

The Medicare Hospital Value-Based Purchasing Program

Impact on Rural Hospitals

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Introduction

- The Medicare Hospital Value-Based Purchasing Program (HVBPP) is one of several quality related initiatives authorized by the Patient Protection and Affordable Care Act.
- The HVBPP is the most complex of these initiatives. It looks at the largest number of quality measures – more than 20, as compared to only 3 under the Medicare Hospital Readmissions Reduction Program (HRRP).
- The HVBPP includes the potential for Medicare revenue penalties and bonuses.
- This creates for potential for HVBPP bonuses to offset all or part of any penalty assessed under the HRRP.

Authority for the HVBPP

- The HVBPP is authorized under section 1886(o) of the Social Security Act (SSA).
- This section of the SSA was added by section 3001(a) of the Patient Protection and Affordable Care Act.
- Final rules for the program were published in Vol. 76, No. 88 of the Federal Register, page 26490 on May 6, 2011. These rules are codified in 42 CFR Parts 422 and 480.
- Supplemental rules for the latter years of the program were published on page 50496 of the Federal Register, Vol. 78, No. 160, Monday, August 19, 2013. These rules are codified in 42 CFR Parts 412, 413, 414, 419, 424, 482, 485, and 489.

Eligibility for HVBPP

- Hospitals paid through the inpatient prospective payment system (IPPS) with specific exclusions:
Exclusions: CAHs, children's' hospitals, VA hospitals, long term care facilities, psychiatric hospitals, and rehabilitation hospitals.
- Hospitals with a minimum number of reported measures and cases reported for each measure.
- This represents a subset of the hospitals participating in the Medicare Hospital Readmissions Reduction Program (HRRP) in FY 2014:
 - HBVPP participating hospitals: 2,728, and
 - HRRP participating hospitals: 3,379.

Schedule of Implementation

- The HVBPP is being phased in over several Federal fiscal years (FY 2013 through FY 2017) in a manner similar to the HRRP.
- Additional quality measures are being added in each year, and the relative weights of these changes are changed significantly from year to year.
- The many year-to-year changes make it more challenging for hospitals to respond to the demands of the program.

HBVPP Payment Incentives

- In FY 2014, 1.25% of DRG payments to eligible hospitals will be withheld to provide the estimated \$963 million necessary for the program incentives.
- The withheld amount will be awarded to hospitals according to a formula based on their Total Performance Score. This can lead to a penalty as high as 1.25% of Medicaid revenue or to some level of bonus.
- In future years the withheld DRG payment will increase to a maximum of 2% of projected revenues.
- A table summarizing the annual withholding amounts follows:

DRG Withholding/Incentive Amounts			
FY 2013	1.00%	FY 2016:	1.75%
FY 2014:	1.25%	FY 2017:	2.00%
FY 2015:	1.50%	Succeeding years:	2.00%

HVBPP National Impact

- 2,728 hospitals are covered by the program.
- Of this national total:
 - 1,231 hospitals (45%) received an incentive bonus;
 - 1,451 hospitals (53%) received a penalty; AND
 - 46 hospitals (2%) had neither a penalty nor bonus.
- The hospitals receiving a bonus averaged a 0.24% bonus.
- The hospitals receiving a penalty averaged a 0.26% penalty.

Typical Rural IPPS Hospital Impact

Penalty/Bonus PCT	Revenue Reduction/Increase
0.15%	\$ 15,000
0.25%	\$ 25,000
0.50%	\$ 50,000
1.00%	\$ 100,000
1.50%	\$ 150,000
1.75%	\$ 175,000
2.00%	\$ 200,000

47-Bed Hospital with \$10 million Annual Medicare Revenues

HVBPP Quality Measures – FY 2014

- For FY 2014, 24 separate quality measures are utilized in the HVBPP.
- These quality measures fall into three categories:
 - Clinical Process of Care Measures: covering several evidenced based procedures recognized as important to improving inpatient care.
 - Patient Experience of Care Measures: covering a range of different patient satisfaction concerns.
 - Outcome Measures: covering selected mortality rates for hospital patients.

