Reducing Hospital Readmissions: A CMS/HHS Priority

Barry M. Straube, M.D.
Centers for Medicare & Medicaid Services
2nd Hospital Readmission Summit
June 7, 2010

Hospital Readmissions

- Oft-quoted 2009 NEJM article ***once again*** documented the problem
  - 1/5 Medicare patients are readmitted within 30 days following discharge from hospital
  - Medicare beneficiaries are readmitted in 34% of hospital discharges within 90 days of discharge
  - Cost to CMS: $17.4 billion (2004)
- This finding has been known for years
- Two theses for the Summit to consider:
  - Actions and interventions to reduce readmissions should predominate over continued description of the problem
  - Continued research is needed, but focused on evidence-based effective solutions

Hospital Readmissions

- **The Good News**: Discussions less frequently focus on excuses and barriers/challenges to reducing readmissions
- Many stakeholders, especially hospital leadership, are working together on reducing readmissions

Affordable Care Act (ACA) of 2010

- Title I: Quality, Affordable Health Care for all Americans
- Title II: Role of Public Programs
- Title III: Improving the Quality & Efficiency of Health Care
- Title IV: Prevention of Chronic Disease & Improving Public Health
- Title V: Health Care Work Force

Affordable Care Act (ACA) of 2010

- Title VI: Transparency and Public Reporting
- Title VII: Improving Access to Innovative Medical Therapies
- Title VIII: Community Living Assistance Services & Support (CLASS) Act
- Title IX: Revenue Provisions
- Title X: Strengthening Quality, Affordable Health Care for All Americans (Amendments)

ACA: Section 3026 - Community-Based Transitions Care Program

- Program established by the Secretary to provide funding to Eligible Entities that furnish improved care transitions services to High-risk Medicare beneficiaries
- Eligible Entity
  - Community-based organization
  - Arrangements made for care transitions services with hospitals
  - Governing body must include sufficient representation of multiple health care stakeholders (including consumers)

ACA: Section 3026 - Community-Based Transitions Care Program

- High-Risk Medicare Beneficiary
  - Attained "minimal hierarchical condition category score as determined by the Secretary
  - Multiple chronic conditions, or other risk factors, which may include:
    - Cognitive impairment
    - Depression
    - A history of multiple readmissions
    - Any other chronic disease or risk factor as determined by the Secretary
  - 5-year Program beginning January 1, 2011

Ensuring Quality & Value: CMS Strategies

- "Contemporary Quality Improvement"
- Transparency: Public Reporting & Data Sharing
- Incentives:
  - Financial: Value-Based Purchasing, P4P, P4R, gain-sharing, etc.
  - Non-financial
- Regulatory vehicles
  - COPs & CfCs
  - Survey & Certification, Accreditation
  - Myriad policy decisions: Benefit categories, Fraud & Abuse, etc.
- National & Local Coverage Decisions
- Demonstrations, pilots, research

Contemporary Quality Improvement

- Evidence-Based
  - Identification of the problem
  - Metrics
  - Interventions
- Metrics
  - Scientifically sound in development, subject expert input
  - Preferably nationally endorsed by consensus process
  - Tested
  - Accurate, valid, actionable

Contemporary Quality Improvement

- Entities involved in quality improvement
  - Accountable for
    - Evidence-based nature of the initiative and technical assistance
    - Data collection, validity, accuracy, feedback
  - Are measured more frequently than pre- and post-
    - Allows rapid cycle QI, modifications to interventions if not working
    - Tied to performance measurement, funding
  - Must be able to attribute specific interventions to observed outcomes

Contemporary Quality Improvement

- CMS QIO Program: 9th SOW
  - August 1, 2008-July 31, 2011
  - Themes
    - Beneficiary Protection
    - Prevention
    - Patient Safety
    - Care Transitions
  - Cross-cutting issues
    - Value in healthcare
    - Health Information Technology adoption and "meaningful use"
    - Health Disparities reduction

Contemporary Quality Improvement

- Why Care Transitions?
  - Long-standing problem with high rate of readmissions, particularly in the Medicare population
  - Multiple quality of care deficiencies observed with transitions of care from one setting or provider to another in numerous academic & healthcare policy papers
  - Personal and public experiences with poor care transitions
  - Increased focus among healthcare stakeholders on care coordination, payment silos, etc.

