



MLN ConnectsTM

National Provider Call

HCAHPS Star Ratings: Overview and Methodology

October 8, 2014

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Agenda

- Rationale for Star Ratings for the Compare Websites
- Description of Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Star Ratings Methodology
- Distribution of HCAHPS Summary Star Rating in the Dry Run
- Some Frequently Asked Questions About the HCAHPS Star Ratings
- Preview Report Details
- Resources
- Q&A Session

Rationale for Star Ratings for the Compare Websites

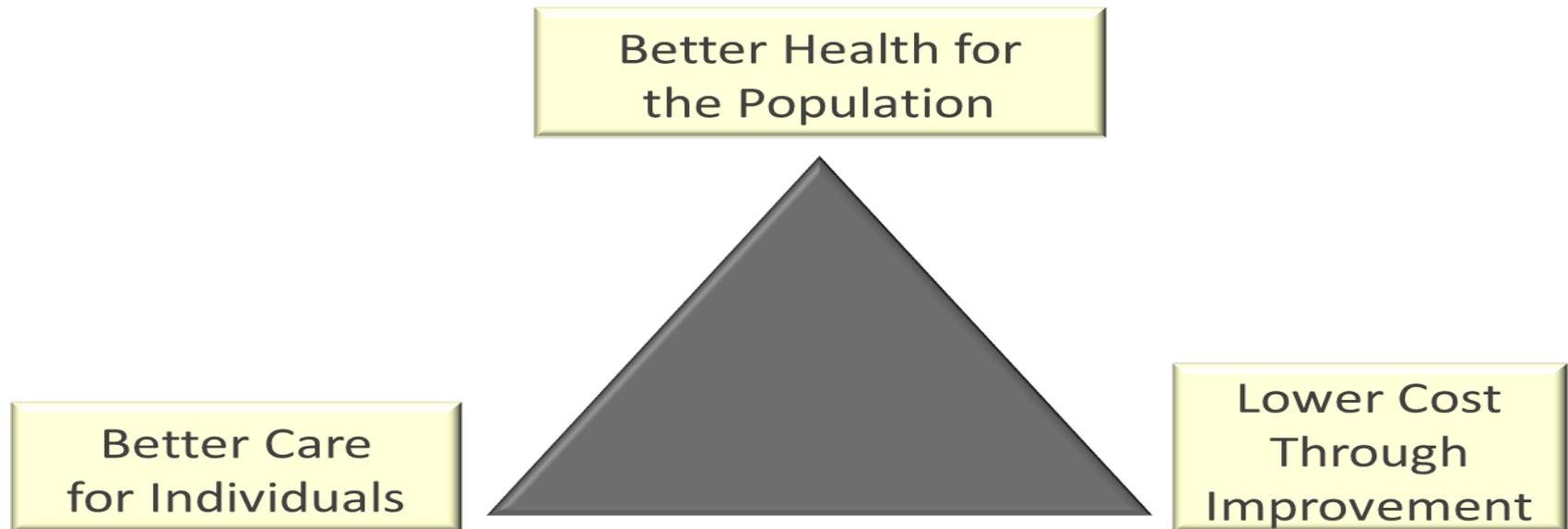
Kate Goodrich, CMS

Background on Star Ratings

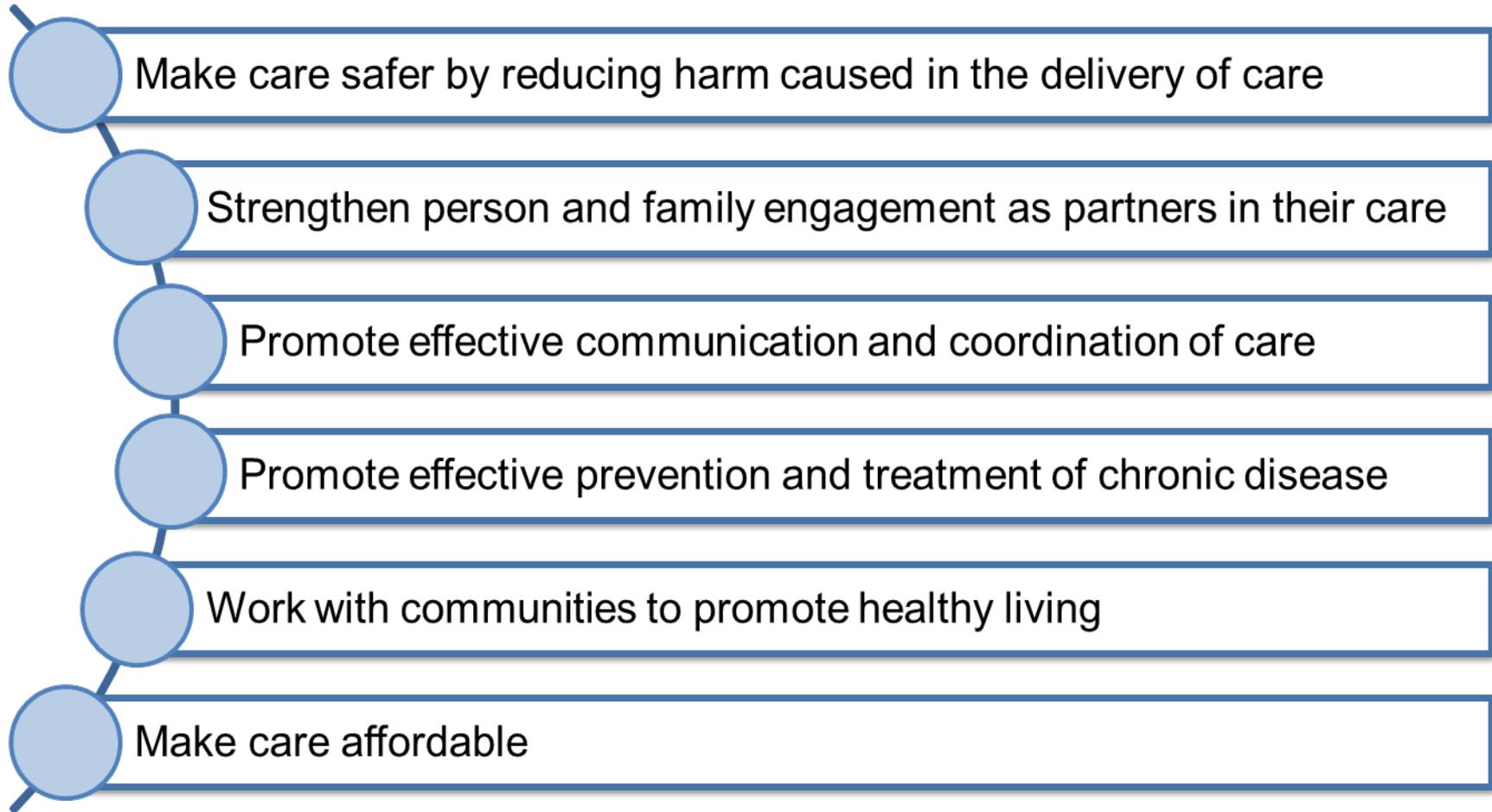
- 2014-2015: Star Ratings will be introduced on Dialysis Facility Compare, Home Health Compare, and Hospital Compare
- 2014: Star Ratings introduced early in the year on Physician Compare for certain physician groups
- 2008: Star Ratings introduced on Nursing Home Compare

The CMS Vision

- To optimize health outcomes by improving clinical quality and transforming the health system.
- Three aims



The Six Goals of the CMS Quality Strategy

- 
- Make care safer by reducing harm caused in the delivery of care
 - Strengthen person and family engagement as partners in their care
 - Promote effective communication and coordination of care
 - Promote effective prevention and treatment of chronic disease
 - Work with communities to promote healthy living
 - Make care affordable

Affordable Care Act (ACA): Major Expansion of Compare Websites

- Provided for creation of Physician Compare
- New reporting requirements, including:
 - Hospital Compare (e.g., value-based purchasing measures, measures on hospital-acquired conditions)
 - Nursing Home Compare (e.g., staffing data, complaints, links to state survey and certification websites)