HVBPP Quality Measures – Future Years

- In subsequent years, several additional measures will be added to the quality measures used for the HVBPP. These include:
 - Patient Safety Measures,
 - Hospital Acquired Infection Measures, and
 - Efficiency Measures (Medicare Cost per Patient).
- In FY 2015, a total of 26 separate quality measures will be used.
- When fully implemented in FY 2016, the number of quality measures will drop to 24, but will include several different measures than are being used in FY 2014 and FY 2015. This is an additional source of potential confusion for participating hospitals.
- A detailed enumeration of all quality measures is follows.

Clinical Process of Care Measures - 1

Measure ID	Measure Description	FY 2013	FY 2014	FY 2015	FY 2016
AMI-7a	Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival	Yes	Yes	Yes	Yes
AMI-8a	Primary PCI Received Within 90 Minutes of Hospital Arrival	Yes	Yes	Yes	No
HF-1	Discharge Instructions	Yes	Yes	Yes	No
IMM-2	Influenza Immunization	No	No	No	Yes
PN-3b	Blood Cultures Performed in the Emergency Department Prior to Initial Antibiotic Received in Hospital	Yes	Yes	Yes	No
PN-6	Initial Antibiotic Selection for CAP in Immunocompetent Patient	Yes	Yes	Yes	Yes
SCIP-Card-2	Surgery Patients on a Beta Blocker Prior to Arrival That Received a Beta Blocker During the Perioperative Period	Yes	Yes	Yes	Yes
SCIP-Inf-1	Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision	Yes	Yes	Yes	No

Clinical Process of Care Measures - 2

Measure ID	Measure Description	FY 2013	FY 2014	FY 2015	FY 2016
SCIP-Inf-2	Prophylactic Antibiotic Selection for Surgical Patients	Yes	Yes	Yes	Yes
SCIP-Inf-3	Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time	Yes	Yes	Yes	Yes
SCIP-Inf-4	Cardiac Surgery Patients with Controlled 6AM Postoperative Serum Glucose	Yes	Yes	Yes	No
SCIP-Inf-9	Postoperative Urinary Catheter Removal on Post Operative Day 1 or 2	No	Yes	Yes	Yes
SCIP-VTE-1	Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered	Yes	Yes	No	No
SCIP-VTE-2	Surgery Patients Who Received Appropriate Venous Thromboembolism Prophylaxis Within 24 Hours Prior to Surgery to 24 Hours After Surgery	Yes	Yes	Yes	Yes

Patient Experience of Care Measures

Measure Description	FY 2013	FY 2014	FY 2015	FY 2016
Communication with Nurses	Yes	Yes	Yes	Yes
Communication with Doctors	Yes	Yes	Yes	Yes
Responsiveness of Hospital Staff	Yes	Yes	Yes	Yes
Pain Management	Yes	Yes	Yes	Yes
Communication about Medicines	Yes	Yes	Yes	Yes
Cleanliness and Quietness of Hospital Environment	Yes	Yes	Yes	Yes
Discharge Information	Yes	Yes	Yes	Yes
Overall Rating of Hospital	Yes	Yes	Yes	Yes

From Hospital Consumer Assessment of Healthcare Providers and Systems Survey

Outcome of Care Measures

Measure ID**	Measure Description	FY 2013	FY 2014	FY 2015	FY 2016
MORT-30-AMI	Acute Myocardial Infarction (AMI) 30-Day Mortality Rate	No	Yes	Yes	Yes
MORT-30-HF	Heart Failure (HF) 30-Day Mortality Rate	No	Yes	Yes	Yes
MORT-30 PN	Pneumonia (PN) 30-Day Mortality Rate	No	Yes	Yes	Yes
AHRQ Composite (PSI-90)	Complication/Patient safety for selected indicators (Composite)	No	No	Yes	Yes
CAUTI	Catheter-Associated Urinary Tract Infection	No	No	No	Yes
CLABSI	Central Line-Associated Blood Stream Infection	No	No	Yes	Yes
SSI	SSI - Colon Surgery SSI - Abdominal Hysterectomy	No	No	No	Yes

