



# CMS Hospital Inpatient Quality Reporting Program Hospital-Acquired Condition Measures

National Call

Monday March 21, 2011

1:00 p.m. – 2:00 p.m. ET

# Agenda



- Introduction
- Methods
- National results
- Preview period and public reporting
- Frequently asked questions
- Q&A

# Health Care Must be Safe

- Necessary for a high quality, 21<sup>st</sup> century health system
- The first aim in IOM's "Crossing the Quality Chasm" (2001)
  - IOM's "To Err is Human" highlighted the large number of preventable adverse events (1999)
- NQF published a list of Serious Reportable Events (2002, updated in 2006), many of which are considered never events.
- DHHS OIG Report 'Adverse Events in Hospitals: National Incidence Among Medicare Beneficiaries (November 2010) (OEI-06-09-00090).
  - An estimated 13.5% hospitalized Medicare beneficiaries experienced adverse events during hospitalization.
- A top priority and a shared responsibility
  - For CMS & health care providers

# Measurement is a Cornerstone of CMS' Efforts to Improve Quality



- Measurement uncovers opportunities for improvement
  - Helps identify opportunities for improvement and encourages application of best medical practices
- CMS' Hospital Inpatient Quality Reporting Program
  - Distributes quality information to hospitals and consumers
  - Measures process and outcomes of care
  - Gives hospitals a financial incentive to report the quality of their care
  - Enables patients to make informed decisions about their care

# CMS is Expanding its Measures of Patient Safety



- CMS recently adopted several patient safety measures in its Hospital Inpatient Quality Reporting Program
  - Eight Hospital-Acquired-Conditions (HACs)
    - ❖ Many are recognized by NQF as serious reportable events
    - ❖ Several similar measures are already reported by state or local health agencies [e.g., PA, NJ, and RI]
  - Patient Safety Indicators (AHRQ)
  - Healthcare-Associated Infections (HAIs) (CDC)

# A Call to Action



- The reporting of all these patient safety measures is a call to action to continue efforts to improve patient safety.
- Although many HACs are rare events, we can continue to push to remove preventable patient harm from our national health care system.
- We should take action and work together to build on the upcoming HAC public reporting efforts for the safety and well-being of all Medicare beneficiaries and their loved ones.

# Legislative Requirement



- For purposes for determining DRG payment, Section 5001(c) of the Deficit Reduction Act of 2005 requires the Secretary of the DHHS to identify HACs that:
  - (a) Are high cost or high volume or both
  - (b) Result in the assignment of a case to a DRG that has a higher payment when present as a secondary diagnosis
  - (c) Could reasonably have been prevented through the application of evidence based guidelines.

# HACs Adopted for Public Reporting



## HACs Used in IPPS Payment

### ✓ HACs adopted for Reporting Program

- |   |  |
|---|--|
| ✓ | 1. Foreign object retained after surgery             |
| ✓ | 2. Air embolism                                      |
| ✓ | 3. Blood incompatibility                             |
| ✓ | 4. Stage III and IV pressure ulcers                  |
| ✓ | 5. Falls and trauma                                  |
| ✓ | 6. Catheter-associated urinary tract infection (UTI) |
| ✓ | 7. Vascular catheter-associated infection            |
| ✓ | 8. Manifestations of poor glycemic control           |
|   | 9. Surgical site infection                           |
|   | 10. Deep vein thrombosis                             |

# CMS' Approach to Selecting HACs

- The selected HACs were established in collaboration with the CDC and external agencies to determine conditions or events which were considered serious and reasonably preventable through the applications of evidenced based guidelines.
- Several of CMS's designated HACs are derived from the NQF list of SREs. Overlap occurs between SREs and HACs due to the fact that the condition or event must occur or be acquired in the facility
- The conditions or events must be identifiable through claims data (ICD-9 and procedure coding) and the present on admission (POA) indicator.

# CMS' Approach to Selecting HACs

- The CMS Hospital Acquired Policy is not only a Medicare payment policy but part of an overall public health initiative.
- Implementation of the policy has raised awareness and motivated stakeholders to increase the public discussion of efforts to improve quality in the health care system.
- The establishment of public reporting of the HACs on Hospital Compare will also undoubtedly promote continued improvements in the delivery of quality healthcare to our beneficiaries.



