

## CMS' Progress Toward Implementing Value-Based Purchasing

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## Presentation Overview

- CMS' Value-Based Purchasing (VBP) Principles
- CMS' VBP Demonstrations and Pilots
- CMS' VBP Programs
- Value-Driven Health Care
- Horizon Scanning and Opportunities for Participation



## CMS' Quality Improvement Roadmap

- Vision: The right care for every person every time
  - Make care:
    - Safe
    - Effective
    - Efficient
    - Patient-centered
    - Timely
    - Equitable



## CMS' Quality Improvement Roadmap

- Strategies
  - Work through partnerships
  - Measure quality and report comparative results
  - Value-Based Purchasing: improve quality and avoid unnecessary costs
  - Encourage adoption of effective health information technology
  - Promote innovation and the evidence base for effective use of technology



## VBP Program Goals

- Improve clinical quality
- Reduce adverse events and improve patient safety
- Encourage more patient-centered care
- Avoid unnecessary costs in the delivery of care
- Stimulate investments in effective structural components or systems
- Make performance results transparent and comprehensible
  - To empower consumers to make value-based decisions about their health care
  - To encourage hospitals and clinicians to improve quality of care



## What Does VBP Mean to CMS?

- Transforming Medicare from a passive payer to an active purchaser of high quality, efficient health care
- Tools for promoting better quality, while avoiding unnecessary costs
  - Explicit payment incentives to achieve identified quality and efficiency goals
  - Pay for reporting, pay for performance, gainsharing, and competitive bidding are all VBP tools

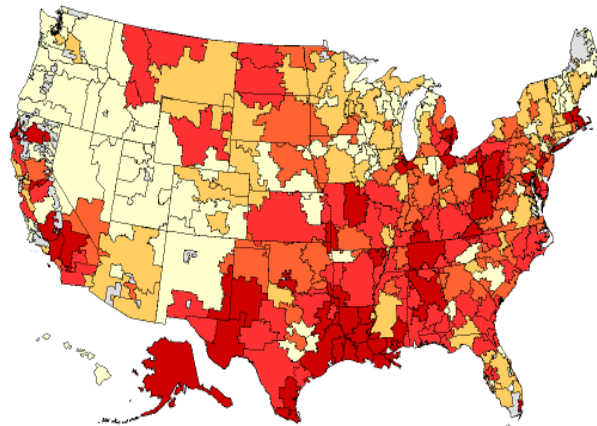


## Why VBP?

- Improve Quality
  - Quality improvement opportunity
    - Wennberg's Dartmouth Atlas on variation in care
    - McGlynn's NEJM findings on lack of evidence-based care
    - IOM's Crossing the Quality Chasm findings
- Avoid Unnecessary Costs
  - Medicare's various fee-for-service fee schedules and prospective payment systems are based on resource consumption and quantity of care, NOT quality or unnecessary costs avoided
    - Physician Fee Schedule and Hospital Inpatient DRGs
    - Medicare Trust Fund insolvency looms



## Practice Variation



**Map 2.5. Inpatient Hospital Services per Medicare Enrollee**  
by Hospital Referral Region (1995)

■ \$2516 to 3723	(61)
■ 2321 to < 2516	(60)
■ 2117 to < 2321	(61)
■ 1893 to < 2117	(62)
■ 1483 to < 1893	(62)
■ Not Populated	



## Support for VBP

- President's Budget
  - FYs 2006-08
- Congressional Interest in P4P and Other Value-Based Purchasing Tools
  - Medicare Modernization Act, Deficit Reduction Act, and Tax Relief and Health Care Act provisions
- MedPAC Reports to Congress
  - P4P recommendations related to quality, efficiency, health information technology, and payment reform
- IOM Reports
  - P4P recommendations in *To Err Is Human* and *Crossing the Quality Chasm*
  - Recent report, *Rewarding Provider Performance: Aligning Incentives in Medicare*
- Private Sector
  - Private health plans
  - Employer coalitions



## VBP Demonstrations and Pilots

- Premier Hospital Quality Incentive Demonstration
- Physician Group Practice Demonstration
- Medicare Care Management Performance Demonstration
- Nursing Home Value-Based Purchasing Demonstration
- Home Health Pay-for-Performance Demonstration
- ESRD Bundled Payment Demonstration
- ESRD Disease Management Demonstration