** Measure names:
 MORT = Outcome Mortality Measure
 AHRQ = Agency for Healthcare Research and Quality
 PSI = Patient Safety Indicators
 SSI = Surgical Site Infection

Points Awarded for Each Quality Measure

- Hospitals may be awarded up to 10 points for each quality measure.
- Points may be awarded for individual hospital:
 - Achievement: its performance compared to national standards, or
 - Improvement: its improved performance compared to its own previous baseline.
- A hospital will be awarded the higher of the Achievement or Improvement score for each measure.
- In addition, for Patient Experience of Care measures, if a hospital exceeds the national median on all measures, it will automatically be awarded maximum points for Consistency on these measures, even though it falls short of national standards.

Composite Scores

- In FY 2014 the individual quality measures of the HVBPP are compiled by Medicare into 4 composite performance scores:
 - Clinical Process of Care Performance Score,
 - Patient Experience of Care Performance Score,
 - Outcome of Care Performance Score, and
 - Total Performance Score.
- The Total Performance Score is a weighted combination of the other three performance scores.
- In subsequent years an additional Efficiency score will be added.
- The Total Performance Score is used in the calculation of HBVPP penalties and bonuses.

Composite Score Weighting

FY 2013 Scoring		FY 2015 Scoring	
Domain	Weight	Domain	Weight
Clinical Process of Care	70%	Clinical Process of Care	20%
Patient Experience of Care	30%	Patient Experience of Care	30%
		Outcome	30%
		Efficiency	20%
FY 2014 Scoring		FY 2016 Scoring	
Domain	Weight	Domain	Weight
Clinical Process of Care	45%	Clinical Process of Care	10%
Patient Experience of Care	30%	Patient Experience of Care	25%
Outcome Mortality	25%	Outcome	40%
		Efficiency	25%

Summary of Key Analytic Findings

- There are **705 rural HVBPP hospitals in 46 states**, representing about a quarter (**25.84%**) of program hospitals.
- There are **307 rural hospitals receiving HVBPP bonuses** - 24.04% of all bonus hospitals - and **398 rural hospitals receiving HVBPP penalties** - 27.43% of all penalized hospitals. This is roughly commensurate with their proportion of all hospitals.
- The **average bonus amount** for rural HVBPP hospitals receiving bonuses is **.24%**. This is slightly higher than the average bonus for urban hospitals.
- The **average penalty amount** for rural HVBPP hospitals receiving penalties is **.30%**. This is higher than the average penalty for urban hospitals.
- This **average bonus rate** would lead to a **revenue increase of \$24,000** per year for the typical rural hospital described earlier.
- This **average penalty rate** would lead to a **revenue reduction of \$30,000** per year for the typical rural hospital described earlier.