CMS Quality Improvement Organization (QIO) Program

- VALUE Project during 8th SOW
  - 4 sites
  - Most successful in Colorado by QIO and University of Colorado
  - Set stage for wider initiative in 9th SOW
- Care Transitions Theme in QIO 9th SOW
  - 3 years of planning
  - Implemented August 1, 2008
  - 14 states involved, hopefully nationwide in 10th SOW
  - Not a pilot or demo, contractual with deliverables

Care Transitions Theme Goals

- To measurably improve the quality of care for Medicare beneficiaries who transition across care settings through a comprehensive **community** effort
- To reduce readmissions following hospitalization and to yield sustainable and replicable strategies to achieve high-value health care for Medicare beneficiaries
- To achieve the goals, Care Transitions QIOs:
  - Conduct a "root cause analysis" to identify the major contributing factors associated with the local rates of re-hospitalization.
  - Implement evidence-based intervention strategies to address driving factors

Care Transitions Theme: 14 QIOs in 14 Communities

- Tuscaloosa HRR (AL)
- NW Denver (CO)
- Miami (FL)
- North-Central Georgia (GA)
- Evansville (IN)
- Baton Rouge (LA)
- Greater Lansing Area Community (MI)
- Omaha (NE)
- SW New Jersey (NJ)
- Upper Capital Region (NY)
- Western Pennsylvania (PA)
- Providence (RI)
- Harlingen HRR (TX)
- Whatcom (WA)

14 QIOs with 14 Target Communities

Care Transitions Community Characteristics

- Competitive contracting process
  - Best 14 proposals chosen
- Focus on the community setting, NOT individual hospitals
- Providers:
  - Hospitals – 66
  - Skilled Nursing Facilities – 277
  - Home Health – 316
  - Other - 89
- Zip Codes – 677
- Variation in community size
  - Miami, FL: 146,000 beneficiaries
  - Whatcom, WA: 28,000 beneficiaries

Care Transitions Community Characteristics

- Variation in numbers of transitions: 43,000 to 7,000/year
- Medicare Beneficiaries – 1,125,649
  - 100,000 30-day readmissions in 2008 and 2009
- Variable baseline readmission rates: 14-22%
- Goal of 2% reduction in overall readmissions rates
  - Most comprehensive measurement and monitoring of hospital admissions to date
  - 6 Interim Process Measures, 8 Outcomes measures
  - Beneficiary experience of care measured using HCAHPS
- Total Number of 30-day Readmission Avoided if 2% reduction is met: 2,585

Root Cause Analysis: An Example

- Root Cause Identified:
  - High HF readmission rates at all 4 target hospitals. Causes identified through claims data and interdisciplinary staff interviews
    - Medication reconciliation issues
    - Opportunity for more post acute f/u by HH based on claims data disposition codes
    - Inconsistent disease specific teaching across settings
    - Inconsistent transfer of appropriate information
    - Timely PCP f/u
    - Hospitalist contact with PCP

Evidence-Based Interventions: An Example

- Transforming Care at the Bedside for patients with Heart Failure:
  - Creating an Ideal Transition Home
  - Medication reconciliation Identifying and involving family caregivers
  - Teach Back
  - CARE Tool/Transfer checklist
  - HH referral/coaching
  - Cardiology f/u
  - NP f/u

Area of Activity: A
Hospital/community system-wide interventions that address system-level weaknesses

Intervention	Medication Management	Plan of Care	Post-discharge Follow-up
Care Transitions Intervention (CTI™) Coleman, et al. 2004, 2005, 2006	✓		✓
Hospital-based DC Medication Protocol Lappe, et al., 2004	✓		
APN-directed DC Planning and home follow-up protocol Naylor et al., 1999			✓
Delivery Of DC Summaries To FU Physicians Post Discharge Van Walraven et al., 2002			✓
Correcting Medication Errors At Hospital Discharge Vira et al., 2006	✓		
Transforming Care at the Bedside (TCAB) IHI 2007		✓	
Move Your Dot™ IHI 2003			
Project RED Jack et al, 2007			✓