# METHODS

# Hospitals Included in HAC Calculation

- Hospitals paid under prospective payment system (PPS)
- Excluded
  - Critical access hospitals (CAHs)
  - Long-term care hospitals (LTCHs)
  - Maryland waiver hospitals
  - Cancer hospitals
  - Children's inpatient facilities
  - Rural health clinics
  - Federally qualified health centers
  - Inpatient psychiatric hospitals
  - Inpatient rehabilitation facilities
  - Veterans Administration/Department of Defense Hospitals
  - Religious, non-medical health care institutions

# Discharges Included

- Discharges from October 1, 2008 to June 30, 2010
  - Processed by      June 26, 2009    (2008 discharges)
  - June 25, 2010    (2009 discharges)
  - Sep. 24, 2010    (2010 discharges)
- Medicare, fee-for-service (FFS) only
- Exclude if exempt from POA coding
  - Or, missing or invalid POA code for diagnosis 2-9
- Data Source: CMS' Standard Analytic Files (SAFs)
  - Recent releases correct errors in previous releases related to e codes & POA.

# HAC Identification

- A HAC requires
  - A qualifying diagnosis code
    - ❖ As one of the first eight secondary diagnoses (i.e., diagnoses 2 through 9; not 10 or beyond)
  - AND a POA value of N or U
    - ❖ **'N'**: Diagnosis was not present at time of inpatient admission.
    - ❖ **'U'**: Documentation insufficient to determine if the condition was present at the time of inpatient admission.
  
- HAC reporting counts all HACs
  - Regardless of the effect on DRG assignment
  - Different from payment provision.

# Secondary Diagnoses that Define HACs

| HAC                                     | Secondary Diagnoses   |
|---|---|
| Foreign object retained after surgery   | 998.4 and 998.7   |
| Air embolism                            | 999.1   |
| Blood incompatibility                   | 999.6*  |
| Stage III and IV pressure ulcers        | 707.23 and 707.24   |
| Falls and trauma                        | Fractures: 800-829 (CC/MCC)<br>Dislocations: 830-839 (CC/MCC)<br>Intracranial injuries: 850-854 (CC/MCC)<br>Crushing injuries: 925-929 (CC/MCC)<br>Burns: 940-949 (CC/MCC)<br>Electric shocks: 991-994 (CC/MCC) |
| Catheter-associated UTI                 | 996.64  |
| Vascular catheter-associated infection  | 999.31  |
| Manifestations of poor glycemic control | 249.10–249.11, 249.20–249.21<br>250.10–250.13, 250.20–250.23, 251.0   |

\*The diagnosis code 999.6 does not match the codes listed in the 2011 IPPS Final Rule for this HAC measure. The HAC measures being calculated for the Reporting Program reflect the coding in place at the time of the discharges. The proposed codes in the 2011 IPPS Final Rule reflect updates to the coding for Complications and Comorbidities (CCs) that were put in place in October 2010.

# HAC Rate Calculation

- Number of HACs
  - As defined above
  - “Numerator”
- Number of eligible discharges
  - Foreign object retained after surgery: number of surgical discharges
  - All other HACs: total number of discharges (medical & surgical)
- HAC rate = (Numerator/Denominator) \* 1,000
  - Different from September 2010
  - Change made in response to hospital comments



# NATIONAL RESULTS

# Themes in National Results

- Good news - HACs are rare
  - The most rare HACs are blood incompatibility and air embolism
    - ❖ > 95% of hospitals have 0
  - The most common HAC is falls and trauma
    - ❖ >50% of hospitals have 2+
  - For all other HACs, the median is 0
  - Still room for improvement
- Hospital performance
  - 19% of hospitals had zero HACs
  - 81% had at least one HAC
  - 62% had HACs of two different types
    - ❖ E.g., falls and trauma and catheter-associated UTI