Analysis of Rural Hospital Performance

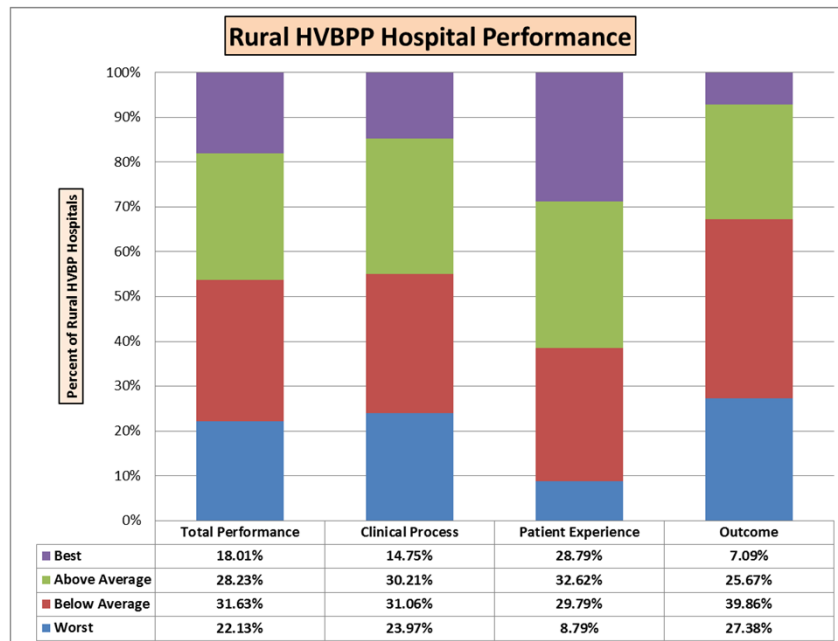
- An analysis of FY 2014 HVBPP hospitals was conducted, calculating, for each hospital, its relative performance on all four composite performance scores.
- Four relative categories were assessed for each score:
 - Worst: for scores more than 1 standard deviation below the mean for all HVBPP hospitals;