Area of Activity: B
Interventions that target re-hospitalizations for specific diseases or conditions

Intervention	Medication Management	Plan of Care	Post-d/c Follow-up
Care Transitions Intervention (CTI™) Coleman, et al. 2004, 2005, 2006	✓		✓
Multi-disciplinary Care in HF Outpatients Kasper et al. 2002			✓
SPAN-CHF Trial Kimmelstiel et al. 2004	✓		✓
Discharge Education Koelling et al. 2005			✓
Education & Support Intervention for HF Patients Krumholz et al. 2002	✓		✓
Hospital-based DC Medication Protocol Lappe, et al., 2004	✓		
APN-directed DC Planning and home follow-up protocol Naylor et al., 1999			✓
Standardized Nurse CM telephone Intervention Riegel et al., 2005			✓
Transforming Care at the Bedside (TCAB) IHI 2007		✓	
The PACT Project Behforouz, 2008			✓

Area of Activity: C
Interventions that target specific reasons for readmission

Intervention	Medication Management	Plan of Care	Post-d/c Follow-up
HF Patient Management Programme Cline, et al. 1998			✓
Care Transitions Intervention (CTI™) Coleman, et al. 2004, 2005, 2006	✓		✓
Multi-disciplinary Care in HF Outpatients Kasper et al. 2002			✓
SPAN-CHF Trial Kimmelstiel et al. 2004	✓		✓
Discharge Education Koelling et al. 2005			✓
Education & Support Intervention for HF Patients Krumholz et al. 2002	✓		✓
APN-directed DC Planning and home follow-up protocol Naylor et al., 1999			✓
Nurse-directed Multi-disciplinary Intervention Rich et al, 1995			✓
Correcting Medication Errors At Hospital Discharge Vira et al., 2006	✓		
Transforming Care at the Bedside (TCAB) IHI 2007		✓	
Move Your Dot™ IHI 2003			

QIO Performance Measurement

I-1	Percentage of patient care transitions (FFS Medicare) in the specified geographic area that are attributable to providers who agree to participate.
I-2	Percentage of patient care transitions (FFS Medicare) in the specified geographic area that are the potential subject of an implemented intervention that addresses hospital/community system wide processes.
I-3	Percentage of patient care transitions (FFS Medicare) in the specified geographic area that are the potential subject of an implemented intervention that addresses AMI, CHF or pneumonia.
I-4	Percentage of patient care transitions (FFS Medicare) in the specified geographic area that are the potential subject of an implemented intervention that addresses specific reasons for readmission.
I-5	Percentage of implemented interventions in the specific geographic area that are measured.
I-6	Percentage of patient care transitions (FFS Medicare) in the specified geographic area to which implemented and measured interventions apply.

O-1	**Patient Assessment of Hospital Quality (HCAHPS)**
O-1a.	Percentage of patients over 65 years who rate hospital performance as meeting HCAHPS performance standard for information about medicines.
O-1b.	Percentage of patients over 65 years who rate hospital performance as meeting HCAHPS performance standard for discharge information.
O-2	Percentage of patients discharged to community and readmitted within 30 days who are seen by a physician between discharge and readmission.
O-3	Percentage of patient care transitions (FFS Medicare), in the specified geographic area, for which implemented and measured interventions show improvement.
O-4	Percentage of patients from the specified geographic area re-hospitalized within 30 days of discharge from an acute care hospital.
O-5	**Diagnosis related 30-Day Readmission Rates**
O-5a.	AMI Discharge and All-Cause Readmission Rates
O-5b.	HF Discharge and All-Cause Readmission Rates
O-5c.	Pneumonia Discharge and All-Cause Readmission Rates
O-6	Percentage of patient transitions within the specified geographic area for which a CARE instrument was used.