## VBP Demonstrations and Pilots

- Medicare Health Support Pilots
- Care Management for High-Cost Beneficiaries Demonstration
- Medicare Healthcare Quality Demonstration
- Gainsharing Demonstrations
- Better Quality Information (BQI) Pilots
- Electronic Health Records (EHR) Demo (TBA)
- Medical Home Demo (TBA)



## Premier Hospital Quality Incentive Demonstration

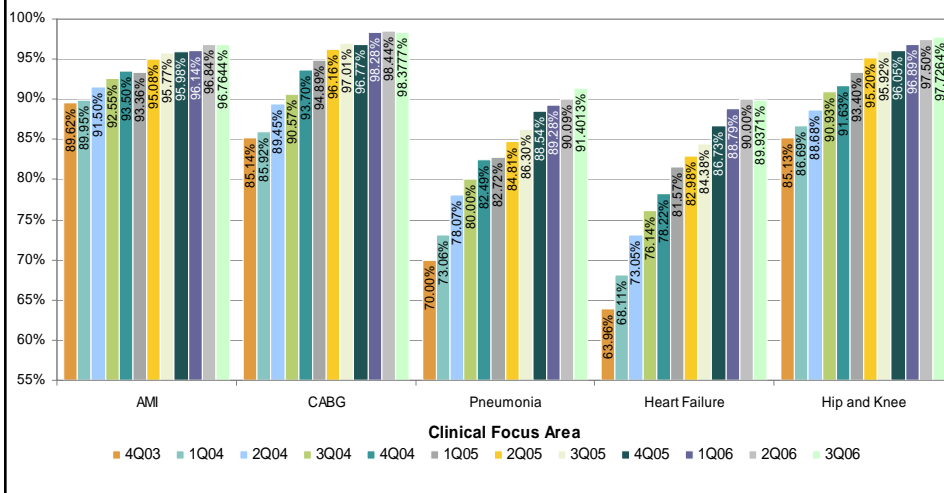
- Authority
  - CMS' demonstration authority
- Purpose
  - To determine if financial incentives and public recognition are effective in improving quality of care
- Timing
  - Initial 3-year project ended September 2006
  - Recently extended for additional 3 years
- Target
  - Approximately 250 hospitals
- Compensation
  - Bonus payment model for quality attainment in five clinical conditions



# Premier Hospital Quality Incentive Demonstration

## CMS/Premier HQID Project Participants Composite Quality Score:

Trend of Quarterly Median (5th Decile) by Clinical Focus Area  
October 1, 2003 - September 30, 2006 (Year 1 and Year 2 Final Data, and Yr 3 Preliminary)



## PHQID Extension

- 3 years, beginning with October 1, 2006 discharges
- Only hospitals that completed Year 3 of the initial demonstration eligible to participate
- Major change in payment methodology
  - Financial incentives: all hospitals that exceed baseline mean on measures, top 20% on "attainment", and top 20% on "improvement"
  - Penalty of 1 – 2% in Year 4 for hospitals that do not score above 10<sup>th</sup> decile threshold set in Year 2
  - Payment methodology may be modified each year to evaluate alternative incentive models



## Hospital Quality Initiative

- MMA Section 501(b)
  - Payment differential of 0.4% for reporting (hospital pay for reporting)
  - FYs 2005-07
  - Starter set of 10 measures
  - High participation rate (>98%) for small incentive
  - Public reporting through CMS' Hospital Compare website



## Hospital Quality Initiative

- DRA Section 5001(a)
  - Payment differential of 2% for reporting (hospital P4R)
  - FYs 2007- "subsequent years"
  - Expanded measure set, based on IOM's December 2005 *Performance Measures* Report
  - Expanded measures publicly reported through CMS' Hospital Compare website
- DRA Section 5001(b)
  - Report for hospital VBP beginning with FY 2009
    - Report must consider: quality and cost measure development and refinement, data infrastructure, payment methodology, and public reporting



## Overview of Hospital VBP

- Legislative background
- Program goals and design assumptions
- Plan development process
- Plan design
  - Performance assessment model
  - Measures
  - Data infrastructure & validation
  - Public reporting



