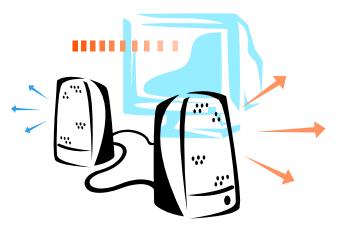
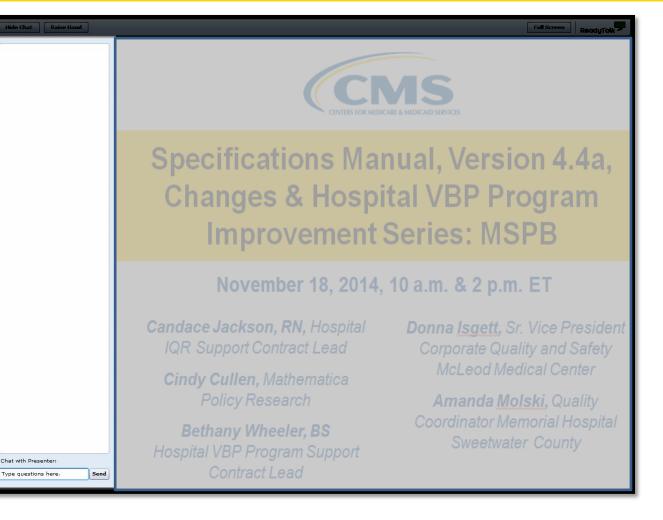
Medicare Spending Per Beneficiary (MSPB) Measure

- Audio for this event is available via INTERNET STREAMING.
- No telephone line is required.
- <u>Computer speakers or headphones are necessary</u> to listen to streaming audio.



Submitting Questions

Type questions in the "Chat with Presenter" section, located in the bottomleft corner of your screen.





Medicare Spending Per Beneficiary (MSPB) Measure

Rachel Yong, MSPH Senior Research Analyst Acumen

> June 3, 2015 2 p.m. ET

Purpose

This presentation will provide attendees with an overview of the MSPB Measure and the associated Hospital-Specific Reports (HSRs).

Objectives

By the end of the presentation, attendees will recognize the:

- Goals of the MSPB Measure
- MSPB Measure methodology
- MSPB Measure calculation steps
- Hospital-Specific reports and supplemental files
- Location of the downloadable MSPB files posted on <u>www.Data.Medicare.Gov</u>

Introduction to the MSPB Measure

The MSPB Measure:

- Evaluates hospitals' efficiency relative to the efficiency of the national median hospital
- Assesses the cost to Medicare for services performed by hospitals and other healthcare providers during an MSPB episode
 - Comprises periods immediately prior to, during, and following a patient's hospital stay

MSPB and Hospital VBP Program

- The MSPB Measure:
 - Is an efficiency measure in the Hospital Value-Based Purchasing (VBP) Program
 - Was included starting in Fiscal Year (FY) 2015
 - Was required for inclusion in Hospital VBP by §1886(o)(2)(B)(ii) of the Social Security Act
- Final details of MSPB episode construction and adjustment are in:
 - FY 2012 Inpatient Prospective Payment System (IPPS) Final Rule (76 FR 51618 through 51626)
 - o <u>http://www.gpo.gov/fdsys/pkg/FR-2011-08-18/pdf/2011-19719.pdf</u>
 - FY 2013 IPPS Final Rule
 - o <u>http://www.gpo.gov/fdsys/pkg/FR-2012-08-31/pdf/2012-19079.pdf</u>

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files Posted on Data.Medicare.Gov

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files
 Posted on Data.Medicare.Gov

Goals of MSPB

In conjunction with other Hospital VBP Program quality measures, the MSPB Measure aims to:

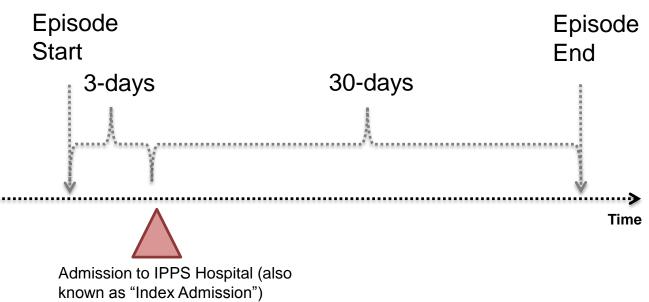
- Incentivize hospitals to coordinate care
- Reduce system fragmentation
- Improve efficiency

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files
 Posted on Data.Medicare.Gov

Measure Methodology

The MSPB Measure is a claims-based measure that includes price-standardized payments for all Part A and Part B services provided from 3 days prior to a hospital admission (index admission) through 30 days after the hospital discharge.



MSPB Measure Definition

(Slide 1 of 2)

- MSPB Episode: Period three days prior to an IPPS hospital admission (also known as the "index admission") through 30 days post-hospital discharge.
- Hospital admissions that are NOT considered as index admissions include:
 - Admissions which occur within 30 days of discharge from another index admission
 - Acute-to-acute transfers
 - Episodes where the index admission claim has \$0 payment
 - Admissions having discharge dates fewer than 30 days prior to the end of the performance period

MSPB Measure Definition

(Slide 2 of 2)

MSPB Amount

 $MSPB Measure = \frac{1}{National Episode-Weighted Median MSPB Amount}$

- **MSPB Amount:** Sum of a hospital's standardized, risk-adjusted spending across all of the hospital's eligible episodes divided by the number of episodes
- MSPB Measure: A hospital's MSPB Amount divided by the episode-weighted median MSPB Amount across all hospitals
 - Normalized MSPB Amount so that median MSPB Measure equals 1.0

Measure Interpretation

- An MSPB Measure that is less than one indicates that a given hospital spends less than the national median MSPB Amount across all hospitals during a given performance period.
- Improvement on the MSPB Measure for a hospital would be observed as a lower MSPB Measure value across performance periods.

Measure Specifications: Included and Excluded Populations

• Beneficiaries Included:

- Enrolled in Medicare Parts A and B from 90 days prior to the episode through the end of the episode
- Admitted to subsection (d) hospitals
- Covered by the Railroad Retirement Board

• Beneficiaries Excluded:

- Enrolled in Medicare Advantage
- Have Medicare as the secondary payer
- Died during episode

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files
 Posted on Data.Medicare.Gov

Overview of Calculation Steps

- 1. Standardize Claims Payments
- 2. Calculate Standardized Episode Spending
- 3. Calculate Expected Episode Spending
- 4. Truncate Expected Values
- 5. Calculate Residuals
- 6. Exclude Outliers
- 7. Calculate MSPB Amount for Each Hospital
- 8. Calculate MSPB Measure
- 9. Report MSPB Measure

Step 1: Standardize Claims Payments

- Standardize spending to adjust for geographic differences and payments from special Medicare programs that are not related to resource use
 - e.g., graduate medical education
- Maintain differences that result from healthcare delivery choices such as:
 - setting where the service is provided
 - specialty of healthcare provider who provides the service
 - number of services provided in the same encounter
 - outlier cases
- Refer to *QualityNet* for full details at:
 - <u>http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=</u> <u>QnetPublic/Page/QnetTier4&cid=1228772057350</u>.

Step 2: Calculate Standardized Episode Spending

Sum all standardized Medicare Part A and Part B claim payments made during an MSPB episode (i.e., between three days prior to the hospital admission until 30 days after discharge), including:

- Patient deductibles and coinsurance
- Claims based on the from date variable
 - The first day on the billing statement covering services rendered to the beneficiary (or admission date for Inpatient claims)

Step 3: Calculate Expected Episode Spending

- Account for variation in patient case mix across hospitals by using a linear regression to estimate the relationship between risk adjustment variables and standardized episode cost (Step 2).
 - Risk adjustment variables include factors such as age, severity of illness, and comorbidity interactions.
- Use a separate regression model for each major diagnostic category (MDC).