ACA: Expansion of Online Public Reporting

- New requirements for reporting on care settings, including:
 - Long-term care hospitals
 - Inpatient rehabilitation facilities
 - Hospices
 - Ambulatory surgical centers
 - Certain cancer hospitals
 - Inpatient psychiatric facilities

Digital Government Strategy (Executive Office of the President)

- Issued by Obama Administration in 2012
- Lays out milestone actions for enabling American people to access high-quality digital government information and services

CMS Support for the Digital Government Strategy

- Support includes:
 - Data contributions to Data.gov and Medicare.Data.gov
 - Mobile optimization of Compare websites
 - Use of web analytics data to improve sites
 - Use of visitor surveys to improve sites

Why Star Ratings for Compare Websites?

- Consumers are the primary audience for Compare websites, along with other important stakeholders
- The National Quality Strategy envisions effective public reporting as a key driver for improving the health care system as a whole:
 - Consumers consult ratings
 - Consumers choose the care that is best for them and their families
 - Providers are incentivized to improve quality to retain existing patients and to attract new ones.

Principles for Star Ratings

- Report what is most important to patients in a way they can understand
- Leverage knowledge and lessons learned from existing sites
- Not all measures are appropriate for Star Ratings
- Transparency of methodology and display with stakeholders
- Supplement information already on Hospital Compare
- Coordinate across all Compare sites

Description of HCAHPS Star Ratings Methodology

Liz Goldstein, CMS

William G. Lehrman, CMS

Overview of HCAHPS Star Ratings - 1

- CMS will add Star Ratings for HCAHPS measures beginning with the April 2015 public reporting on Hospital Compare
 - Patients discharged from July 2013 to June 2014
- No current HCAHPS information will be removed from Hospital Compare when HCAHPS Star Ratings are added to the Web site

Overview of HCAHPS Star Ratings - 2

- HCAHPS Star Ratings are based on the same data as the HCAHPS measures publicly reported on the [Hospital Compare website](#)
- Data come from the HCAHPS Survey, a national, standardized, 32-item survey of patients' experience of care during a recent hospital stay

HCAHPS Star Ratings Dry Run

- CMS is providing a **Dry Run** of the HCAHPS Star Ratings in the Hospital Inpatient Quality Reporting (IQR) Program preview period for the December 2014 public reporting.
 - September 15, 2014 through October 14, 2014
- The HCAHPS Star Ratings in the December Preview Reports are for ***informational purposes only*** and ***will not be publicly reported***
- The April 2015 Preview Reports will include updated HCAHPS Star Ratings for the April release of Hospital Compare

HCAHPS Measures for Star Ratings

- All **11 HCAHPS measures** receive a Star Rating:
- Composite Measures
 - Communication with Nurses
 - Communication with Doctors
 - Staff Responsiveness
 - Pain Management
 - Communication about Medicines
 - Discharge Information
 - Care Transition
- Individual Items
 - Cleanliness of Hospital Environment
 - Quietness of Hospital Environment
- Global Items
 - Recommend Hospital
 - Overall Hospital Rating

Hospital Eligibility for HCAHPS Star Ratings

- Hospitals must have at least 100 completed surveys over the four-quarter reporting period to receive HCAHPS Star Ratings
- Hospital must be eligible for public reporting on Hospital Compare
- Hospitals that do not have sufficient completed surveys for calculation of Star Ratings will still have their HCAHPS measures publicly reported on Hospital Compare

Process of Creating HCAHPS Star Ratings - 1

Step 1

Construction and Adjustment of HCAHPS Linear Mean Scores

Calculation of HCAHPS Linear Mean Scores

- All survey responses are used in the construction of HCAHPS Star Ratings
- Survey responses are converted into **linear mean scores**
 - The linear mean score for an HCAHPS measure summarizes all the responses to the survey items included in that measure