 - Below Average: for scores between the mean and 1 standard deviation below;
 - Above Average: for scores between the mean and 1 standard deviation above; and
 - Best: for scores more than 1 standard deviation above the mean for all HVBPP hospitals.

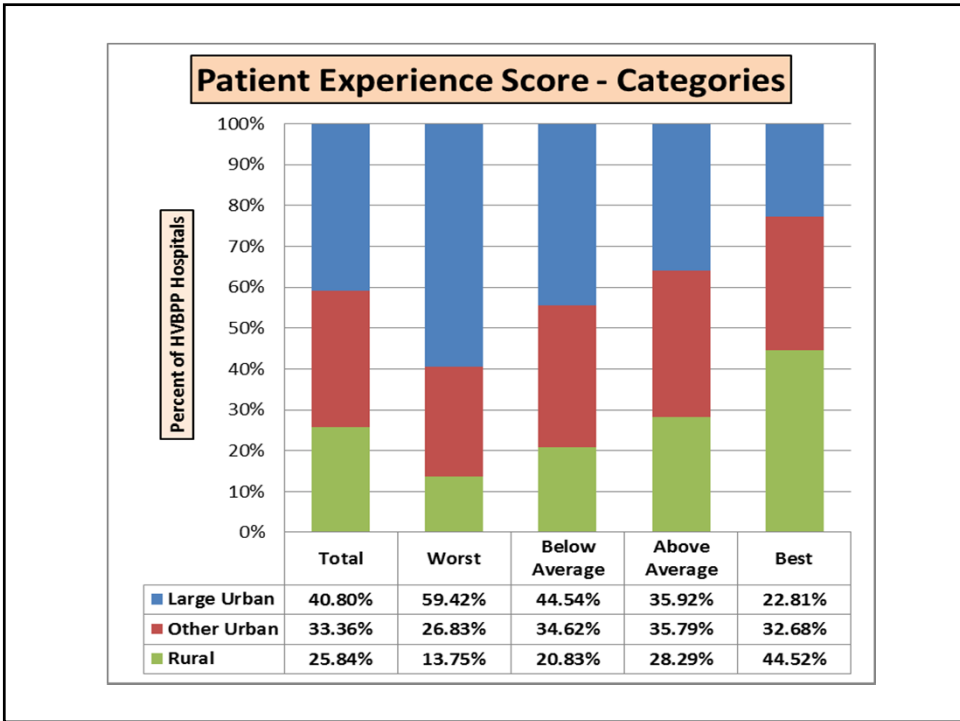
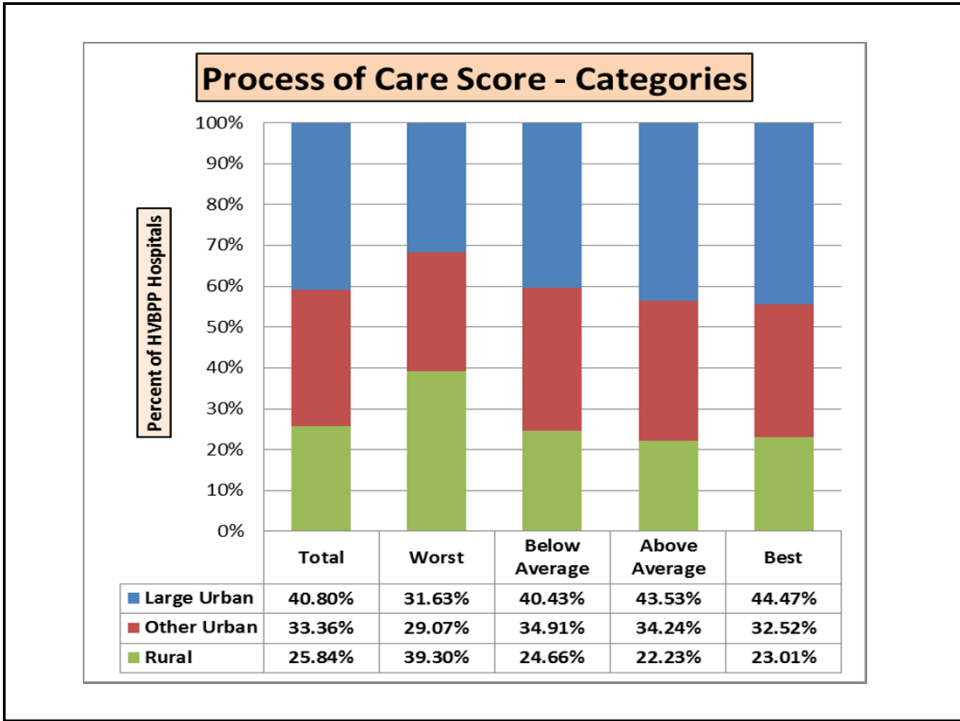
Key Rural Hospital Performance Findings

