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healthcare financial management association

Value-Based Reimbursement Resource

*This resource contains important information pertaining to the Value-Based Reimbursement Program extracted from rules published by CMS. Text in **red** are those final changes contained in the FY15 IPPS Final Rule, published in the August 22, 2014, [Federal Register](#).*

Table of Contents

I. Value-Based Purchasing

1. FY15 Value-Based Purchasing Tables
 - 1a. Final Hospital Quality Measures
 - 1b. Baseline and Performance Periods
 - 1c. Performance Standards
2. FY16 Value-Based Purchasing Tables
 - 2a. Finalized and Readopted Hospital Quality Measures
 - 2b. Baseline and Performance Periods
 - 2c. Performance Standards
 1. Mortality Measures
3. FY17 Value-Based Purchasing Tables
 - 3a. Previously Adopted and New Measures
 - 3b. Previously Adopted and Final Performance and Baseline Periods
 - 3c. Previously Adopted and Final Performance Standards
4. FY18 Value-Based Purchasing Tables
 - 4a. FY18 Final Performance Standards
5. FY19 Value-Based Purchasing Tables
 - 5a. FY19 Previously Adopted and Final Performance and Baseline Periods
 - 5b. FY19 Previously Adopted and Final Performance Standards

- 6. FY20 Value-Based Purchasing Tables
 - 6a. FY20 Finalized Performance and Baseline Periods for the Clinical Care--Outcomes Domain
 - 6b. FY20 Final Performance Standards for Clinical Care
- 7. Value-Based Purchasing Domain Weights
 - 7a. FY15 Weights
 - 7b. FY16 Weights
 - 7c. FY17 Final Revised Weights

II. Hospital Readmissions

- 1a. Planned Readmission Algorithm
- 1b. FY15 Data Collection Periods
- 1c. Final FY15 Hospital Readmissions Reduction Program Measures
- 1d. FY15 Program Measure ICD-9-CM Codes

III. Hospital Acquired Conditions (HACs)

- 1a. Planned Readmission Algorithm
- 1b. FY15 Final HAC Measures and Beyond
- 1b. FY15 HAC Reduction Program Measures Compared to FY15 VBP Patient Safety Outcomes Measures
- 1c. Final FY16 HAC Reduction Program Measures Compared to FY16 VBP Patient Safety Outcomes Measures
- 1d. Final FY17 HAC Reduction Program Measures Compared to FY17 VBP Patient Safety Outcomes Measures
- 1e. FY15 Data Collection Period
- 1f. FY16 Data Collection Period
- 1g. FY15 HAC Weights
- 1h. FY16 HAC Weights

1. FY15 Value-Based Purchasing Tables

Appendix 1a: FY15 Final VBP Hospital Quality Measures

Finalized Quality Measures for FY 2015 Hospital VBP Program	
Clinical Process of Care Measures	
Measure ID	Measure Description
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival
AMI-8a	Primary PCI Received Within 90 Minutes of Hospital Arrival

Finalized Quality Measures for FY 2015 Hospital VBP Program	
HF-1	Discharge Instructions
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
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
SCIP-Inf-9	Urinary Catheter Removed on Postoperative Day 1 or Postoperative Day 2
SCIP-Card-2	Surgery Patients on Beta-Blocker Therapy Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxes Within 24 Hours Prior to Surgery to 24 Hours After Surgery
Patient Experience Measures	
HCAHPS*	Hospital Consumer Assessment of Healthcare Providers and Systems Survey
Outcome Measures	
AHRQ PSI composite	Complication/patient safety for selected indicators (composite)
CLABSI	Central Line-Associated Blood Stream Infection
MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-day mortality rate
MORT-30-HF	Heart Failure (HF) 30-day mortality rate
MORT-30-PN	Pneumonia (PN) 30-day mortality rate
Efficiency Measures	
MSPB-1	Medicare Spending per Beneficiary

Appendix 1b: FY15 Final VBP Baseline and Performance Periods

Domain	Baseline period	Performance period
<i>Clinical Process of Care</i>	January 1, 2011–December 31, 2011	January 1, 2013–December 31, 2013.
<i>Patient Experience of Care</i>	January 1, 2011–December 31, 2011	January 1, 2013–December 31, 2013.
<i>Outcome</i>		
• Mortality	• October 1, 2010–June 30, 2011	• October 1, 2012–June 30, 2013.
• AHRQ PSI	• October 15, 2010–June 30, 2011	• October 15, 2012–June 30, 2013.
• CLABSI	• January 1, 2011–December 31, 2011	• February 1, 2013–December 31, 2013.
<i>Efficiency</i>		
• Medicare Spending Per Beneficiary-1	• May 1, 2011–December 31, 2011	• May 1, 2013–December 31, 2013.

Appendix 1c: FY15 Final VBP Performance Standards

FINAL PERFORMANCE STANDARDS FOR THE FY 2015 HOSPITAL VBP PROGRAM CLINICAL PROCESS OF CARE, OUTCOME, AND EFFICIENCY DOMAINS

Measure ID	Description	Achievement threshold	Benchmark
Clinical Process of Care Measures			
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival.	0.80000	1.00000.
AMI-8a	Primary PCI Received Within 90 Minutes of Hospital Arrival.	0.95349	1.00000.
PN-3b	Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital.	0.94118	1.00000.
PN-6	Initial Antibiotic Selection for CAP in Immunocompetent Patient.	0.97783	1.00000.
SCIP-Card-2	Surgery Patients on Beta-Blocker Therapy Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period.	0.95918	1.00000.
SCIP-Inf-1	Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision.	0.97175	1.00000.
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients.	0.98639	1.00000.
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time.	0.98637	1.00000.
SCIP-Inf-4	Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose.	0.97494	1.00000.

