to patients will be excluded from the hospital VBP program for the fiscal year.