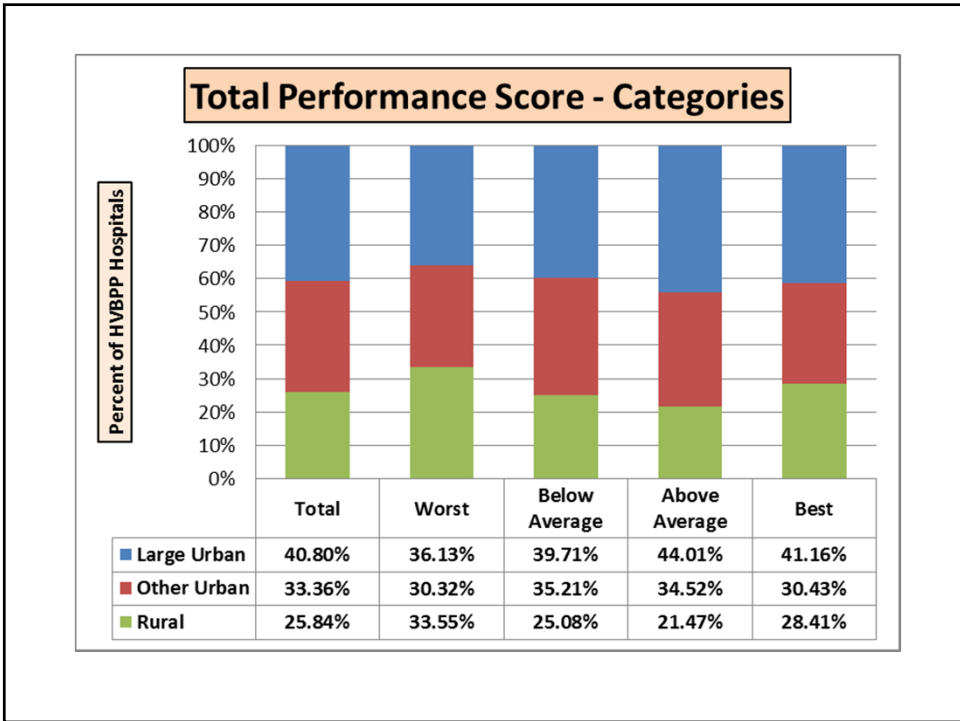
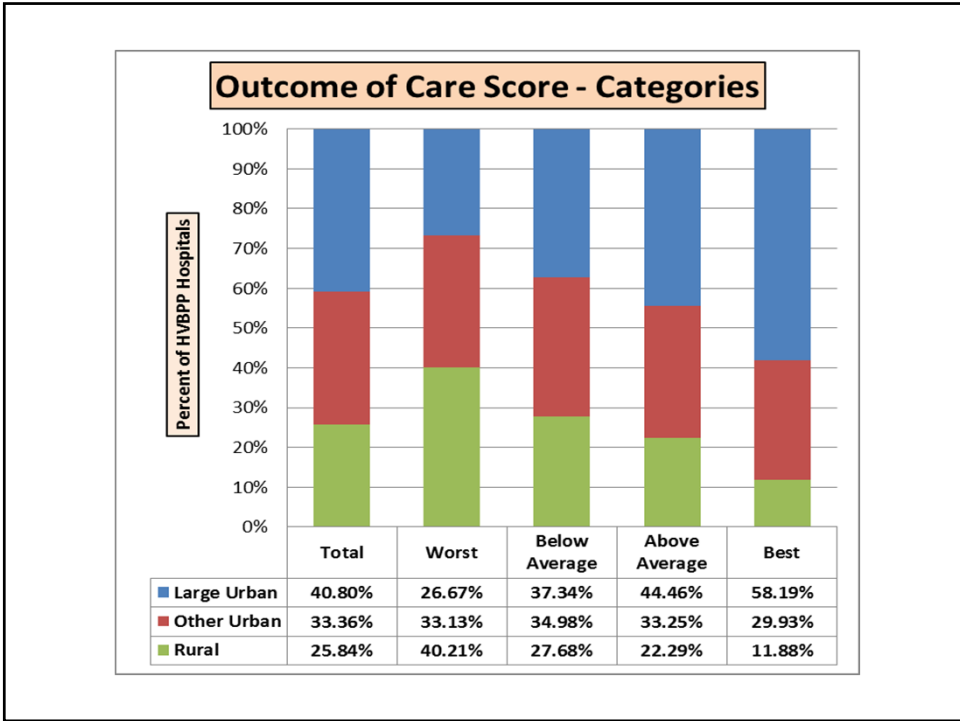
- 474 rural hospitals – representing more than two-thirds (67.23%) of all rural HVBPP hospitals – are either in the worst or below average category of all HVBPP hospitals for the Outcome of Care performance measure.
- 433 rural hospitals – representing more than three-fifths (61.42%) of all rural HVBPP hospitals – are either in the best or above average category of all HVBPP hospitals for the Patient Experience of Care measure.
- Rural hospitals constitute almost half (44.52%) of all HVBPP hospitals with the best Patient Experience scores, and only about an eighth (13.75%) of HVBPP hospitals with the worst Patient Experience scores.