Step 4: Truncate Expected Values

Process of truncating (or Winsorizing) extremely low-cost expected values for each Medicare Severity Diagnosis Related Group (MS-DRG):

- 1. Identify episodes that fall below the 0.5 percentile of the MS-DRG expected cost distribution
- 2. Reset the expected cost for these episodes to the expected cost of the episode at this threshold (0.5 percentile)
- 3. Renormalize expected cost so that the average expected spending within any MS-DRG remains unchanged

Step 5: Calculate Residuals

- Calculate residuals for each episode to identify outliers using this formula:
 - Residual = Standardized Episode Spending (Step 2) Truncated Expected Episode Spending (Step 4)

Step 6: Exclude Outliers

- Exclude statistical outlier episodes to mitigate effect of high-cost and low-cost outliers on each hospital's MSPB Measure.
- Statistical outlier episodes defined as:
 - High-Cost Outlier: Residual falls above 99th percentile of the residual cost distribution within any MS-DRG-admission category
 - Low-Cost Outlier: Residual falls below first percentile of the residual cost distribution within any MS-DRG-admission category
- Renormalize expected cost to ensure that average expected cost is the same as average standardized cost after outlier exclusions.

Step 7: Calculate the MSPB Amount for Each Hospital

Calculate the risk-adjusted MSPB Amount for each hospital as the ratio of the average standardized episode spending over the average expected episode spending multiplied by the average episode spending level across all hospitals.

Step 8: Calculate the MSPB Measure

MSPB Measure for each hospital is reported as the ratio of the MSPB Amount for the hospital (Step 7) divided by the episode-weighted median MSPB Amount across all hospitals:

Step 9: Report the MSPB Measure

Report only the MSPB Measures for Hospital VBPeligible hospitals with more than 25 episodes for payment purposes.

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files
 Posted on Data.Medicare.Gov

Example Calculation

(Slide 1 of 3)

- Hospital A has 12 MSPB episodes, ranging from \$1,000 to \$33,000. After applying steps 1-4, one episode had a residual higher than the 99th percentile residual over all MSPB episodes and was excluded in step 6.
 - Calculate Residuals (Step 5) = Standardized Episode Spending (Step 2) – Truncated Expected Episode Spending (Step 4)
 - Example Episode Residual = \$33,000 \$5,500 = \$27,500
- The following two slides show how the MSPB Amount and MSPB Measure is calculated for Hospital A.
- Full details of example calculation are available at this *QualityNet* webpage:

http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPubl ic/Page/QnetTier4&cid=1228772057350

Example Calculation

(Slide 2 of 3)

Step 7: Calculate the MSPB Amount for each hospital as the ratio of the average standardized episode spending over the average expected episode spending multiplied by the average episode spending level across all hospitals.

 $MSPB \ Amount = \frac{Avg. Standardized \ Spending_{j}}{Avg. Truncated \ Expected \ Spending_{j}} \times Avg. Standardized \ Spending_{all \ hospitals}$

Example Hospital MSPB Amount = $\frac{\$9,368}{\$9,964} \times \$9,000 = \$8,462$

Example Calculation

(Slide 3 of 3)

Step 8: Calculate the MSPB Measure

The hospital's MSPB Amount divided by the episodeweighted median MSPB Amount across all hospitals

MSPB Amount

 $MSPB Measure = \frac{1}{National Episode-Weighted Median MSPB Amount}$

Example Hospital MSPB Measure $=\frac{\$8,462}{\$9,100}=0.93$

Step 9: Report the MSPB Measure

- This hospital's MSPB Measure will not be used for ulletpayment purposes
 - The hospital only has 11 episodes

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files
 Posted on Data.Medicare.Gov

Overview of Hospital-Specific Reports

- During the Preview Period, individual hospitals can review their MSPB Measure in their HSR.
- Reports include six tables and are accompanied by three supplemental hospital-specific data files.
 - Tables include the MSPB Measure results of the individual hospital and of other hospitals in the state and the nation.
 - Supplemental hospital-specific data files contain information on the admissions that were considered for the individual hospital's MSPB Measure and data on the Medicare payments (to individual hospital and other providers) that were included in the measure.