Care Transitions 18 month Results

- 14/14 QIOs met their interim performance metrics results
  - In spite of many evidence-based interventions, communities tended to focus on the two interventions that have received most publicity and public attention
  - There are many opportunities to broaden the scope of interventions
  - Section 3206 of ACA is an opportunity to broaden the use of evidence-based interventions, not tying funding to a narrow group of evidence-based interventions

Care Transitions 18 month Results

- Most communities are experiencing a drop in Medicare FFS beneficiaries
  - ? Migration to MA plans or exodus to other states
- Most communities are seeing a drop in readmission rates
  - Overall community 30-day readmission rates at baseline ranged from 8.5/1000 eligible beneficiaries to 37/1000 eligible beneficiaries
  - 11/14 communities have documented a drop in 30-day readmission rates, the magnitude ranging from 0.8% to 18.9%
  - There is a strong tendency to persist in relatively high/low readmission rates over time from 2007-2009
  - 3/14 communities have seen a slight rise in 30-day readmission rates, the magnitude ranging from 0.2% to 4.1%

Care Transitions 18 month Results

- Of interest, we are also seeing a drop in primary admission rates, which is unexpected
- Overall community hospitalization rates range from 44/1000 eligible beneficiaries to 197/1000 eligible beneficiaries
- Communities with very low or very high hospitalization rates tend to persist over the years 2007-2009
- 8/14 communities have had a drop in admission rates ranging from 1.5% to 10%