FINAL PERFORMANCE STANDARDS FOR THE FY 2015 HOSPITAL VBP PROGRAM CLINICAL PROCESS OF CARE, OUTCOME, AND EFFICIENCY DOMAINS—Continued

Measure ID	Description	Achievement threshold	Benchmark
SCIP-Inf-9	Urinary Catheter Removed on Postoperative Day 1 or Postoperative Day 2.	0.95798	0.99767.
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxes Within 24 Hours Prior to Surgery to 24 Hours After Surgery.	0.94891	0.99991.

Outcome Measures

MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate.	0.847472	0.862371.
MORT-30-HF	Heart Failure (HF) 30-Day Mortality Rate	0.881510	0.900315.
MORT-30-PN	Pneumonia (PN) 30-Day Mortality Rate	0.882651	0.904181.
PSI-90	Patient safety for selected indicators (composite).	0.622879	0.451792.
CLABSI	Central Line-Associated Blood Stream Infection.	0.437	0.000.

Efficiency Measures

MSPB-1	Medicare Spending per Beneficiary	Median Medicare spending per beneficiary ratio. across all hospitals during the performance period.	Mean of the lowest decile of Medicare spending per beneficiary ratios across all hospitals during the performance period.
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FINAL PERFORMANCE STANDARDS FOR THE FY 2015 HOSPITAL VBP PROGRAM PATIENT EXPERIENCE OF CARE DOMAIN

HCAHPS Survey dimension	Floor (percent)	Achievement threshold (percent)	Benchmark (percent)
Communication with Nurses	47.77	76.56	85.70
Communication with Doctors	55.62	79.88	88.79
Responsiveness of Hospital Staff	35.10	63.17	79.06
Pain Management	43.58	69.46	78.17
Communication about Medicines	35.48	60.89	71.85
Hospital Cleanliness & Quietness	41.94	64.07	78.90
Discharge Information	57.67	83.54	89.72
Overall Rating of Hospital	32.82	67.96	83.44

Please Note: The above chart appeared in the FY13 IPPS final rule. However, the figures for the achievement threshold and the benchmark for the **HF-1 measure** were inadvertently omitted. A correction notice was subsequently published, but these figures were omitted once again. CMS finally published the figures for the Clinical Process of Care Measures, including those for HF-1, in a chart appearing in a second correction notice, contained in the October 29, 2012, Federal Register, as follows:

FY15 Final VBP Performance Standards (cont.)

CLINICAL PROCESS OF CARE MEASURES

Measure ID	Description	Achievement threshold	Benchmark
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival	0.80000	1.00000
AMI-8a	Primary PCI Received Within 90 Minutes of Hospital Arrival	0.95349	1.00000
HF-1	Discharge Instructions	0.94118	1.00000
PN-3b	Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital.	0.97783	1.00000
PN-6	Initial Antibiotic Selection for CAP in Immunocompetent Patient	0.95918	1.00000
SCIP-Card-2 ...	Surgery Patients on Beta-Blocker Therapy Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period.	0.97175	1.00000
SCIP-Inf-1	Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision	0.98639	1.00000
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients	0.98637	1.00000
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time	0.97494	1.00000
SCIP-Inf-4	Cardiac Surgery Patients With Controlled 6AM Postoperative Serum Glucose	0.95798	0.99767
SCIP-Inf-9	Urinary Catheter Removed on Postoperative Day 1 or Postoperative Day 2	0.94891	0.99991
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxes Within 24 Hours Prior to Surgery to 24 Hours After Surgery.	0.97403	0.99998

Note: In a March 18, 2014, notice, CMS corrected a technical error pertaining to measure **PSI-90** for FY13, appearing in the August 31, 2012, IPPS final rule.

Measure ID	Description	Achievement threshold	Benchmark
Outcome Measures			
PSI-90	Patient safety for selected indicators (composite)	0.616248	0.449988

2. FY16 Value-Based Purchasing Tables

Appendix 2a: FY16 VBP Hospital Quality Measures

Newly Finalized and Readopted Measures for the FY 2016 Hospital VBP Program	
Clinical Process of Care Measures	
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival
IMM-2**	Influenza Immunization
PN-6	Initial Antibiotic Selection for CAP in Immunocompetent Patient
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time
SCIP-Inf-9	Urinary Catheter Removed on Postoperative Day 1 or Postoperative Day 2
SCIP-Card-2	Surgery Patients on Beta-Blocker Therapy Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxes Within 24 Hours Prior to Surgery to 24 Hours After Surgery
Patient Experience Measures	
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems Survey
Outcome Measures	
CAUTI**	Catheter-Associated Urinary Tract Infection
CLABSI***	Central Line-Associated Blood Stream Infection
MORT-30-AMI*	Acute Myocardial Infarction (AMI) 30-day mortality rate
MORT-30-HF*	Heart Failure (HF) 30-day mortality rate
MORT-30-PN*	Pneumonia (PN) 30-day mortality rate
PSI-90*	Complication/patient safety for selected indicators (composite)
SSI**	Surgical Site Infection <ul style="list-style-type: none"> ● Colon ● Abdominal Hysterectomy
Efficiency Measures	
MSPB-1	Medicare Spending per Beneficiary

Appendix 2b: FY16 Final VBP Baseline and Performance Periods

FINALIZED PERFORMANCE AND BASELINE PERIODS FOR THE FY 2016 HOSPITAL VBP PROGRAM—CLINICAL PROCESS OF CARE, PATIENT EXPERIENCE OF CARE, AND EFFICIENCY DOMAINS

Domain	Baseline period	Performance period
Clinical Process of Care	January 1, 2012–December 31, 2012	January 1, 2014–December 31, 2014.
Patient Experience of Care	January 1, 2012–December 31, 2012	January 1, 2014–December 31, 2014.
Efficiency	January 1, 2012–December 31, 2012	January 1, 2014–December 31, 2014.