## Legislative Background

- Deficit Reduction Act (DRA) Section 5001(b) authorized CMS to develop a Medicare Hospital Value-Based Purchasing (VBP) Plan
  - Based on assumption of implementation in FY 2009; implementation will require additional statutory authority
  - Must consider
    - Measures
    - Data Infrastructure and Validation
    - Incentive Structure
    - Public Reporting
  - Must consult relevant stakeholders and consider experience with relevant P4P demonstrations and private-sector programs



## Hospital VBP Design Assumptions

- A specified percentage of hospital payment would be conditional on performance
- Would reward both improvement and attainment
- Would use both financial incentives and public reporting to drive quality improvement



## Hospital VBP Design Assumptions

- Would build on infrastructure of the Reporting Hospital Quality Data for Annual Payment Update Program (RHQDAPU)
- Transition from and replace RHQDAPU
- Would not include additional funding



## CMS Hospital VBP Workgroup Tasks and Expected Timeline

- 2006
  - Oct ■ Environmental Scan
  - Dec ■ Issues Paper
- 2007
  - Jan 17 ■ Listening Session #1 for Stakeholder Input on Issues Paper
  - Options Paper
  - Apr 12 ■ Listening Session #2 for Input on Hospital VBP Options Paper
  - June ■ Final Design
  - August ■ Final Report, Including Design, Process, and Environmental Scan



## Performance Model Overview

- Submit data for all VBP measures that apply
- Receive a performance score on each measure
  - Score 0 to 10 points on attainment or improvement
- Aggregate scores across all measures for overall performance score
- Overall performance score translated into the incentive payment using an "exchange function"



## Scoring Performance

- Scoring Based on Attainment
  - 0 to 10 points scored relative to the attainment threshold and the benchmark
- Scoring Based on Improvement
  - 0 to 9 points for improvement based on hospital improving its score on the measure from its prior year's performance.



## Performance Assessment Model Terminology

**Benchmark:** the reference point defining high level of performance

**Attainment threshold:** the minimum level of performance required to receive attainment points

**Attainment range:** the scale between the attainment threshold and benchmark

**Improvement range:** the scale between the hospital's prior year score (baseline) on the measure and the benchmark



## Benchmark and Attainment Thresholds

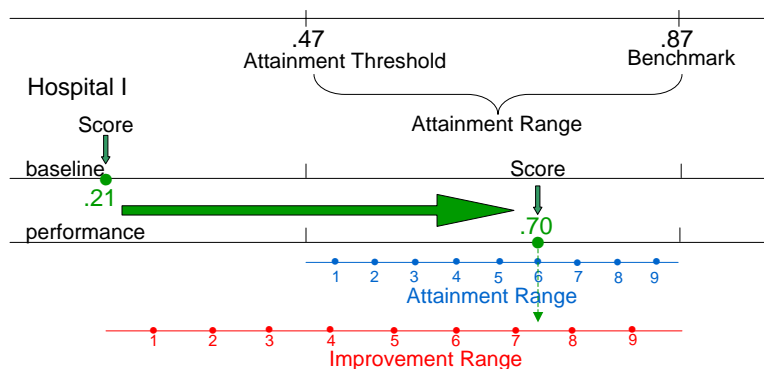
Measure Designation	Benchmark	Attainment Threshold
Standard method	Mean of the top decile	50 <sup>th</sup> percentile
Method for topped out measures*	90% performance	60% performance

\*Topped out measures: 75th percentile is not statistically different from the 90th percentile.



## Earning Quality Points Examples

Measure: PN Pneumococcal Vaccination



Hospital I Earns: 6 points for attainment

7 points for improvement

Hospital I Score: maximum of attainment or improvement  
= 7 points on this measure

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## Calculation of the Overall Hospital VBP Performance Score

Total Earned Points =  
Sum of points earned across all reported measures

Total Possible Points =  
Total number of measures reported by hospital  
x 10 points

VBP Performance Score =  
 $\frac{\text{Total Earned Points}}{\text{Total Possible Points}} \times 100$