HCAHPS Star Ratings Linear Mean Scores

- HCAHPS Survey responses are **converted to a 0-100 score** as follows:
 - *Never* 0; *Sometimes* 33 1/3; *Usually* 66 2/3; *Always* 100
 - *Strongly disagree* 0; *Disagree* 33 1/3; *Agree* 66 2/3; *Strongly agree* 100
 - *No* 0; *Yes* 100
 - Rating 0 = 0; Rating 1 = 10; ... Rating 10 = 100
 - *Definitely no* 0; *Probably no* 33 1/3; *Probably yes* 66 2/3; *Definitely yes* 100
- HCAHPS scores are averaged to obtain linear means for each measure

Construction & Adjustment of HCAHPS Linear Mean Scores

- Linear means capture the full distribution of responses to HCAHPS Survey items
 - Not just the “Top-Box” (most positive) response
- Scores are then adjusted for patient mix and mode of survey administration

Process of Creating HCAHPS Star Ratings - 2

Step 2

Conversion of Linear Mean Scores to HCAHPS Star Ratings

Converting Linear Mean Scores to HCAHPS Star Ratings - 1

- A statistical **clustering** technique is applied to HCAHPS linear mean scores
- Clustering identifies star groups that ***maximize differences between groups*** and ***minimize differences within groups***
 - There are no pre-determined quotas for the star categories
 - Same method is used for many CMS Part C and Part D Star Ratings

Converting Linear Mean Scores to HCAHPS Star Ratings - 2

- 1, 2, 3, 4 or 5 whole stars are assigned to each HCAHPS measure
 - No half-stars are assigned

Process of Creating HCAHPS Star Ratings - 3

Step 3

Calculation of the HCAHPS Summary Star Rating

HCAHPS Summary Star Rating - 1

- The HCAHPS Summary Star Rating combines the Star Ratings of all the HCAHPS measures
- The HCAHPS Summary Star Rating is the average of 9 elements:
 - 7 Star Ratings from the HCAHPS composite measures
 - Average of Cleanliness and Quietness stars
 - Average of Overall Rating and Recommend stars

HCAHPS Summary Star Rating - 2

- Normal rounding rules are applied to the HCAHPS Summary Star Rating average to assign 1, 2, 3, 4 or 5 whole stars
 - No half-stars are assigned

Example Calculation of HCAHPS Summary Star Rating

	11 HCAHPS Measure Star Ratings	9 Star Ratings Used in HCAHPS Summary Star Rating	9-Measure HCAHPS Summary Star Rating Average (<i>unrounded</i>)	HCAHPS Summary Star Rating (<i>rounded</i>)
HCAHPS Composite Measures			$(4+3+4+5+4+4+3+5+3.5)/9 = 3.944$	4
Communication with Nurses	4	4		
Communication with Doctors	3	3		
Responsiveness of Hospital Staff	4	4		
Pain Management	5	5		
Communication about Medicines	4	4		
Discharge Information	4	4		
Care Transition	3	3		
HCAHPS Individual Items				
Cleanliness of Hospital Environment	5	$(5+5)/2 = 5$		
Quietness of Hospital Environment	5			
HCAHPS Global Items				
Overall Hospital Rating	4	$(4+3)/2 = 3.5$		
Recommend the Hospital	3			

Distribution of the HCAHPS Summary Star Rating in the Dry Run

Liz Goldstein, CMS

William G. Lehrman, CMS

Distribution of HCAHPS Summary Star Rating in the Dry Run

HCAHPS Summary Star Rating	# of Hospitals	% of Hospitals
1 Star	131	4%
2 Stars	519	14%
3 Stars	1,476	41%
4 Stars	1,246	35%
5 Stars	211	6%
Total	3,583	100%

Some Frequently Asked Questions About the HCAHPS Star Ratings

Liz Goldstein, CMS

William G. Lehrman, CMS

FAQs about HCAHPS Star Ratings - 1

- **Which hospitals** are included in HCAHPS Star Ratings?
 - All hospitals that participate in the HCAHPS Survey.
 - Both Inpatient Prospective Payment System (IPPS) hospitals and Critical Access Hospitals (CAH).
 - Provided hospitals have 100+ completed HCAHPS Surveys in the 12-month reporting period.