FINALIZED FY 2016 PERFORMANCE PERIODS AND BASELINE PERIODS FOR 30-DAY MORTALITY AND AHRQ PSI MEASURES

Measure	Baseline period	Performance period
Mortality	October 1, 2010–June 30, 2011	October 1, 2012–June 30, 2014.
AHRQ PSI composite	October 15, 2010–June 30, 2011	October 15, 2012–June 30, 2014.

Finalized Performance and Baseline Periods for CAUTI/CLABSI/SSI under the FY 2016 Hospital VBP Program		
Domain	Baseline Period	Performance Period
Outcome ● CAUTI / CLABSI / SSI	● January 1, 2012 – December 31, 2012	● January 1, 2014 – December 31, 2014

Note: The final FY16 baseline and performance periods for Central-Line associated Blood Stream Infection (CLABSI), Surgical Site Infection (SSI), and Catheter-associated Urinary Tract Infection (CAUTI) were inadvertently omitted from the FY14 IPPS final rule. They periods appear FY14 OPSS final rule, published in the December 10, 2013 [Federal Register](#).

Appendix 2c: FY16 Final VBP Performance Standards

FINALIZED PERFORMANCE STANDARDS FOR THE FY 2016 HOSPITAL VBP PROGRAM CLINICAL PROCESS OF CARE, OUTCOME, AND EFFICIENCY DOMAIN MEASURES

Measure ID	Description	Achievement threshold	Benchmark
Clinical Process of Care Measures			
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival.	0.91154	1.00000
IMM-2	Influenza Immunization	0.90607	0.98875
PN-6	Initial Antibiotic Selection for CAP in Immunocompetent Patient.	0.96552	1.00000
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients.	0.99074	1.00000
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time.	0.98086	1.00000
SCIP-Inf-9	Urinary Catheter Removed on Postoperative Day 1 or Postoperative Day 2.	0.97059	1.00000
SCIP-Card-2	Surgery Patients on Beta-Blocker Therapy Prior to Arrival Who Received a Beta-Blocker During the Perioperative Period.	0.97727	1.00000
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxes Within 24 Hours Prior to Surgery to 24 Hours After Surgery.	0.98225	1.00000

Outcome Measures			
CAUTI	Catheter-Associated Urinary Tract Infection.	0.801	0.000
CLABSI	Central Line-Associated Blood Stream Infection.	0.465	0.000
SSI	Surgical Site Infection. • Colon • Abdominal Hysterectomy	• 0.668 • 0.752	• 0.000 • 0.000

Efficiency Measures			
MSPB-1	Medicare Spending per Beneficiary	Median Medicare Spending per Beneficiary ratio across all hospitals during the performance period.	Mean of the lowest decile Medicare Spending per Beneficiary ratios across all hospitals during the performance period

FINALIZED PERFORMANCE STANDARDS FOR THE FY 2016 HOSPITAL VBP PROGRAM PATIENT EXPERIENCE OF CARE DOMAIN

HCAHPS Survey dimension	Floor (percent)	Achievement threshold (percent)	Benchmark (percent)
Communication with Nurses	53.99	77.67	86.07
Communication with Doctors	57.01	80.40	88.56

FINALIZED PERFORMANCE STANDARDS FOR THE FY 2016 HOSPITAL VBP PROGRAM PATIENT EXPERIENCE OF CARE DOMAIN—Continued

HCAHPS Survey dimension	Floor (percent)	Achievement threshold (percent)	Benchmark (percent)
Responsiveness of Hospital Staff	38.21	64.71	79.76
Pain Management	48.96	70.18	78.16
Communication about Medicines	34.61	62.33	72.77
Hospital Cleanliness & Quietness	43.08	64.95	79.10
Discharge Information	61.36	84.70	90.39
Overall Rating of Hospital	34.95	69.32	83.97

Appendix 2c1: FY16 Final VBP Performance Standards for Mortality Measures

FINALIZED PERFORMANCE STANDARDS FOR CERTAIN FY 2016 HOSPITAL VBP PROGRAM OUTCOME DOMAIN MEASURES

Measure ID	Description	Achievement threshold	Benchmark
Outcome Measures			
MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-day mortality rate	0.847472	0.862371
MORT-30-HF ..	Heart Failure (HF) 30-day mortality rate	0.881510	0.900315
MORT-30-PN ..	Pneumonia (PN) 30-day mortality rate	0.882651	0.904181
PSI-90	Complication/patient safety for selected indicators (composite)	0.622879	0.451792

Note: In a March 18, 2014, notice, CMS corrected a technical error pertaining to measure **PSI-90** for FY13, appearing in the August 31, 2012, IPPS final rule.

Measure ID	Description	Achievement threshold	Benchmark
Outcome Measures			
PSI-90	Patient safety for selected indicators (composite)	0.616248	0.449988