## Translating Performance Score into Incentive Payment

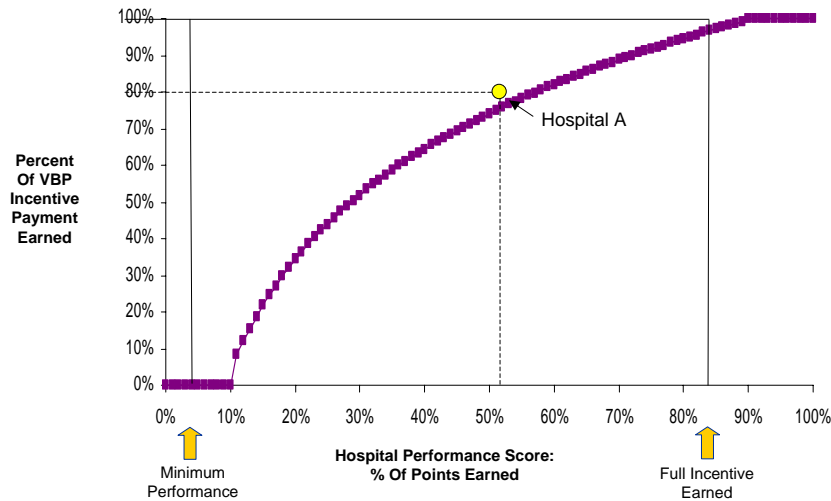
**Minimum performance level:** level below which a hospital would receive none of the VBP incentive

**Benchmark level of performance:** level required for a hospital to obtain its full incentive amount

**Exchange rate:** translates the performance score to the percent of the VBP incentive payment earned



## Translating Performance Score into Incentive Payment: Example



## Options Regarding Structuring Incentive Payments

### Basis of the incentive payment

- Base DRG
- Other potential components?
  - Capital costs?
  - Disproportionate Share Hospital (DSH) payments?
  - Indirect Medical Education (IME) payments?
  - Outlier payments?
- Implementation

## Options Regarding Structuring Incentive Payments

### Allocation of unearned incentives

- Not all hospitals will earn the full VBP incentive payment
- To the extent distributed back to hospitals, could be an additional quality incentive.
- Options for distribution include:
  - Option 1: Distribute to all hospitals based on their VBP Performance Scores.
  - Option 2: Distribute to top performers only



## Hospital VBP Measures Overview

- Measure selection considerations
- Fiscal Year 2009 candidate measures for VBP financial incentive
- Additional measures for Fiscal Year 2010 and beyond
- Proposed process for introducing, managing, and retiring Measures in VBP
- Challenge of small numbers



## Hospital VBP Measure Selection Considerations

- Initial measures for the VBP program would be selected using the foundation established in RHQDAPU for public reporting
- All VBP measures would meet the NQF criteria used for public reporting
- Candidate VBP measures for incentive payments will require consideration of additional criteria



## Proposed Hospital VBP Measure Selection Criteria

### NQF

- Importance
- Scientific acceptability
- Feasibility
- Usability

### Additional CMS

- Improvability
- Controllability
- Potential for unintended consequences
- Contribution to comprehensiveness



## FY 2009 Candidate Measures for Hospital VBP Financial Incentive

Clinical quality process-of-care measures – Acute Myocardial Infarction (AMI)		Entered Public Reporting on Hospital Compare
AMI-1	Aspirin at Arrival	4/2005
AMI-2	Aspirin prescribed at discharge	4/2005
AMI-3	ACE Inhibitor (ACE-I)/Angiotensin receptor blocker (ARB) for left ventricular systolic dysfunction	4/2005
AMI-4	Adult smoking cessation advice/counseling	4/2005
AMI-5	Beta blocker at discharge	4/2005
AMI-7a	Thrombolytic agent received within 30 minutes of hospital arrival	4/2005
AMI-8a	Primary percutaneous coronary intervention (PCI) received within 90 minutes of hospital arrival	4/2005

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## FY 2009 Candidate Measures for Hospital VBP Financial Incentive

Clinical quality process-of-care measures – Heart Failure (HF)		Entered Public Reporting on Hospital Compare
HF-1	Discharge Instructions	4/2005
HF-3	ACE Inhibitor (ACE-I)/Angiotensin receptor blocker (ARB) for left ventricular systolic dysfunction	4/2005
HF-4	Adult smoking cessation advice/counseling	4/2005

