A Step-by-Step Guide to Calculating the Patient Experience of Care Domain Score in the Hospital Value-Based Purchasing FY 2013 Actual Percentage Payment Summary Report

This Guide summarizes in step-by-step fashion the process by which the Centers for Medicare & Medicaid Services (CMS) and its HCAHPS Project Team calculate the Patient Experience of Care Domain score for the FY 2013 Hospital Value-Based Purchasing program. By following these steps, a hospital can approximate its Patient Experience of Care Domain score.

Step 1.

A hospital or its HCAHPS survey vendor submits HCAHPS survey data to the HCAHPS data warehouse for the Hospital Inpatient Quality Reporting program.

- The Hospital VBP FY 2013 Performance Period encompasses patients discharged between July 1, 2011 and March 31, 2012 (third quarter 2011 to first quarter 2012).
- The Hospital VBP FY 2013 Baseline Period encompasses patients discharged between July 1, 2009 and March 31, 2010 (third quarter 2009 to first quarter 2010).
- HCAHPS data submitted for the Hospital Inpatient Quality Reporting program are used in the Hospital VBP program.
- In order to participate in the Hospital Value-Based Purchasing program, hospitals must meet the following criteria:
    o Be part of the Inpatient Prospective Payment System program
    o Be open during the Hospital VBP Performance Period
    o Be located in the 50 states or D.C.
    o Passed the Annual Payment Update requirements for the Performance Period
    o Have at least 100 completed surveys during the Performance Period; see Step 7

Step 2.

CMS cleans the submitted HCAHPS data by removing incomplete surveys, surveys from ineligible patients, etc.

- "Completed survey" is defined in the *HCAHPS Quality Assurance Guidelines V7.0,* p. 143, http://www.hcahpsonline.org/files/HCAHPS%20Quality%20Assurance%20Guidelines%20V7.0%20March%202012.pdf.

Step 3.

CMS calculates the "top-box" raw score for the nine HCAHPS measures that are used in the Hospital VBP Patient Experience of Care Domain.

- The top-box raw score, which is the percentage of a hospital's patients who chose the most positive, or "top-box," response to HCAHPS Survey items, is used in the Patient Experience of Care Domain.

  o See the HCAHPS On-Line Web site's "Summary Analyses" page for more information on the HCAHPS top-box, http://www.hcahpsonline.org/SummaryAnalyses.aspx.

- Nine measures from HCAHPS are used in Hospital VBP: six composite measures (Communication with Nurses, Communication with Doctors, Staff Responsiveness, Pain Management, Communication about Medicines, and Discharge Information); two individual measures (Cleanliness of Hospital Environment, and Quietness of Hospital Environment); and one global measure (Overall Rating of Hospital).

  o CMS combines the Cleanliness and Quietness measures to form a new composite for Hospital VBP, Cleanliness and Quietness of Hospital Environment; see Step 6.

  o The HCAHPS global measure Recommend the Hospital is not used in the Patient Experience of Care Domain.

Step 4.

CMS applies the patient-mix adjustment for each of the nine HCAHPS measures used in Hospital VBP to obtain patient-mix adjusted scores.

- Information on HCAHPS patient-mix adjustment can be found in the 'Mode and Patient-mix Adjustment' page on the HCAHPS On-Line Web site, http://www.hcahpsonline.org/modeadjustment.aspx.

- A detailed description of the HCAHPS patient-mix adjustment process can be found at http://www.hcahpsonline.org/files/December_2012_PMA_Web_Document_09-12-12.pdf.

- The patient-mix adjustment coefficients applicable specifically to the Baseline and Performance periods for the FY 2013 Hospital VBP program will be made available on the HCAHPS On-Line Web site, www.hcahpsonline.org.

Step 5.

CMS applies the survey mode effect adjustment for each of the nine HCAHPS measures used in Hospital VBP to adjust for scores for the effect of mode of survey administration.

- Information on HCAHPS survey mode adjustment can be found in the 'Mode and Patient-mix Adjustment' page on the official HCAHPS On-Line Web site, http://www.hcahpsonline.org/modeadjustment.aspx.

Step 6.

CMS combines the Cleanliness of Hospital Environment and Quietness of Hospital Environment measures to create the Cleanliness and Quietness of Hospital Environment dimension for Hospital VBP (after having applied the patient-mix and mode adjustments to the Cleanliness of Hospital Environment and Quietness of Hospital Environment measures).

- CMS uses the simple arithmetic average of the Cleanliness and Quietness top-box scores to obtain the Cleanliness and Quietness of Hospital Environment dimension.
- Thus, there are eight HCAHPS measures (called "dimensions") in Hospital VBP.

Step 7.