3. FY17 Value-Based Purchasing Tables

Appendix 3a – FY17 Previously Adopted and New VBP Measures

PREVIOUSLY ADOPTED AND NEW MEASURES FOR THE FY 2017 HOSPITAL VBP PROGRAM

Measure	Description	Domain
CAUTI *	Catheter-Associated Urinary Tract Infection (NQF #0138)	Safety.
CLABSI **	Central Line-Associated Blood Stream Infection (NQF #0139)	Safety.
C. difficile***	Clostridium difficile Infection (NQF #1717)	Safety.
MRSA ***	Methicillin-Resistant Staphylococcus aureus Bacteremia (NQF #1716)	Safety.
PSI-90 *	Complication/patient safety for selected indicators (composite) (NQF #0531)	Safety.
SSI *	Surgical Site Infection: (NQF #0753) <ul style="list-style-type: none"> Colon Abdominal Hysterectomy 	Safety.
MORT-30-AMI *	Acute Myocardial Infarction (AMI) 30-day mortality rate (NQF #0230)	Clinical Care—Outcomes.
MORT-30-HF *	Heart Failure (HF) 30-day mortality rate (NQF #0229)	Clinical Care—Outcomes.
MORT-30-PN *	Pneumonia (PN) 30-day mortality rate (NQF #0468)	Clinical Care—Outcomes.
AMI-7a *	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival (NQF #0164)	Clinical Care—Process.
IMM-2 *	Influenza Immunization (NQF #1659)	Clinical Care—Process.
PC-01 ***	Elective Delivery Prior to 39 Completed Weeks Gestation (NQF #0469)	Clinical Care—Process.
MSPB-1 *	Medicare Spending per Beneficiary (NQF #2158)	Efficiency and Cost Reduction.
HCAHPS *	Hospital Consumer Assessment of Healthcare Providers and Systems Survey (NQF #0166)	Patient and Caregiver Centered Experience of Care/Care Coordination.

* Measures readopted for the FY 2017 Hospital VBP Program.

** Measure adopted for the FY 2017 Hospital VBP Program that were not previously subject to automatic re-adoption.

*** Measures newly adopted for the FY 2017 Hospital VBP Program in this final rule.

Appendix 3b – FY17 Previously Adopted and Final VBP Performance and Baseline Periods

PREVIOUSLY ADOPTED AND NEWLY FINALIZED PERFORMANCE AND BASELINE PERIODS FOR THE FY 2017 HOSPITAL VBP PROGRAM

Domain	Baseline period	Performance period
Safety:		
<ul style="list-style-type: none"> PSI-90* NHSN (CAUTI, CLABSI, SSI, C. difficile Infection, MRSA Bacteremia). 	<ul style="list-style-type: none"> October 1, 2010–June 30, 2012* January 1, 2013–December 31, 2013 	<ul style="list-style-type: none"> October 1, 2013–June 30, 2015.* January 1, 2015–December 31, 2015.
Clinical Care—Outcomes:		
<ul style="list-style-type: none"> Mortality* (MORT-30-AMI, MORT-30-HF, MORT-30-PN). 	<ul style="list-style-type: none"> October 1, 2010–June 30, 2012* 	<ul style="list-style-type: none"> October 1, 2013–June 30, 2015.*
Clinical Care—Process		
<ul style="list-style-type: none"> (AMI-7a, IMM-2, PC-01) 	<ul style="list-style-type: none"> January 1, 2013–December 31, 2013 	<ul style="list-style-type: none"> January 1, 2015–December 31, 2015.
Efficiency and Cost Reduction (MSPB-1)	<ul style="list-style-type: none"> January 1, 2013–December 31, 2013 	<ul style="list-style-type: none"> January 1, 2015–December 31, 2015.
Patient and Caregiver-Centered Experience of Care/Care Coordination (HCAHPS).	<ul style="list-style-type: none"> January 1, 2013–December 31, 2013 	<ul style="list-style-type: none"> January 1, 2015–December 31, 2015.

* Previously adopted performance and baseline periods.

Appendix 3c - FY17 Previously Adopted and Final VBP Performance Standards

PREVIOUSLY ADOPTED AND NEWLY FINALIZED PERFORMANCE STANDARDS FOR THE FY 2017 HOSPITAL VBP PROGRAM: SAFETY, CLINICAL CARE—OUTCOMES, CLINICAL CARE—PROCESS, AND EFFICIENCY AND COST REDUCTION MEASURES

Measure ID	Description	Achievement threshold	Benchmark
Safety Measures			
CAUTI	Catheter-Associated Urinary Tract Infection	0.845	0.000.
CLABSI	Central Line-Associated Blood Stream Infection.	0.457	0.000.
<i>C. difficile</i>	<i>Clostridium difficile</i> Infection	0.750	0.000.
MRSA Bacteremia	Methicillin-Resistant <i>Staphylococcus aureus</i> Bacteremia.	0.799	0.000.
PSI-90*	Complication/patient safety for selected indicators (composite)*.	*0.577321	*0.397051.
SSI	Surgical Site Infection.		
	• Colon	• 0.751	• 0.000.
	• Abdominal Hysterectomy	• 0.698	• 0.000.
Clinical Care—Outcomes Measures			
MORT-30-AMI*	Acute Myocardial Infarction (AMI) 30-day mortality rate*.	*0.851458	*0.871669.
MORT-30-HF*	Heart Failure (HF) 30-day mortality rate*	*0.881794	*0.903985.
MORT-30-PN*	Pneumonia (PN) 30-day mortality rate*	*0.882986	*0.908124.
Clinical Care—Process Measures			
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival.	0.954545	1.000000.
IMM-2	Influenza Immunization	0.951607	0.997739.
Efficiency and Cost Reduction Measure			
MSPB-1	Medicare Spending per Beneficiary	Median Medicare Spending per Beneficiary ratio across all hospitals during the performance period.	Mean of the lowest decile Medicare Spending per Beneficiary ratios across all hospitals during the performance period.

*Previously adopted performance standards.

HCAHPS survey dimension	Floor (percent)	Achievement threshold (percent)	Benchmark (percent)
Communication with Nurses	58.14	78.19	86.61
Communication with Doctors	63.58	80.51	88.80
Responsiveness of Hospital Staff	37.29	65.05	80.01
Pain Management	49.53	70.28	78.33
Communication about Medicines	41.42	62.88	73.36
Hospital Cleanliness & Quietness	44.32	65.30	79.39
Discharge Information	64.09	85.91	91.23
Overall Rating of Hospital	35.99	70.02	84.60

4. FY18 Value-Based Purchasing

Appendix 4a – FY18 Final VBP Performance Standards

FINALIZED PERFORMANCE STANDARDS FOR THE THREE 30-DAY MORTALITY AND AHRQ COMPOSITE MEASURES FOR THE FY 2018 HOSPITAL VBP PROGRAM

Measure ID	Description	Achievement threshold	Benchmark
Outcome Measures			
MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-day mortality rate	0.850916	0.873053
MORT-30-HF ..	Heart Failure (HF) 30-day mortality rate	0.883421	0.907656
MORT-30-PN ..	Pneumonia (PN) 30-day mortality rate	0.882860	0.907900
PSI-90	Complication/patient safety for selected indicators (composite)	0.582626	0.398030

*In the FY15 IPPS final rule, CMS refers readers to this table displaying these performance standards, which appeared in the FY14 IPPS final rule.