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## FY 2009 Candidate Measures for Hospital VBP Financial Incentive

Clinical quality process-of-care measures – Pneumonia (PN)		Entered Public Reporting on Hospital Compare
PN-2	Pneumococcal vaccination status	4/2005
PN-3b	Blood culture performed in emergency department before first antibiotic received in hospital	4/2005
PN-4	Adult smoking cessation counseling	4/2005
PN-6	Appropriate antibiotic selection	9/2005
PN-7	Influenza vaccination status	12/2006

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## FY 2009 Candidate Measures for Hospital VBP Financial Incentive

Surgical Care Improvement/Surgical Infection Prevention (SCIP/SIP)		Entered Public Reporting on Hospital Compare
SCIP-Inf-1	Prophylactic antibiotic selection received within 1 hour prior to surgical incision	9/2005
SCIP-Inf-3	Prophylactic antibiotics discontinued within 24 hours after surgery end time	9/2005

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## FY 2009 Candidate Measures for Hospital VBP Financial Incentive

Clinical Quality – Outcome Measures		Scheduled to Enter Public Reporting on Hospital Compare
	30-day AMI mortality	6/2007
	30-day HF mortality	6/2007
Patient-Centered Care Measures		
	HCAHPS	3/2008

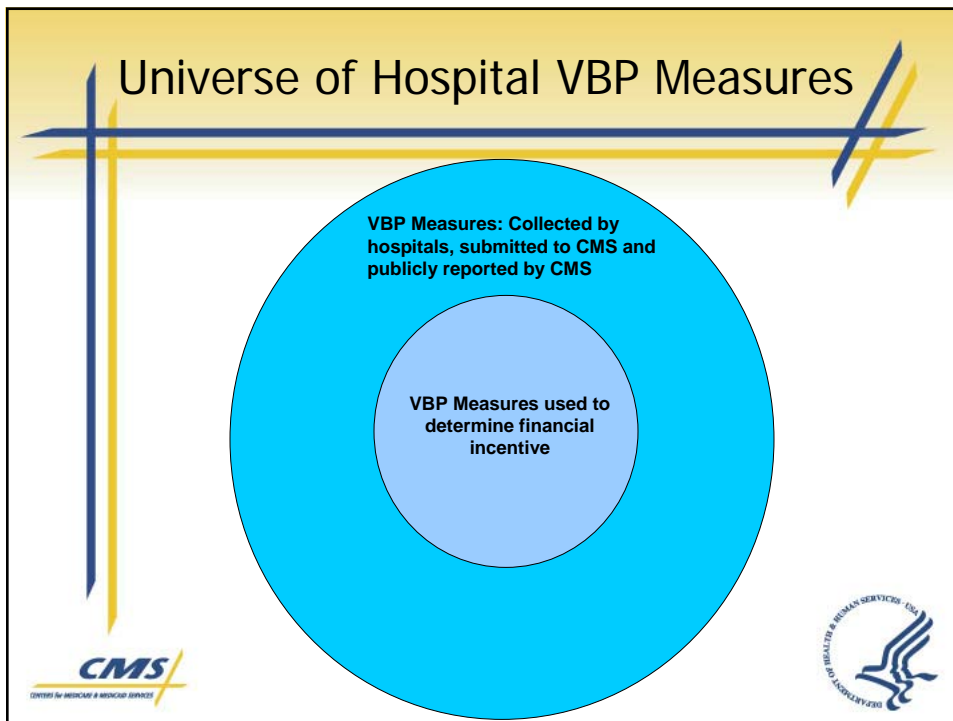
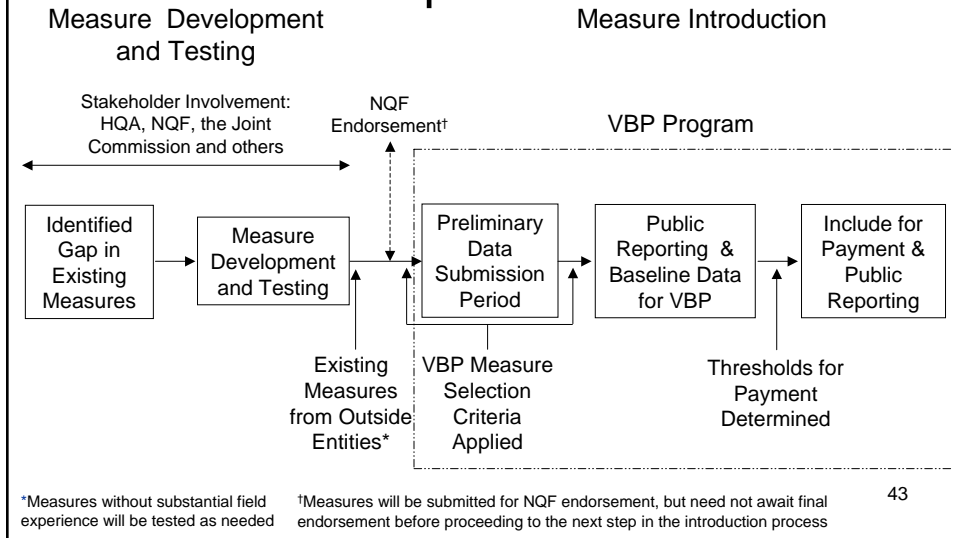
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## Additional Measure Topics for FY 2010 and Beyond