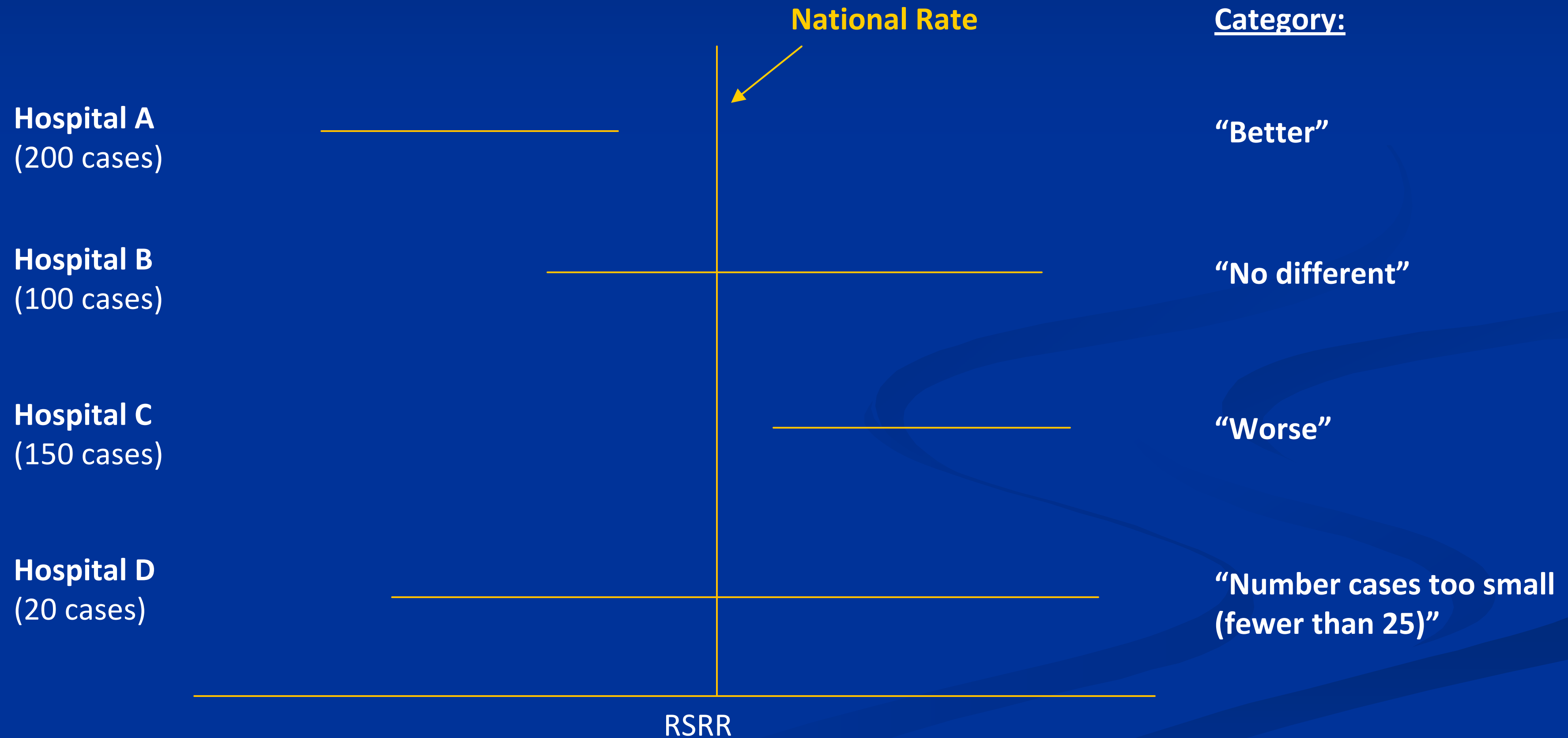
Readmission Metrics Development

- Risk-standardized 30-day readmission measures
  - Congestive Heart Failure
  - Acute Myocardial Infarction
  - Pneumonia
  - Represent about 46% of Medicare readmissions
- Developed by CMS under contract with Yale and Harvard Universities
- Methodology published in peer-reviewed literature
  - Also subjected to public comments in various venues, including public rulemaking

Readmission Metrics Development

- Comply with standards set by the American Heart Association and the American College of Cardiology
- Estimated with Medicare administrative data using models validated against medical record-based abstraction models
  - Results of the models with administrative claims and enrollment data were shown to be highly correlated with the results of models based on clinical data
- Endorsed by the National Quality Forum
- Adopted for reporting by the Hospital Quality Alliance
- Tested in advance of implementation
- Linked to Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) & Hospital Compare