5. FY19 Value-Based Purchasing Tables

Appendix 5a - FY19 Previously Adopted and Final VBP Performance and Baseline Periods

PREVIOUSLY ADOPTED AND NEWLY FINALIZED PERFORMANCE AND BASELINE PERIODS FOR CERTAIN MEASURES FOR THE FY 2019 HOSPITAL VBP PROGRAM

Domain	Baseline period	Performance period
Safety:		
• PSI-90	• July 1, 2011–June 30, 2013	• July 1, 2015–June 30, 2017.
Clinical Care—Outcomes:		
• Mortality* (MORT-30-AMI, MORT-30-HF, MORT-30-PN).	• July 1, 2009–June 30, 2012*	• July 1, 2014–June 30, 2017.*
• THA/TKA	• July 1, 2010–June 30, 2013	• January 1, 2015–June 30, 2017.

* Previously adopted performance and baseline periods.

Appendix 5b - FY19 Previously Adopted and Final VBP Performance Standards

PREVIOUSLY ADOPTED AND NEWLY FINALIZED PERFORMANCE STANDARDS FOR CERTAIN SAFETY AND CLINICAL CARE—OUTCOMES DOMAIN MEASURES FOR THE FY 2019 HOSPITAL VBP PROGRAM

Measure ID	Description	Achievement threshold	Benchmark
Safety Measures			
PSI-90	Complication/patient safety for selected indicators (composite)	0.840335	0.589462
Outcomes Measures			
MORT-30-AMI*	Acute Myocardial Infarction (AMI) 30-day mortality rate*	*80.850671	*80.873263
MORT-30-HF*	Heart Failure (HF) 30-day mortality rate*	*80.883472	*80.908094
MORT-30-PN*	Pneumonia (PN) 30-day mortality rate*	*80.882334	*80.907906
THA/TKA	Hospital-level Risk-Standardized Complication Rate Following Elective Primary Total Hip Arthroplasty (THA) And/Or Total Knee Arthroplasty (TKA).	0.032229	0.023178

* Previously adopted performance standards.

6. FY20 Value-Based Purchasing Tables

Appendix 6a - FY20 Final Clinical Care Performance and Baseline Periods

PERFORMANCE AND BASELINE PERIOD FOR THE CLINICAL CARE—OUTCOMES DOMAIN FOR THE FY 2020 HOSPITAL VBP PROGRAM

Domain	Baseline period	Performance period
Clinical Care—Outcomes:		
• Mortality (MORT-30 AMI, MORT-30-HF, MORT-30-PN).	• July 1, 2010–June 30, 2013	• July 1, 2015–June 30, 2018.
• THA/TKA	• July 1, 2010–June 30, 2013	• July 1, 2015–June 30, 2018.

Appendix 6b - FY20 Final Clinical Care Performance Standards

PERFORMANCE STANDARDS FOR CLINICAL CARE—OUTCOMES DOMAIN MEASURES FOR THE FY 2020 HOSPITAL VBP PROGRAM

Measure ID	Description	Achievement threshold	Benchmark
Clinical Care—Outcomes Measures			
MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-day mortality rate	0.853715	0.875869
MORT-30-HF	Heart Failure (HF) 30-day mortality rate	0.881090	0.906068
MORT-30-PN	Pneumonia (PN) 30-day mortality rate	0.882266	0.909532
THA/TKA	Hospital-level Risk-Standardized Complication Rate Following Elective Primary Total Hip Arthroplasty (THA) And/Or Total Knee Arthroplasty (TKA).	0.032229	0.023178

7. Value-Based Purchasing Domain Weights

7a. FY15 Weights

Domain	Weight
Patient Experience of Care	30%
Clinical Process of Care	20%
Outcome	30%
Efficiency	20%

7b. FY16 Weights

Domain	Weight
Patient Experience of Care	25%
Clinical Process of Care	10%
Outcome	40%
Efficiency	25%

7c. FY17 Final Revised Weights

Domain	Weight
Safety	20%
Clinical Care <ul style="list-style-type: none">○ Outcomes = 25%○ Process = 5%	30%
Efficiency and Cost Reduction	25%
Patient and Caregiver Centered Experience of Care/Care Coordination	25%

II. Hospital Readmissions

Appendix 1a: Planned Readmission Algorithm

CMS will use an updated, revised version, the CMS Planned Readmission Algorithm Version 3.0, for the AMI, HF, PN, COPD, and THA/TKA readmission measures for FY15 and subsequent payment determinations. CMS will use this algorithm for the CABG readmission measure proposed for inclusion in the Hospital Readmissions Reduction Program starting in FY17. Version 3.0 incorporates improvements that were made based on a validation study of the algorithm. Version 3.0 removes CCS 211 and CCS 224 from the list of potentially planned procedures to improve the accuracy of the algorithm. The specific version of tables for each measure in the measure updates and specifications reports can be found at the following link: <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>

For more detailed information on how the algorithm is structured and the use of tables to identify planned procedures and diagnoses, CMS refers readers to discussion of the CMS Planned Readmission Algorithm Version 2.1 in its reports (available also at the link above).