FAQs about HCAHPS Star Ratings - 2

- Why are **at least 100 completed** HCAHPS Surveys necessary to receive HCAHPS Star Ratings?
 - HCAHPS scores based on fewer than 100 completed surveys lack sufficient statistical reliability for performance measurement.
 - Same standard used in the Hospital Value-Based Purchasing program.

FAQs about HCAHPS Star Ratings - 3

- Why did our hospital **not receive** HCAHPS Star Ratings?
 - Your hospital had fewer than 100 completed HCAHPS Surveys in the 12-month reporting period.
 - Or your hospital was not eligible to be publicly reported on Hospital Compare.

FAQs about HCAHPS Star Ratings - 4

- What is the **purpose** of the HCAHPS Summary Star Rating? Isn't the "Overall Hospital Rating" item sufficient?
 - "Overall Hospital Rating" is based on responses to one HCAHPS item.
 - The HCAHPS Summary Star Rating is much broader: it summarizes all of the responses to all the patient experience items on the HCAHPS Survey.

FAQs about HCAHPS Star Ratings - 5

- Does the **number of hospitals** that receive 5 stars differ for each of the HCAHPS measures?
 - Yes. The clustering algorithm empirically determines the number of hospitals in each Star Rating category independently for each HCAHPS measure. CMS does not force a pre-determined number or percentage of hospitals into a specific Star Rating category.

FAQs about HCAHPS Star Ratings - 6

- Why do HCAHPS Star Ratings use **linear mean scores** instead of “Top-Box” scores?
 - Linear mean scores and “Top-Box” scores are alternative, statistically valid methods for summarizing HCAHPS performance. The linear mean score utilizes the full range of survey responses to each HCAHPS item, while the “Top-Box” score is based on only the most positive response.

FAQs about HCAHPS Star Ratings - 7

- Do HCAHPS Star Ratings affect hospitals' **Hospital Value-Based Purchasing (VBP)** payment?
 - No. HCAHPS Star Ratings are not used in the Patient Experience of Care (HCAHPS) Domain in the Hospital VBP program or in the Hospital VBP payment determination.

Preview Report Details

Kristie Baus, CMS

Preview Report with HCAHPS Star Ratings - 1

SAMPLE

HCAHPS Survey Completion, Response Rate and Summary Star Rating												
Number of Completed Surveys:		570										
Survey Response Rate:		26										
HCAHPS Summary Star Rating		3										
HCAHPS Composites and Individual Items												
HCAHPS Composites		HCAHPS Star Rating		Your Hospital's Adjusted Score			State Average			National Average		
		Star Rating (Out of 5)	Linear Score (0-100)	% Sometimes to Never	% Usually	% Always	% Sometimes to Never	% Usually	% Always	% Sometimes to Never	% Usually	% Always
Composite 1 (Q1 to Q3)	Communication with Nurses	2	89	6	20	74	4	15	81	4	17	79
Composite 2 (Q5 to Q7)	Communication with Doctors	3	92	5	13	82	4	12	84	4	14	82
Composite 3 (Q4 & Q11)	Responsiveness of Hospital Staff	3	82	13	26	61	10	22	68	9	23	68
Composite 4 (Q13 & Q14)	Pain Management	3	87	8	21	71	7	21	72	7	22	71
Composite 5 (Q16 & Q17)	Communication about Medicines	1	73	25	19	56	18	16	66	18	18	64

Preview Report with HCAHPS Star Ratings - 2

SAMPLE

Hospital Environment Items		Star Rating (Out of 5)	Linear Score (0-100)	% Sometimes to Never	% Usually	% Always	% Sometimes to Never	% Usually	% Always	% Sometimes to Never	% Usually	% Always			
Q8	Cleanliness of Hospital Environment	2	81	18	19	63	9	19	72	8	18	74			
Q9	Quietness of Hospital Environment	4	83	11	28	61	7	26	67	9	30	61			
Discharge Information Composite		Star Rating (Out of 5)	Linear Score (0-100)	% Yes		%No		% Yes		%No		% Yes		%No	
Composite 6 (Q19 & Q20)	Discharge Information	3	84	84		16		86		14		86		14	
Care Transition Composite		Star Rating (Out of 5)	Linear Score (0-100)	% Disagree to Strongly Disagree	% Agree	% Strongly Agree	% Disagree to Strongly Disagree	% Agree	% Strong Agree	% Disagree to Strongly Disagree	% Agree	% Strongly Agree			
Composite 7 (Q23 to Q25)	Care Transition	2	78	7	50	43	6	43	51	5	44	51			