Additional Performance Findings

- On the negative side, while rural hospitals represent about a quarter of all HVBPP hospitals (25.84%):
 - Rural hospitals represent almost a third (33.55%) of all HVBPP hospitals with the worst Total Performance scores.
 - Rural hospitals constitute almost two-fifths (39.30%) of all HVBPP hospitals with the worst Process of Care scores.
 - Rural hospitals constitute more than two-fifths (40.21%) of all HVBPP hospitals with the worst Outcome of Care scores.
 - Rural hospitals constitute only about one-eighth (11.88%) of all HVBPP hospitals with the best Outcome of Care scores.







State Rural HVBPP Hospital Profiles

- State rural hospital HVBPP profile reports were prepared for each of the 46 states with rural HVBPP hospital. Each profile is a listing which includes the following data items for each rural hospital:
 - CMS Provider Number;
 - Hospital Name;
 - County Location;
 - HVBPP Bonus-Penalty 2014: indicating the hospital's HVBPP bonus or penalty rate for 2014;
 - Readmission Reduction Penalty 2014: indicating the hospital's HRRP penalty for 2014;
 - Combined Bonus-Penalty 2014: indicating the hospital's combined bonus or penalty for the HVBPP and HRRP;
 - Clinical Process of Care Score Category;
 - Patient Experience of Care Score Category;
 - Outcome of Care Score Category; and
 - Total Performance Score Category.
- The listed hospitals for each state are ranked by HVBPP bonus/penalty, with those hospitals with the highest FY 2014 penalties ranked first. These profiles can be used by State Offices of Rural Health to help target hospital quality improvement efforts.

Sample State Profile Table

Hospital Name	VBP Bonus-Penalty 2014	Readmit Reduction Penalty 2014	Combined Bonus-Penalty 2014	Clinical Process of Care Score Category	Patient Experience of Care Score Category	Outcome of Care Score Category	Total Performance Score Category
Hospital 1	-0.19%	0.00%	-0.19%	BELOW AVERAGE	BELOW AVERAGE	BELOW AVERAGE	BELOW AVERAGE
Hospital 2	-0.19%	0.00%	-0.19%	BELOW AVERAGE	BEST	WORST	BELOW AVERAGE
Hospital 3	-0.15%	0.00%	-0.15%	BELOW AVERAGE	ABOVE AVERAGE	BELOW AVERAGE	BELOW AVERAGE
Hospital 4	-0.10%	0.00%	-0.10%	BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	BELOW AVERAGE
Hospital 5	-0.09%	0.00%	-0.09%	ABOVE AVERAGE	ABOVE AVERAGE	WORST	BELOW AVERAGE
Hospital 6	-0.05%	0.00%	-0.05%	BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	BELOW AVERAGE
Hospital 7	0.01%	0.00%	0.01%	BELOW AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE	ABOVE AVERAGE
Hospital 8	0.05%	-0.28%	-0.23%	ABOVE AVERAGE	ABOVE AVERAGE	WORST	ABOVE AVERAGE
Hospital 9	0.20%	0.00%	0.20%	WORST	BEST	BEST	ABOVE AVERAGE
Hospital 10	0.23%	0.00%	0.23%	ABOVE AVERAGE	BEST	WORST	ABOVE AVERAGE
Hospital 11	0.26%	-0.07%	0.19%	BEST	BEST	WORST	ABOVE AVERAGE
Hospital 12	0.27%	-0.07%	0.20%	BELOW AVERAGE	BEST	ABOVE AVERAGE	BEST

Summary

- Rural HVBPP hospitals represent about a quarter of all HVBPP hospitals.
- Rural HVBPP hospitals receive bonuses and penalties proportionately with their overall numbers.
- The average penalties and bonuses for rural HVBPP hospitals are generally equivalent to those of other hospitals.
- A large percentage of Rural HVBPP hospitals demonstrate poorer Clinical Care and Outcome performance.
- A large percentage of rural HVBPP hospitals demonstrate better Patient Experience performance.
- The performance measures for rural HVBPP hospitals provide a good evidence base for SORH quality improvement efforts.

References - 1

- **QualityNet HVBPP Overview:**
<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPPage%2FQnetTier2&cid=1228772039937>
- **Original Program Guidance - Final Rules – HVBPP:**
<http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10568.pdf>
- **Supplemental Program Guidance – HVBPP:**
<http://www.gpo.gov/fdsys/pkg/FR-2013-08-19/pdf/2013-18956.pdf>
- **CMS: Hospital Quality Initiative Website:**
<http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/index.html>

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- **QualityNet HVBPP Measures Overview:**
<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228772237361>
- **QualityNet – Reports Available to Hospitals:**
<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228772479345>
- **Hospital Compare Detailed Measures Overview for HVBPP – Links to individual datasets for all domains:**
<http://www.medicare.gov/hospitalcompare/data/hospital-vbp.html>