The planned readmission measure algorithm can be used to identify planned readmissions across its readmission measures, and has applied the algorithm to each of its readmission measures. This set of criteria is used for classifying readmissions as planned or unplanned using Medicare claims, and identifies admissions that are typically planned and may occur within 30 days of discharge from the hospital. This report can be downloaded from the [Hospital Quality Initiative](#) area of CMS's website, under "Measure Methodology".

Appendix 1b: FY15 – FY17 Data Collection Periods

FY15 Final Data Collection Period

- Aggregate payments for excess readmissions will be calculated using MedPAR claims from July 1, 2010, to June 30, 2013.

FY16 Anticipated Collection Period

- Aggregate payments for excess readmissions will be calculated using MedPAR claims from July 1, 2011, to June 30, 2014.

FY17 Anticipated Collection Period

- Aggregate payments for excess readmissions will be calculated using MedPAR claims from July 1, 2012, to June 30, 2015.

Note: Collection periods for FY15-FY17 verified by CMS staff.

Appendix 1c: FY15 Hospital Readmissions Reduction Program Measures

- Acute Myocardial Infarction (AMI)
- Heart Failure (HF)
- Pneumonia (PN)
- Chronic Obstructive Pulmonary Disease (COPD)
- Total Hip Arthroplasty (THA) and Total Knee Arthroplasty (TKA)

Appendix 1d: FY15 Final Program Measure ICD-9-CM Codes

Note: FY15 measures are the same as FY16 measures. For FY17, CMS finalized its proposal to adopt the Hospital-Level, 30-Day, All-Cause, Unplanned Readmission measure following coronary artery bypass graft surgery measure for inclusion in the Hospital Readmissions Reduction Program.

ICD-9-CM CODES TO IDENTIFY PNEUMONIA (PN) CASES

ICD-9-CM Code	Description of code
480.0	Pneumonia due to adenovirus.
480.1	Pneumonia due to respiratory syncytial virus.
480.2	Pneumonia due to parainfluenza virus.
480.3	Pneumonia due to SARS-associated coronavirus.
480.8	Viral pneumonia: pneumonia due to other virus not elsewhere classified.
480.9	Viral pneumonia unspecified.
481	Pneumococcal pneumonia [streptococcus pneumoniae pneumonia].
482.0	Pneumonia due to klebsiella pneumoniae.
482.1	Pneumonia due to pseudomonas.
482.2	Pneumonia due to hemophilus influenzae [h. influenzae].
482.30	Pneumonia due to streptococcus unspecified.
482.31	Pneumonia due to streptococcus group a.
482.32	Pneumonia due to streptococcus group b.
482.39	Pneumonia due to other streptococcus.
482.40	Pneumonia due to staphylococcus unspecified.
482.41	Pneumonia due to staphylococcus aureus.
482.42	Methicillin Resistant Pneumonia due to Staphylococcus Aureus.
482.49	Other staphylococcus pneumonia.
482.81	Pneumonia due to anaerobes.
482.82	Pneumonia due to escherichia coli [e.coli].
482.83	Pneumonia due to other gram-negative bacteria.
482.84	Pneumonia due to legionnaires' disease.
482.89	Pneumonia due to other specified bacteria.
482.9	Bacterial pneumonia unspecified.
483.0	Pneumonia due to mycoplasma pneumoniae.
483.1	Pneumonia due to chlamydia.
483.8	Pneumonia due to other specified organism.
485	Bronchopneumonia organism unspecified.
486	Pneumonia organism unspecified.
487.0	Influenza with pneumonia.
488.11	Influenza due to identified novel H1N1 influenza virus with pneumonia.

ICD-9-CM CODES TO IDENTIFY HEART FAILURE (HF) CASES

ICD-9-CM Code	Code description
402.01	Hypertensive heart disease, malignant, with heart failure.
402.11	Hypertensive heart disease, benign, with heart failure.
402.91	Hypertensive heart disease, unspecified, with heart failure.
404.01	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified.
404.03	Hypertensive heart and chronic kidney disease, malignant, with heart failure and with chronic kidney disease stage V or end stage renal disease.
404.11	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified.
404.13	Hypertensive heart and chronic kidney disease, benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified failure and chronic kidney disease stage V or end stage renal disease.
404.91	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease heart failure and with chronic kidney disease stage I through stage IV, or unspecified.
404.93	Hypertensive heart and chronic kidney disease, unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease.
428.xx	Heart Failure.

Appendix 1d: FY15 Program Measure ICD-9-CM Codes (cont.)

ICD-9-CM CODES TO IDENTIFY ACUTE MYOCARDIAL INFARCTION (AMI) CASES

ICD-9-CM Code	Description of code
410.00	AMI (anterolateral wall)—episode of care unspecified.
410.01	AMI (anterolateral wall)—initial episode of care.
410.10	AMI (other anterior wall)—episode of care unspecified.
410.11	AMI (other anterior wall)—initial episode of care.
410.20	AMI (inferolateral wall)—episode of care unspecified.
410.21	AMI (inferolateral wall)—initial episode of care.
410.30	AMI (inferoposterior wall)—episode of care unspecified.
410.31	AMI (inferoposterior wall)—initial episode of care.
410.40	AMI (other inferior wall)—episode of care unspecified.
410.41	AMI (other inferior wall)—initial episode of care.
410.50	AMI (other lateral wall)—episode of care unspecified.
410.51	AMI (other lateral wall)—initial episode of care.
410.60	AMI (true posterior wall)—episode of care unspecified.
410.61	AMI (true posterior wall)—initial episode of care.
410.70	AMI (subendocardial)—episode of care unspecified.
410.71	AMI (subendocardial)—initial episode of care.
410.80	AMI (other specified site)—episode of care unspecified.
410.81	AMI (other specified site)—initial episode of care.
410.90	AMI (unspecified site)—episode of care unspecified.
410.91	AMI (unspecified site)—initial episode of care.