FY 2010–FY 2011	FY 2012 and Beyond
Efficiency measures	Performance areas to address measure gaps Expect need for new measure development
Outcomes measures	
Emergency care measures	
Care coordination measures	
Patient safety measures	
Structural measures	

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# Proposed Process for Introducing Measures into Hospital VBP



## Hospital VBP Data Infrastructure & Validation Overview

- Proposed data submission process
- Improved data infrastructure
- Strengthening validation methodology
  - Examples of current and proposed approaches
- Proposed changes to sampling
- Potential interest in a single data repository and infrastructure



## Public Reporting Design Considerations

- Build on Hospital Compare
- Provide transparency
- Address needs of multiple audiences
- Test displays and content for understanding and use
- Provide support for informed decision-making



## Hospital Acquired-Conditions

- VBP and HAC
- Deficit Reduction Act (DRA) Section 5001(c)
- Present on Admission Indicator (POA)
- Inpatient Prospective Payment System (IPPS) FY2008 Final Rule



## Value-Based Purchasing and Hospital-Acquired Conditions

- The Hospital-Acquired Conditions provision is a step toward Medicare VBP for hospitals
- Strong public support for CMS to pay less for conditions that are acquired during a hospital stay
- Considerable national press coverage of HAC has prompted dialogue of how to further eliminate healthcare-associated infections and conditions



## DRA Section 5001(c)

- CMS was required to select at least two conditions by October 1, 2007 that are:
  1. High cost, high volume, or both;
  2. Assigned to a higher paying DRG when present as a secondary diagnosis;
  3. Reasonably prevented through the application of evidence-based guidelines



## DRA Section 5001(c)

- Beginning October 1, 2007, hospitals must begin submitting data on their claims for payment indicating whether diagnoses were present on admission (POA)
- Beginning October 1, 2008, CMS cannot assign a case to a higher DRG based on the occurrence of one of the selected conditions, if that condition was acquired during the hospitalization
- This provision does not apply to Critical Access Hospitals, Rehabilitation Hospitals, Psychiatric Hospitals, or any other facility not paid under the Medicare Hospital IPPS



## Present on Admission (POA) Indicator

- Definition: Present at the time the order for inpatient admission occurs
  - Conditions that develop during an outpatient encounter, including emergency department, observation, or outpatient surgery, are considered present on admission
- The National Uniform Billing Committee (NUBC) has adopted a standardized approach to documenting POA on claims
- CMS' Change Requests (CRs) 5499 and 5679 detail the requirements for POA indicator
  - See MLM Matters Article on POA for provider instructions



## POA Reporting Dates

- Phased Implementation:
  - October 1, 2007: Hospitals must begin reporting POA indicator on claims for payment
  - January 1, 2008: CMS will begin processing POA data and will inform hospitals if they did not submit the information correctly, while continuing to process claims for payment
  - April 1, 2008: Claims will be returned if a POA indicator is not submitted for each diagnosis