HCAHPS Global Items												
		HCAHPS Star Rating		Your Hospital's Adjusted Score			State Average			National Average		
Q21	Overall Rating of Hospital	Star Rating (Out of 5)	Linear Score (0-100)	% 0 to 6 rating	% 7 or 8 rating	% 9 or 10 rating	% 0 to 6 rating	% 7 or 8 rating	% 9 or 10 rating	% 0 to 6 rating	% 7 or 8 rating	% 9 or 10 rating
<i>Overall Rating of Hospital (0= Worst Hospital 10= Best Hospital)</i>		3	89	7	25	68	7	21	72	8	21	71
		HCAHPS Star Rating		Your Hospital's Adjusted Score			State Average			National Average		
Q22	Willingness to Recommend this Hospital	Star Rating (Out of 5)	Linear Score (0-100)	%No: Definitely or Probably Not Recommend	%Yes: Probably Recommend	%Yes: Definitely Recommend	%No: Definitely or Probably Not Recommend	%Yes: Probably Recommend	%Yes: Definitely Recommend	%No: Definitely or Probably Not Recommend	%Yes: Probably Recommend	%Yes: Definitely Recommend
<i>Willingness to Recommend this Hospital</i>		3	88	4	27	69	5	24	71	5	24	71

Preview Report with HCAHPS Star Ratings - 3

SAMPLE

Footnote Legend

- 1 . The number of cases/patients is too few to report.
- 3 . Results are based on a shorter time period than required.
- 5 . Results are not available for this reporting period.
- 6 . Fewer than 100 patients completed the HCAHPS survey. Use these scores with caution, as the number of surveys may be too low to reliably assess hospital performance.
- 10 . Very few patients were eligible for the HCAHPS survey. The scores shown reflect fewer than 50 completed surveys. Use these scores with caution, as the number of surveys may be too low to reliably assess hospital performance.
- 11 . There were discrepancies in the data collection process.
- 15 . The number of cases/patients is too few to report a star rating.

Star Ratings Legend

- 5 stars: Excellent
- 4 stars: Above Average
- 3 stars: Average
- 2 stars: Below Average
- 1 star: Poor

"For additional information on HCAHPS Star Ratings and Linear Scores, please see www.hcahponline.org."

Resources

Kristie Baus, CMS

Sources for More Information & Assistance

- For more information about HCAHPS Star Ratings, visit the official HCAHPS online website, www.HCAHPSonline.org
 - FAQs about HCAHPS Star Ratings
 - HCAHPS Star Rating Technical Notes
 - Information about the HCAHPS Survey
 - HCAHPS Survey instrument
- For assistance accessing or downloading preview reports – QualityNet Help Desk at qnetsupport@hcqis.org
- Questions or feedback about dry run and Star Ratings methodologies – HospitalCompare@hsag.com

Question & Answer Session

Acronyms in this Presentation

- ACA – Affordable Care Act
- CAH – Critical Access Hospitals
- CMS – Centers for Medicare & Medicaid Services
- HCAHPS – Hospital Consumer Assessment of Healthcare Providers and Systems
- IPPS – Inpatient Prospective Payment System
- IQR – Inpatient Quality Reporting
- MLN – Medicare Learning Network
- NPC – National Provider Call Program
- VBP – Value-Based Purchasing

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- Hospital Appeals Settlement Update
 - Thursday, October 9; 1:30-3:00 PM Eastern Time

For call descriptions and registration information, visit the CMS [National Provider Calls and Events](http://www.cms.hhs.gov/npc) page at <http://www.cms.hhs.gov/npc>. You may register until 12 PM ET on the day of the call.

Thank You

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