Overview of Tables 1 and 2

Table 1: MSPB Measure Performance Rate

• Displays the individual hospital's MSPB Measure performance rate.

Your Hospital's MSPB Measure

1.08

Table 2: Additional Information About the IndividualHospital's MSPB Performance

• Provides the number of eligible admissions and MSPB Amount for the individual hospital, the state, and the nation.

Number of Eligible Admissions at Your Hospital	Your Hospital's MSPB Amount	State Average MSPB Amount	U.S. National Average MSPB Amount
21	19,546.53	18,900.02	19,679.19

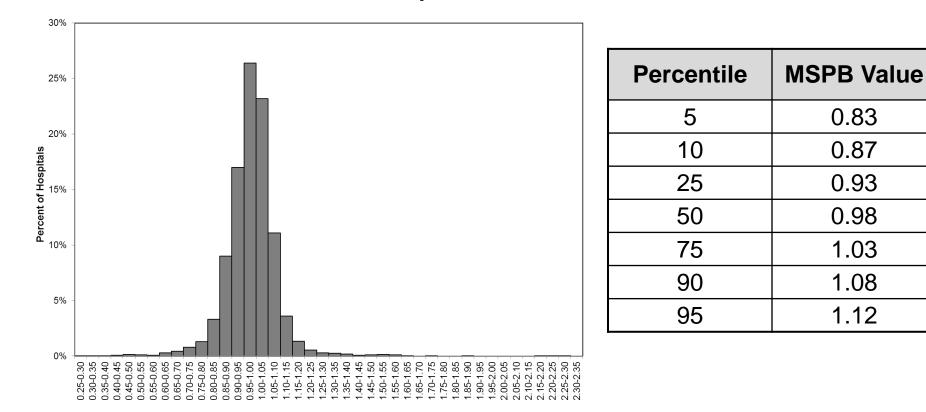
Table 3: Detailed MSPB Statistics

Table 3 displays the major components (e.g., number of eligible admissions, MSPB Amount, and National Median MSPB Amount) used to calculate the individual hospital's MSPB Measure performance rate.

	Your Hospital	State	U.S.
Number of Eligible Admissions	21	64,000	5,446,136
Average Spending per Episode	16,215.81	15,502.55	20,024.64
MSPB Amount (Avg. Risk-Adjusted Spending)	19,546.53	18,900.02	19,679.19
U.S. National Median MSPB Amount	18,017.19	18,017.19	20,017.29
MSPB Measure	1.08	1.05	0.98

Table 4: National Distributionof the MSPB Measure

Table 4 displays the national distribution of the MSPB Measure across all hospitals in the nation.



Overview of Table 5: Spending Breakdown by Claim Type

Table 5:

- Provides a detailed breakdown of the individual hospital's spending for the following time periods:
 - 3 Days Prior to Index Admission
 - During-Index Admission
 - 30 Days After Hospital Discharge
- Breaks down spending levels by claim type within each of the time periods
- Compares the percent of total average episode spending by claim type and time period at the individual hospital to the total average spending at hospitals in the state and the nation

Table 5: Detailed MSPB Spending Breakdown by Claim Type (Slide 1 of 2)

Time Period

When in the episode the claim occurred

The Individual Hospital Spending

Shows the amount and percent of total average episode spending for the individual hospital's episodes in a given category and claim type

	Claim Type	The Individual Hospital Spending per Episode	The Individual Hospital Percent of Spending	State Percent of Spending	Nation Percent of Spending
	Total During-Index	6,687	41.23%	70.2%	53.2%
During-Index Admission	Home Health Agency	47	0.29%	3.1%	0.0%
	Hospice	75	0.46%	4.9%	0.0%
	Inpatient	5,262	32.45%	47%	45.5%
	Outpatient	0	0.00%	0.1%	0.0%
	Skilled Nursing Facility	340	2.10%	10%	0.0%
	Durable Medical Equipment	76	0.47%	0.1%	0.1%
	Carrier	887	5.47%	5.0%	7.6%