ICD-9-CM CODES TO IDENTIFY CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) CASES

ICD-9-CM Code	Description of code
491.21	Obstructive chronic bronchitis; With (acute) exacerbation; acute exacerbation of COPD, decompensated COPD, decompensated COPD with exacerbation.
491.22	Obstructive chronic bronchitis; with acute bronchitis.
491.8	Other chronic bronchitis. Chronic: tracheitis, tracheobronchitis.
491.9	Unspecified chronic bronchitis.
492.8	Other emphysema; emphysema (lung or pulmonary): NOS, centriacinar, centrilobular, obstructive, panacinar, panlobular, unilateral, vesicular. MacLeod's syndrome; Swyer-James syndrome; unilateral hyperlucent lung.
493.20	Chronic obstructive asthma; asthma with COPD, chronic asthmatic bronchitis, unspecified.
493.21	Chronic obstructive asthma; asthma with COPD, chronic asthmatic bronchitis, with status asthmaticus.
493.22	Chronic obstructive asthma; asthma with COPD, chronic asthmatic bronchitis, with (acute) exacerbation.
496	Chronic: nonspecific lung disease, obstructive lung disease, obstructive pulmonary disease (COPD) NOS. NOTE: This code is not to be used with any code from categories 491-493.
518.81 *	Other diseases of lung; acute respiratory failure; respiratory failure NOS.
518.82 *	Other diseases of lung; acute respiratory failure; other pulmonary insufficiency, acute respiratory distress.
518.84 *	Other diseases of lung; acute respiratory failure; acute and chronic respiratory failure.
799.1 *	Other ill-defined and unknown causes of morbidity and mortality; respiratory arrest, cardiorespiratory failure.

* Principal diagnosis when combined with a secondary diagnosis of AECOPD (491.21, 491.22, 493.21, or 493.22).

**ICD-9-CM CODES TO IDENTIFY
TOTAL HIP ARTHROPLASTY/TOTAL
KNEE ARTHROPLASTY (THA/TKA)
CASES**

ICD-9-CM Code	Description of code
81.51	Total hip arthroplasty.
81.54	Total knee arthroplasty.

III. Hospital Acquired Conditions (HACs)

Appendix 1a: Final FY15 and Beyond HAC Reduction Program Measures

Domain 1: AHRQ Patient Safety Indicators

- PSI-90 One Composite of 8 component indicators
 - PSI-3 (Pressure ulcer rate)
 - PSI-6 (Iatrogenic pneumothorax rate)
 - PSI-7 (Central venous catheter-related blood stream infections rate)
 - PSI-8 (Postoperative hip fracture rate)
 - PSI-12 (Postoperative PE/DVT rate)
 - PSI-13 (Postoperative sepsis rate)
 - PSI-14 (Wound dehiscence rate)
 - PS-15 (accidental puncture & laceration rate)

For FY15, CMS will keep the AHRQ PSI-90 composite measure (in Domain 1) that it adopted in the FY14 IPPS/LTCH PPS final rule because it is currently endorsed by NQF. However, CMS notes that the AHRQ PSI-90 composite measure is currently undergoing NQF maintenance review. The PSI-90 composite measure consists of eight component indicators. AHRQ is considering the addition of PSI-9 (Perioperative hemorrhage rate), PSI-10 (Perioperative physiologic metabolic derangement rate) and PSI-11 (Post-operative respiratory failure rate) or a combination of these three measures into the PSI-90 composite measure. CMS considers the inclusion of additional component measures in the PSI-90 composite measure to be a significant change to the PSI-90 composite measure that it finalized in the FY14 IPPS/LTCH PPS final rule. If the changes are significant, CMS will engage in notice-and-comment rulemaking prior to requiring reporting of this revised composite.

Similarly, the Center for Disease Control and Prevention (CDC) NHSN Catheter-Associated Urinary Tract Infection (CAUTI) and Central Line-Associated Blood Stream Infection (CLABSI) measures in Domain 2 that CMS adopted in the FY14 IPPS/LTCH PPS final rule for FY15, also are currently undergoing NQF maintenance review. If there are significant changes to these measures, it will engage in notice-and-comment rulemaking prior to requiring reporting of the changes made to CDC's NHSN CLABSI and CAUTI measures. For FY15, CMS will keep CDC's NHSN CAUTI and CLABSI measures in Domain 2 as they are currently endorsed.

Domain 2: CDC HAI Measures

- For FY15 (onward)
 - Catheter-associated urinary tract infection (CAUTI)
 - Central line-associated blood stream infection (CLABSI)
- For FY16 (onward)
 - Surgical Site Infection (SSI)
- For FY17 (onward)
 - Methicillin-resistant staphylococcus aureus (MRSA) Bactermia
 - Clostridium difficile (C-difficile)

Appendix 1b: 2015 HAC Reduction Program Measures Compared to 2015 VBP Patient Safety Outcomes Measures

	HAC Reduction Program	2015 VBP Safety Outcomes Measures
HAC - Domain I (FY 2015 Onward)	<ul style="list-style-type: none"> •AHRQ PSI Composite (PSI-90) •PSI-3 (pressure ulcer rate) •PSI-6 (iatrogenic pneumothorax rate) •PSI-7 (central venous catheter-related blood stream infections rate) •PSI-8 (postoperative hip fracture rate) •PSI-12 (postoperative PE/DVT rate) •PSI-13 (post-operative sepsis rate) •PSI-14 (wound dehiscence rate) •PSI-15 (accidental puncture and laceration rate) 	<ul style="list-style-type: none"> •AHRQ PSI Composite (PSI-90) •PSI-3 (pressure ulcer rate) •PSI-6 (iatrogenic pneumothorax rate) •PSI-7 (central venous catheter-related blood stream infections rate) •PSI-8 (postoperative hip fracture rate) •PSI-12 (postoperative PE/DVT rate) •PSI-13 (post-operative sepsis rate) •PSI-14 (wound dehiscence rate) •PSI-15 (accidental puncture and laceration rate)
HAC - Domain II	<ul style="list-style-type: none"> •CLASBI (FY 2015 Onward) •CAUTI (FY 2015 Onward) 	<ul style="list-style-type: none"> •CLASBI

Note: Measures highlighted in blue denote where HAC program and VBP measures overlap.