# National Results



| Measure                                | Number of Eligible Discharges (Denominator) | Number of HACS (Numerator) | National HAC Rate (Per 1,000 Discharges) |
|--|---|----------------------------|--|
| Foreign object retained after surgery  | 5,362,384                                   | 484                        | 0.090                                    |
| Air embolism                           | 18,737,512                                  | 53                         | 0.003                                    |
| Blood incompatibility                  | 18,737,512                                  | 23                         | 0.001                                    |
| Pressure ulcer stages III and IV       | 18,737,512                                  | 2,521                      | 0.135                                    |
| Falls and trauma                       | 18,737,512                                  | 10,564                     | 0.564                                    |
| Vascular Catheter-associated infection | 18,737,512                                  | 6,868                      | 0.367                                    |
| Catheter-associated UTI                | 18,737,512                                  | 5,928                      | 0.316                                    |
| Poor glycemic control                  | 18,737,512                                  | 944                        | 0.050                                    |

# Distribution of Number of HACs

Unit of observation is the hospital.



| Measure                      | Mean Number of HACs | Number of HACs 25 <sup>th</sup> Percentile | Number of HACs 50 <sup>th</sup> Percentile | Number of HACs 75 <sup>th</sup> Percentile | Number of HACs 95 <sup>th</sup> Percentile |
|------------------------------|---------------------|--|--|--|--|
| Foreign object after surgery | 0.14                | 0  | 0  | 0  | 1  |
| Air embolism                 | 0.02                | 0  | 0  | 0  | 0  |
| Blood incompatibility        | 0.01                | 0  | 0  | 0  | 0  |
| Pressure ulcer               | 0.71                | 0  | 0  | 1  | 4  |
| Falls and trauma             | 2.99                | 0  | 2  | 4  | 10   |
| Vascular CAI                 | 1.95                | 0  | 0  | 2  | 9  |
| Catheter-associated UTI      | 1.68                | 0  | 0  | 2  | 8  |
| Poor glycemic control        | 0.27                | 0  | 0  | 0  | 2  |

# Distribution of HAC Rates

Unit of observation is the hospital.



| Measure                               | Mean HAC Rate | HAC Rate 25 <sup>th</sup> Percentile | HAC Rate 50 <sup>th</sup> Percentile | HAC Rate 75 <sup>th</sup> Percentile | HAC Rate 95 <sup>th</sup> Percentile |
|---------------------------------------|---------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Foreign object retained after surgery | 0.107         | 0.000                                | 0.000                                | 0.000                                | 0.521                                |
| Air embolism                          | 0.002         | 0.000                                | 0.000                                | 0.000                                | 0.000                                |
| Blood incompatibility                 | 0.001         | 0.000                                | 0.000                                | 0.000                                | 0.000                                |
| Pressure ulcer                        | 0.184         | 0.000                                | 0.000                                | 0.119                                | 0.577                                |
| Falls and trauma                      | 0.617         | 0.000                                | 0.442                                | 0.792                                | 1.652                                |
| Vascular CAl                          | 0.378         | 0.000                                | 0.000                                | 0.376                                | 1.005                                |
| Catheter-associated UTI               | 0.312         | 0.000                                | 0.000                                | 0.340                                | 1.191                                |
| Poor glycemic control                 | 0.055         | 0.000                                | 0.000                                | 0.000                                | 0.256                                |

# Hospitals Included In National Results

- Foreign Object Retained After Surgery:
  - PPS Hospitals with at least one qualifying surgical discharge
  - 3,413 hospitals
- All other HACs
  - PPS Hospitals with at least one qualifying discharge
  - 3,531 hospitals
- Not all these hospitals will have their rates publicly reported

# PREVIEW PERIOD, HOSPITAL-SPECIFIC REPORTS & PUBLIC REPORTING

# Preview Period



- Allows hospitals to review results prior to public reporting
- HAC preview: March 10 through March 30, 2011
  - CMS encourages all hospitals to review results by March 25
- Send questions to
  - [HACmeasures@mathematica-mpr.com](mailto:HACmeasures@mathematica-mpr.com)

# Hospital-Specific Report Delivery

- Via *My QualityNet*
- Available to staff registered as *My QualityNet* users & assigned two roles
  - QIO Clinical Warehouse Feedback Report role – required to receive the report
  - File Exchange & Search role – required to download the report from *My QualityNet*

# Hospital-Specific Report Content

- Hospital results
  - Number of eligible discharges (denominator),
  - Number of HACs (numerator)
  - Rate
  - National rate (for comparison)
  
- Patient data for patients with HACs
  - Name of HAC
  - Patient HIC, birth date, admit date, discharge date
  - First 9 dxs & first 9 POAs on claim
  - Hospitals with no HACs have no patient data
  - *CMS added patient data in response to hospital comments*