## POA Reporting Options

- Five reporting options
  - Yes: Present at the time of inpatient admission
  - No: Not present at the time of inpatient admission
  - U: Documentation is insufficient to determine if condition is present on admission
  - W: Provider is unable to clinically determine whether condition was present on admission or not
  - Blank: Exempt from POA reporting



## IPPS FY2008 Final Rule

- Complications, including infections, acquired in the hospital can trigger higher payments:
  - DRGs may split into two different levels of severity, based on the presence or absence of a complication or comorbidity (no CC or CC)
    - The CC DRG in each pair generates a higher payment
  - MS-DRGs may split into three different levels of severity (no CC, CC, or MCC—major complication)
    - The more severe the complicating condition, the higher the payment assigned to that CC or MCC DRG



## IPPS FY2008 Final Rule Structure

Each condition considered was placed in one of three categories:

1. Conditions selected for implementation – These conditions will have payment implications beginning in October 1, 2008.
2. Conditions being considered during FY2009 IPPS rulemaking – These conditions raise one or more implementation or policy issues that need to be resolved before they can be selected. We will work to address these issues and propose to reconsider these conditions during the FY 2009 IPPS rulemaking process.
3. Conditions needing further analysis – After exhaustive consideration, we determined that further analysis is required before considering these conditions.



## IPPS FY2008 Final Rule – Category 1

### 1-3. Serious Preventable Events

- Object left in during surgery (998.4 CC)
- Air embolism (999.1 MCC)
- Blood incompatibility (999.6 CC)
- These three conditions received strong public support and meet all of the DRA selection criteria

### 4. Catheter Associated Urinary Tract Infection

- 996.64 & 599.0 CCs
- Strong public support for this condition
- Implementing this condition may decrease the time that patients have urinary catheters in place



## IPPS FY 2008 Final Rule – Category 1

### 5. Pressure Ulcers

- 707.00-.01 & 7-7.09 CCs; 707.02-09 MCCs
- Strong public support for this condition
- Current coding does not distinguish between stages of pressure ulcers; codes are being developed to address this problem

### 6. Vascular Catheter Associated Infection

- 999.31 CC
- Strong public support for this condition
- A new code for this condition will be established by October 1, 2007



## IPPS FY 2008 Final Rule – Category 1

### 7. Surgical Site Infection – Mediastinitis after Coronary Artery Bypass Graft (CABG) Surgery

- 519.2 MCC & 36.10-.19
- In the proposed rule, we included surgical site infection as a broader category; mediastinitis was suggested in public comments
- This condition meets the criteria of the DRA and has coding and prevention guidelines



## IPPS FY2008 Final Rule – Category 1

### 8. Falls and Trauma – Fractures, Dislocations, Intracranial Injuries, Crushing Injuries, and Burns

- Strong public support for the inclusion of falls
- Currently, there are operational difficulties that prevent us from choosing falls per se
  - Codes must be assigned to identify the nature of a resulting injury from a fall, such as fracture, concussion, and contusion
  - Other forms of hospital-acquired trauma like crushing injuries and burns are included in this category
- A list of trauma codes is available on the CMS website that will be included for public comment in the IPPS FY2009 Proposed Rule



## IPPS FY2008 Final Rule – Category 2

### 9. Ventilator Associated Pneumonia (VAP)

- No code for FY 2008; working to establish a code for FY 2009

### 10. Staphylococcus Aureus Septicemia

- Working to determine how to identify only those instances where this condition is preventable
- There are several recent changes to the coding of this condition
- 038.11 + 995.91, 998.59, 999.3 MCCs



## IPPS FY2008 Final Rule – Category 2

### 11. Deep Vein Thrombosis (DVT)/ Pulmonary Embolism (PE)

- DVT: 453.40-.42 CCs; PE: 415.10 & 415.19 MCCs
- Additional condition suggested in public comments
- Working to determine only those instances where the condition is preventable and can be identified as present on admission



## IPPS FY2008 Final Rule – Category 3

### 12. Methicillin Resistant Staphylococcus Aureus (MRSA)

- V09.0
- Strong public interest supporting the selection of MRSA
- MRSA is not a CC and is difficult to prevent
- MRSA could be the infecting agent in three conditions selected for implementation:
  - Catheter Associated Urinary Tract Infections
  - Vascular Catheter Associated Infection
  - Mediastinitis after Coronary Artery Bypass Graft (CABG) Surgery