1c. Final FY16 HAC Reduction Program Measures Compared to FY16 VBP Patient Safety Outcomes Measures

	HAC Reduction Program	2015 VBP Safety Outcomes Measures
HAC - Domain I (FY 2015 Onward)	<ul style="list-style-type: none"> •AHRQ PSI Composite (PSI-90) •PSI-3 (pressure ulcer rate) •PSI-6 (iatrogenic pneumothorax rate) •PSI-7 (central venous catheter-related blood stream infections rate) •PSI-8 (postoperative hip fracture rate) •PSI-12 (postoperative PE/DVT rate) •PSI-13 (post-operative sepsis rate) •PSI-14 (wound dehiscence rate) •PSI-15 (accidental puncture and laceration rate) 	<ul style="list-style-type: none"> •AHRQ PSI Composite (PSI-90) •PSI-3 (pressure ulcer rate) •PSI-6 (iatrogenic pneumothorax rate) •PSI-7 (central venous catheter-related blood stream infections rate) •PSI-8 (postoperative hip fracture rate) •PSI-12 (postoperative PE/DVT rate) •PSI-13 (post-operative sepsis rate) •PSI-14 (wound dehiscence rate) •PSI-15 (accidental puncture and laceration rate)
HAC - Domain II	<ul style="list-style-type: none"> •CLASBI (FY 2015 Onward) •CAUTI (FY 2015 Onward) •SSI Following Colon Surgery (FY 2016 Onward) •SSI Following Abdominal Hysterectomy (FY 2016 Onward) 	<ul style="list-style-type: none"> •CLASBI •CAUTI •Surgical Site Infection - Colon •Surgical Site Infection - Abdominal Hysterectomy

Note: Measures highlighted in blue denote where HAC program and VBP measures overlap.

1d. Final FY17 HAC Reduction Program Measures Compared to FY17 VBP Patient Safety Outcomes Measures

	HAC Reduction Program	2015 VBP Safety Outcomes Measures
HAC - Domain I (FY 2015 Onward)	<ul style="list-style-type: none"> •AHRQ PSI Composite (PSI-90) •PSI-3 (pressure ulcer rate) •PSI-6 (iatrogenic pneumothorax rate) •PSI-7 (central venous catheter-related blood stream infections rate) •PSI-8 (postoperative hip fracture rate) •PSI-12 (postoperative PE/DVT rate) •PSI-13 (post-operative sepsis rate) •PSI-14 (wound dehiscence rate) •PSI-15 (accidental puncture and laceration rate) 	<ul style="list-style-type: none"> •AHRQ PSI Composite (PSI-90) •PSI-3 (pressure ulcer rate) •PSI-6 (iatrogenic pneumothorax rate) •PSI-7 (central venous catheter-related blood stream infections rate) •PSI-8 (postoperative hip fracture rate) •PSI-12 (postoperative PE/DVT rate) •PSI-13 (post-operative sepsis rate) •PSI-14 (wound dehiscence rate) •PSI-15 (accidental puncture and laceration rate)
HAC - Domain II	<ul style="list-style-type: none"> •CLASBI (FY 2015 Onward) •CAUTI (FY 2015 Onward) •SSI Following Colon Surgery (FY 2016 Onward) •SSI Following Abdominal Hysterectomy (FY 2016 Onward) •MRSA Bacteremia (FY 2017 Onward) •Clostridium difficile (FY 2017 onward) 	<ul style="list-style-type: none"> •CLASBI •CAUTI •Surgical Site Infection - Colon •Surgical Site Infection - Abdominal Hysterectomy •MRSA Bacteremia •Clostridium difficile

Note: measures highlighted in blue denote where HAC program and VBP measures overlap.

AHRQ is considering the addition of PSI-9 (Perioperative hemorrhage rate), PSI-10 (Perioperative physiologic metabolic derangement rate) and PSI-11 (Post-operative respiratory failure rate) or a combination of these three measures into the PSI-90 composite measure. CMS considers the inclusion of additional component measures in the PSI-90 composite measure to be a significant change to the PSI-90 composite measure that it finalized in the FY14 IPPS final rule. If the changes are significant, CMS will engage in notice and- comment rulemaking prior to requiring reporting of this revised composite.

Appendix 1e: FY15 HAC Measure Data Collection Period

Measures	Collection Period
AHRQ (Domain 1) PSI-90	<ul style="list-style-type: none">• July 1, 2011, through June 30, 2013
CDC HAI Measures (Domain 2)	<ul style="list-style-type: none">• CYs 2012 and 2013

Appendix 1f – FY16 HAC Measure Data Collection Period

Measures	Collection Period
AHRQ (Domain 1) PSI-90	<ul style="list-style-type: none">• July 1, 2012, through June 30, 2014
CDC HAI Measures (Domain 2)	<ul style="list-style-type: none">• CYs 2013 and 2014

Note: The rule reiterates that these periods were submitted in the proposed rule, but did not confirm that they were finalized in the final rule. HFMA is waiting for verification of the collection periods with CMS Staff.

Appendix 1g – FY15 HAC Weights

- Domain 1 Measures: 35%
- Domain 2 Measures: 65%

Appendix 1h – FY16 Final HAC Weights

- Domain 1 Measures: 25%
- Domain 2 Measures: 75 %