# Public Reporting Details

- Downloadable file
  - All open (as of February 3, 2011) IPPS hospitals participating in the Reporting Program
  - Numerator, denominator, rate for each HAC measure
  - Accessible via <http://www.cms.gov> and *Hospital Compare* [<http://www.hospitalcompare.hhs.gov>]
  - Downloadable file only
    - ❖ HACs are not part of “Compare Hospitals” feature
  - Available March 31, 2011 on <http://www.cms.gov> and April 21, 2011 via link on *Hospital Compare*
- *Hospitals may not suppress their results.*

# FREQUENTLY ASKED QUESTIONS (FAQs)

Q. Are the HAC rates risk-adjusted for our patient case-mix?

A. The HAC rates are not adjusted for hospital case-mix. Many of these measures are considered “never events” or “serious reportable events” that should not occur regardless of how sick the patient is.

CMS is evaluating whether risk-adjustment is appropriate for some of the HAC measures and may change the measure definition in the future based on scientific evidence and feedback from the public.

- Q. How will CMS present the HAC rates? Will CMS be comparing HAC rates to national averages and confidence intervals?
- A. CMS anticipates publishing results for all IPPS hospitals participating in the Reporting Program in a separate downloadable file on <http://www.cms.gov> on March 31, 2011 and making this file accessible via the *Hospital Compare* website on April 21, 2010. The downloadable file will include for each measure the hospital's numerator, denominator, and rate per 1,000 discharges. It will also include the national numerator, denominator, and rate for each measure.

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# FAQ #2 Continued



*(Continued)*

A. At this time, CMS is not assessing performance on these measures. Hospital results will not be compared to national averages and these measures will not be shown as part of the consumer-oriented “Compare Hospitals” feature on *Hospital Compare*; they will only reside in a separate downloadable file on <http://www.cms.gov>. The national rate is provided for reference only.

Q. What should I do if I cannot match the patient-level data provided by CMS to my hospital records?

A. You can contact the HAC measures project team at [HACmeasures@mathematica-mpr.com](mailto:HACmeasures@mathematica-mpr.com) to discuss discrepancies between the patient-level data provided along with your HSR and your hospital records. Prior to doing so, however, please review the following common reasons why CMS' data may be different from your records to see if the discrepancy is due to one of these reasons:

- The claim submitted by your billing department differs from the one in your records. CMS calculates the HAC measures from final action claims received from hospital billing departments.

*(Continued, next slide)*

# FAQ #3 Continued



*(Continued)*

- The claim was amended and resubmitted to CMS after the set run-out date for the year. The HAC measures only reflect changes for claims processed by June 26, 2009 for 2008 discharges; by June 25, 2010 for 2009 discharges; and by September 24, 2010 for 2010 discharges.
- The claim was for a non-Medicare patient or a Medicare managed care patient. CMS' HAC measures are only calculated for Medicare fee-for-service claims.
- The qualifying HAC diagnosis was not in the first eight secondary diagnoses (diagnoses 2-9) on the claim. CMS's HAC measures only look for qualifying HAC diagnoses in the first eight secondary diagnoses on the claim, as the data file used to calculate these measures only contains diagnoses 1-9.

Q. I found an error in the claim submitted to CMS and need to correct it. What should I do?

A. If your quality review has identified a coding error on your claim, we suggest you correct the claim using CMS' standard process and follow up with your coding and/or billing department to ensure this type of error does not occur in the future.

As a general rule, CMS' claims-based measures are based on final action paid claims from the inpatient Standard Analytic File (SAF), and CMS cannot regenerate the HAC measures for this period to reflect corrected claims submitted after the set run-out date for the year. CMS, however, encourages hospitals to correct claims with coding errors, as these corrections may be incorporated in future HAC measure calculations.

# Late Breaking FAQs

- Discuss late breaking FAQs



# Q&A



# CONCLUDING REMARKS

# For More Information

- HAC rules and POA requirements:
  - <http://www.cms.gov/HospitalAcqCond>
- Hospital Reporting Program & measure specifications:
  - <http://www.qualitynet.org> > Hospitals-Inpatient > HAC Measures
  - [HACmeasures@mathematica-mpr.com](mailto:HACmeasures@mathematica-mpr.com)