Table 5: Detailed MSPB Spending Breakdown by Claim Type (Slide 2 of 2)

Percent of Total Average Spending in the Individual Hospital, State, and Nation A lower percent of spending in the individual hospital than the percent of spending in the state or nation means that for the given category and claim type, the individual hospital spends less than other hospitals in the state or the nation respectively.

	Claim Type	The Individual Hospital Spending per Episode	The Individual Hospital Percent of Spending	State Percent of Spending	Nation Percent of Spending
	Total During-Index	6,687	41.23%	70.2%	53.2%
	Home Health Agency	47	0.29%	3.1%	0.0%
	Hospice	75	0.46%	4.9%	0.0%
	Inpatient	5,262	32.45%	47%	45.5%
During-Index Admission	Outpatient	0	0.00%	0.1%	0.0%
	Skilled Nursing Facility	340	2.10%	10%	0.0%
	Durable Medical Equipment	76	0.47%	0.1%	0.1%
	Carrier	887	5.47%	5.0%	7.6%

Overview of Table 6: Spending Breakdown by MDC

Table 6:

- Provides a breakdown of the individual hospitals' average actual and expected spending for a MSPB episode by MDC
- Compares the individual hospital average actual and expected spending to state and national average actual and expected spending

Table 6: Detailed MSPB Spending Breakdown by MDC (Slide 1 of 2)

	C Number Description		The individ	Spendin ual hospital's er episode fo	s average ar	•	
MDC	Description	(A) The Individual Hospital Average Spending per Episode	(B) The Individual Hospital Average Expected Spending per Episode	(O) State Average Spending per Episode	(D) State Average Expected Spending per Episode	(E) National Average Spending per Episode	(F) National Average Expected Spending per Episode
4	Respiratory System	14,585	16,444	16,324	15,565	16,641	16,747
5	Circulatory System	19,053	17,422	16,533	17,200	20,323	20,525
6	Digestive System	6,605	11,700	8,000	9,200	16,216	16,343

Table 6: Detailed MSPB Spending Breakdown by MDC (Slide 2 of 2)

Spending in the Individual Hospital's State and Nation reflects average spending values for the state and for the nation. For example, if an individual hospital has a lower value in Column B than in Column F, its patients have a lower expected spending level than the nation for that given MDC.

MDC	Description	(A) The Individual Hospital Average Spending per Episode	(B) The Individual Hospital Average Expected Spending per Episode	(C) State Average Spending per Episode	(D) State Average Expected Spending per Episode	(E) National Average Spending per Episode	(F) National Average Expected Spending per Episode
4	Respiratory System	14,585	16,444	16,324	15,565	16,641	16,747
5	Circulatory System	19,053	17,422	16,533	17,200	20,323	20,525
6	Digestive System	6,605	11,700	8,000	9,200	16,216	16,343

Overview of Supplemental Hospital-Specific Data Files

Each HSR is accompanied by three supplemental hospital-specific data files:

- 1. Index Admission File
 - a. Presents all inpatient admissions for the individual hospital in which a beneficiary was discharged during the period of performance
- 2. Beneficiary Risk Score File
 - Identifies beneficiaries and their health status based on the beneficiary's claims history in the 90 days prior to the start of an episode
- 3. MSPB Episode File
 - c. Shows the type of care, spending amount, and top five billing providers in each care setting for each MSPB episode

Review and Correction

- Hospitals may preview their MSPB Measure for a month after release.
- Data will be posted on Hospital Compare in October 2015.
- During the Preview Period, hospitals may submit questions or requests for correction to <u>cmsMSPBmeasure@acumenllc.com</u>.
 - Please include your hospital's CMS Certification Number (CCN).
- As with other claims-based measures, hospitals may NOT:
 - Submit additional corrections to underlying claims data or
 - Submit new claims to be added to the calculations.

Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files Posted on Data.Medicare.Gov

Overview of Downloadable MSPB Files Posted on Data.Medicare.Gov

Downloadable MSPB files include:

- MSPB Hospital, State, and National Level
 - Presents the hospital, state average, and national average MSPB Measure

• MSPB – Spending Breakdown by Claim Type

 Provides a breakdown of each hospital's MSPB episode spending into the three time periods and claim type, similar to what is presented in Table 5 of the HSRs. Description of this file can be found on the CMS Hospital VBP page: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/hospital-value-based-purchasing/index.html

• MSPB – Additional Decimal Places

Provides hospital MSPB Measure up to 6 decimal places

Summary of Agenda

- Goals of MSPB Measure
- Measure Methodology
- Calculation Steps
- Example Calculation
- Overview of Hospital-Specific Reports and Supplemental Files
- Overview of Downloadable MSPB Files Posted on Data.Medicare.Gov

Continuing Education Approval

- This program has been approved for 1.0 continuing education (CE) unit given by CE Provider #50-747 for the following professional boards:
 - Florida Board of Nursing
 - Florida Board of Clinical Social Work, Marriage and Family Therapy and Mental Health Counseling
 - Florida Board of Nursing Home Administrators
 - Florida Council of Dietetics
 - Florida Board of Pharmacy
- Professionals licensed in other states will receive a Certificate of Completion to submit to their licensing boards.

CE Credit Process

- Complete the ReadyTalk[®] survey you will receive by email within the next 48 hours or the one that will pop up after the webinar.
- The survey will ask you to log in or register to access your personal account in the Learning Management Center.
 - A one-time registration process is required.

CE Credit Process: Survey

Please provide any additional comments	
^	
~	
0. What is your overall level of satisfaction with this pro	esentation?
Very satisfied	
Somewhat satisfied	
Neutral	
Somewhat dissatisfied	
Very dissatisfied	
f you answered "very dissatisfied", please explain	
^	
\sim	
A Miller & Annual Albert and the second design of t	second stimute 0
1. What topics would be of interest to you for future pre-	esentations?
1. What topics would be of interest to you for future pro	esentations?
1. What topics would be of interest to you for future pro	esentations?
$\langle \rangle$	
$\langle \rangle$	esentations? o leave your name and phone number or email address and we will contact you.
$\langle \rangle$	
$\langle \rangle$	
$\langle \rangle$	
$\langle \rangle$	o leave your name and phone number or email address and we will contact you.
$\hat{}$	o leave your name and phone number or email address and we will contact you.

CE Credit Process

Thank you for completing our survey!

Please click on one of the links below to obtain your certificate for your state licensure.

You must be registered with the learning management site.

New User Link:

https://imc.hshapps.com/register/default.aspx?ID=da0a12bc-db39-408f-b429-d6f6b9ccb1ae

Existing User Link:

https://lmc.hshapps.com/test/adduser.aspx?ID=da0a12bc-db39-408f-b429-d6f6b9ccb1ae

Note: If you click the 'Done' button below, you will not have the opportunity to receive your certificate without participating in a longer survey.

Done

CE Credit Process: New User

Learning Center Registration: OQR: 2015 Specifications Manual Update - 1-21- 2015 First Name: Last Name: Email: Phone: Register	HSAG HEALTH SERVICES	this is a secure site please provide credentials to continue
Email: Phone:		ration: OQR: 2015 Specifications Manual Update - 1-21-
	Email:	Phone:

CE Credit Process: Existing User

HEALTH SERVICES AUNSORY GROUP		this is a secure site please provide credentials to continue
	Secure Login User Name: Password: Log In	

QUESTIONS?

This material was prepared by the Inpatient Value, Incentives, and Quality Reporting Outreach and Education Support Contractor, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. HHSM-500-2013-13007I, FL-IQR-Ch8-06012015-03

6/3/2015