### 13. Clostridium Difficile-Associated Disease (CDAD)

- 008.45 CC
- Difficult to prevent



## IPPS FY2008 Final Rule – Category 3

### 14. Wrong Surgery

- The proposed rule indicated that wrong surgery (*e.g.*, right patient, wrong surgery; right surgery, wrong patient) is not a reasonable and necessary service
- Services must be reasonable and necessary to bill for Medicare payment
- Wrong surgery is not a CC and does not meet the criteria of the statute
- CMS will use other appropriate mechanisms to ensure that we do not pay for wrong surgeries



## HAC and POA Implementation

- HAC & POA CMS Website  
<http://www.cms.hhs.gov/HospitalAcqCond/>
- Save the date – Monday, December 17, 2007 – CMS & CDC are hosting a public listening session on HAC & POA
  - Details on registering for the session will be released in the Friday, November 23, 2007 Federal Register Notice and will be posted to the HAC & POA website



## Medicaid VBP

- At least 28 States have 35 Medicaid value-based purchasing initiatives
- In the next two years, at least 34 states are planning 47 new activities
- Important that evolving programs include an evaluation component to answer the question of effectiveness
- Considerations related to the approach a State uses to implement program (e.g. State Plan, Waiver, etc.)



## Value-Driven Health Care

- Executive Order
- CMS' Posting of Quality and Cost Information
- Better Quality Information for Medicare Beneficiaries Pilots



## Value-Driven Health Care

- Executive Order 13410
  - Promoting Quality and Efficient Health Care in Government Administered or Sponsored Health Care Programs
  - Directs Federal Agencies to:
    - Encourage adoption of health information technology standards for interoperability
    - Increase transparency in healthcare quality measurements
    - Increase transparency in healthcare pricing information
    - Promote quality and efficiency of care, which may include pay for performance



## Value-Driven Health Care

- CMS' Posting of Quality and Cost Information
  - Quality
    - Compare Websites for Hospitals, Nursing Homes, Home Health Agencies, and Dialysis Facilities
  - Payments
    - Hospital inpatient -- June 1, 2006
    - Ambulatory surgical centers -- August 21, 2006
    - Hospital outpatient -- late 2006
    - Physician practice -- late 2006
- Available at: <http://www.medicare.gov>



## Value-Driven Health Care

- Better Quality Information for Medicare Beneficiaries Pilots
  - Public-private collaboration of the Department of Health & Human Services, the Quality Alliance Steering Committee (AQA/HQA), and pilot communities
  - Purpose
    - Explore methods for collecting, submitting, and sharing physician and hospital data
    - Collect and aggregate Medicare and Medicaid claims data and private payer data from multiple sources
    - Disseminate performance measurement results to support consumer and purchaser decision-making
    - Test value-based purchasing principles
  - Initial sites, with expansion planned
    - California Cooperative Healthcare Reporting Initiative
    - Indiana Health Information Exchange
    - Massachusetts Health Quality Partners
    - Minnesota Community Measurement
    - Arizona Regional Healthcare Value Measurement Initiative
    - Wisconsin Collaborative for Healthcare Quality



## Horizon Scanning and Opportunities for Participation

- IOM Payment Incentives Report
  - Three-part series: *Pathways to Quality Health Care*
- MedPAC
  - Ongoing studies and recommendations regarding value-based purchasing tools
- Congress
  - VBP legislation in new Congress?
- CMS Proposed Regulations
  - Seeking public comment on the VBP building blocks
- CMS Demonstrations and Pilots
  - Periodic evaluations and opportunities to participate



## Horizon Scanning and Opportunities for Participation

- CMS Implementation of MMA, DRA, and TRHCA provisions
  - Demos, P4R programs, VBP planning
- Measure Development
  - Foundation of VBP
- Value-Driven Health Care Initiative
  - Expanding nationwide
- Quality Alliances and Quality Alliance Steering Committee
  - AQA Alliance and HQA adoption of measure sets and oversight of transparency initiative



*Thank You*

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