CMS performs Steps 1 to 6 separately on each of the three quarters in the FY 2013 Performance Period.

- Please note: If a hospital has fewer than 100 completed surveys in the FY 2013 Performance Period, it will not receive a Patient Experience of Care Domain score.

Step 8.

CMS calculates the three-quarter average for each of the eight Patient Experience of Care Domain dimensions for each hospital.

- For each hospital, each quarter is weighted according to the number of eligible discharges.
    - o For information on the weighting of quarters, see http://www.hcahpsonline.org/files/December_2012_PMA_Web_Document_09-12-12.pdf.

Step 9.

CMS calculates Achievement Points and Improvement Points for each dimension for each hospital.

- Using a hospital's Performance Rate and the Achievement Threshold (50th percentile) and Benchmark (mean of the top decile) for the FY 2013 Baseline Period, CMS calculates Achievement Points for each dimension.

- Using a hospital's Baseline Rate and the Achievement Threshold (50th percentile) and Benchmark (mean of the top decile) for the FY 2013 Baseline Period, CMS calculates Improvement Points for each dimension.
    o Each eligible hospital received the FY 2013 Baseline Period Baseline Rate for each dimension in its FY 2013 Estimated Payment Report (August 2012).
        ▪ The FY 2013 Estimated Report also included the Achievement Threshold and Benchmark for each dimension.
            • The Achievement Thresholds and Benchmarks for the FY 2013 Baseline Period were published in the Hospital Inpatient Value-Based Purchasing Program Final Rule *(Federal Register / Vol. 76, No. 88 / Friday, May 6, 2011 / Rules and Regulations, p. 26519)* http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf.
- The formula for Achievement Points is found in the Hospital Inpatient Value-Based Purchasing Program Final Rule *(Federal Register / Vol. 76, No. 88 / Friday, May 6, 2011 / Rules and Regulations, p. 26517-26520)* http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf.
- The formula for Improvement Points is found in the Hospital Inpatient Value-Based Purchasing Program Final Rule *(Federal Register / Vol. 76, No. 88 / Friday, May 6, 2011 / Rules and Regulations, p. 26517-26520)* http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf.

Step 10.
CMS calculates the HCAHPS Base Score for each hospital.
- For each dimension, the greater of Achievement Points or Improvement Points is designated the Dimension Score.
    o The HCAHPS Base Score is the sum of the eight Dimension Scores.
        ▪ The HCAHPS Base Score ranges from 0 to 80 points.

Step 11.
CMS calculates the Consistency Score for each hospital.
- Using a hospital's Performance Rate and the Floor and Achievement Threshold for each dimension in the Baseline Period, CMS determines the lowest dimension score.

- o The formula for determining the lowest dimension score is found in the Hospital Inpatient Value-Based Purchasing Program Final Rule *(Federal Register / Vol. 76, No. 88 / Friday, May 6, 2011 / Rules and Regulations, p. 26519)* http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf.
  - o The Floors and Achievement Thresholds for the FY 2013 Baseline Period were published in the Hospital Inpatient Value-Based Purchasing Program Final Rule *(Federal Register / Vol. 76, No. 88 / Friday, May 6, 2011 / Rules and Regulations, p. 26519)* http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf.
    - ▪ The Floor and Achievement Threshold for each dimension are also provided in the FY 2013 Estimated Report.
- Having determined the lowest dimension score, CMS calculates the Consistency Score using the formula found in the Hospital Inpatient Value-Based Purchasing Program Final Rule *(Federal Register / Vol. 76, No. 88 / Friday, May 6, 2011 / Rules and Regulations, p. 265519)* http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf.
  - o The Consistency Score ranges from 0 to 20.

Step 12.

CMS calculates the Unweighted Patient Experience of Care Domain Score for each hospital by summing the hospital's HCAHPS Base Score (0-80) and HCAHPS Consistency Score (0-20).

- The Patient Experience of Care Domain Score ranges from 0 to 100 points.
- CMS calculates the Weighted Patient Experience of Care Domain Score for each hospital by multiplying the Unweighted Patient Experience of Care Domain Score by 0.30.
- The FY 2013 Actual Percentage Payment Summary Report contains the Baseline Rate, Performance Rate, Achievement Points, Improvement Points and Dimension Score for each dimension.
  - o The report also provides the HCAHPS Base Score, Consistency Score, lowest dimension, number of completed HCAHPS surveys in the Performance Period, and the Unweighted and Weighted Patient Experience of Care Domain Score.
- A detailed example of how the Patient Experience of Care Domain Score is calculated can be found in slides 35-61 at http://www.cms.gov/Hospital-Value-Based-Purchasing/Downloads/HospVBP_ODF_072711.pdf.