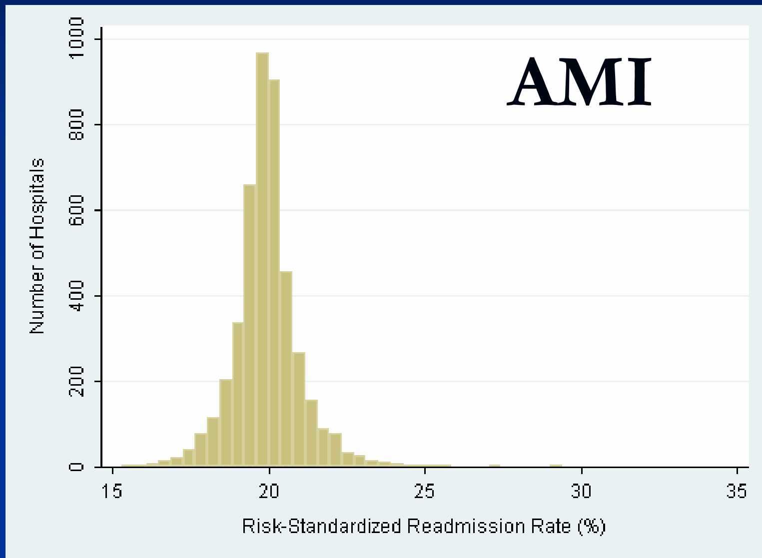
Performance Categories

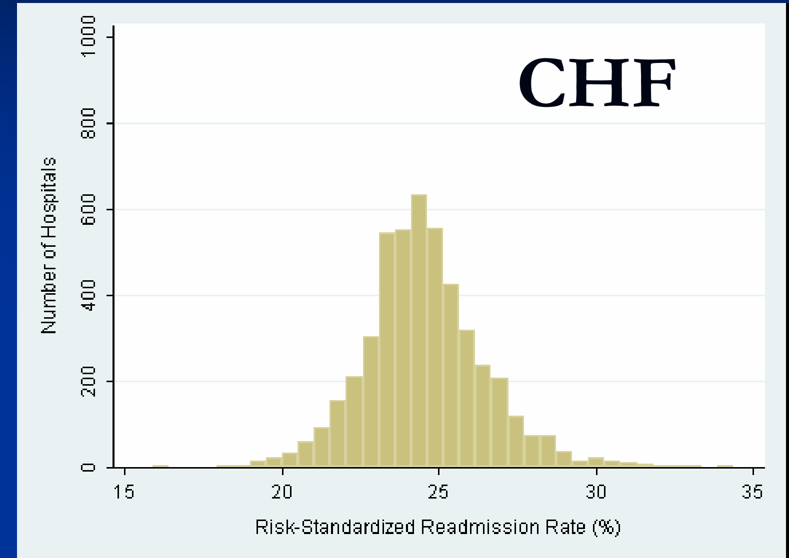


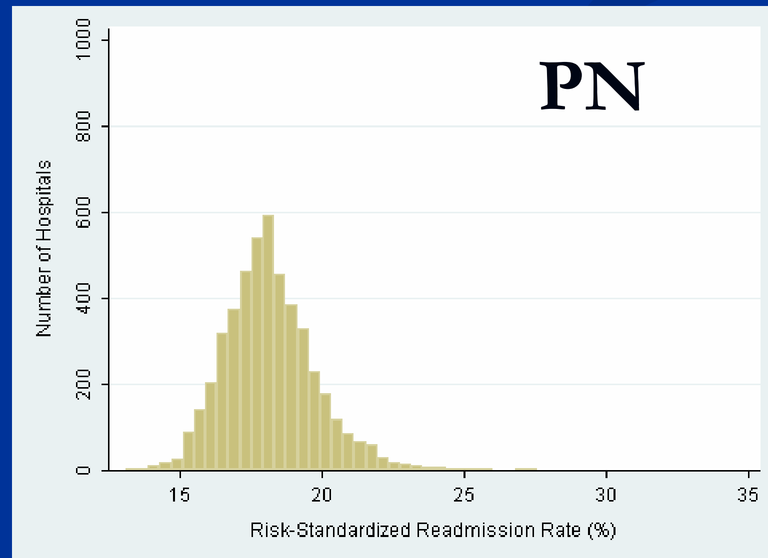
2009 National Results (7/05-6/08 discharges): Readmission

- Average 30-day hospital readmission rates are high
  - AMI 19.9
  - HF 24.5
  - PN 18.2
- There is high variation (about 10 points difference)
- The goal is not zero; all hospitals have room to improve

Distribution of Hospital Readmissions







Distribution of HF Readmission by HRR

Figure 6b. Heart Failure 30-Day Risk-Standardized Readmission Rate (RSRR)
Weighted Average by Hospital Referral Region (HRR)

30-Day Readmission Measures Status Update

- Publicly Reported 30-day Risk-Standardized Readmission Measures (AMI, CHF, PN)
  - Publicly Reported: July, 2009
  - Hospital Compare: June, 2010
- Under review by NQF
  - Patients undergoing Percutaneous Coronary Intervention (PCI)
    - Expected NQF endorsement: Summer, 2010

30-Day Readmission Measures Status Update

- In development by Yale
  - Ischemic stroke
  - Elective hip & knee replacement
  - Expected NQF submission Fall, 2010/Winter 2011
- Planned 30-day Risk Standardized Readmission measures for 2010-2011 development to meet the requirements of the HRRP of ACA
  - CABG
  - COPD
  - Other vascular diseases

Incentives

- Pay-for-Reporting Initiatives
  - RHQDAPU
  - HOPQDRP
  - PQRI
- Value-Based Purchasing Programs
  - ESRD Quality Incentive Program
  - VBP for hospitals, then physicians, SNFs, HHAs, ASCs
  - Gainsharing arrangements
  - Accountable Care Organizations
  - Competitive bidding
  - Other mechanisms

Regulatory Oversight

- Conditions of Participation for hospitals
  - Requires hospitals to provide comprehensive discharge evaluation and planning services to its patients under certain circumstances
    - Must identify patients at risk early in hospitalization
    - Patient/family request
    - Physician request in absence of hospital-generated plan
    - Must include evaluation of services needed and availability
  - Must be timely
  - Must be supervised by nurse, social worker or other appropriately trained personnel

Regulatory Oversight

- Conditions of Participation for hospitals
  - Hospital must arrange for initial implementation
    - Arrangement for post-hospital services and care
    - Educating patient, family, caregivers and community providers about the plan
  - Hospitals must transfer patient to appropriate facilities, agencies, or outpatient services as needed (with caveats)
  - Hospital must reassess discharge plan if there are factors that may affect the continuing care needs or appropriateness of the discharge plan
  - Discharge planning part of required QAPI requirements

Regulatory Oversight

- Survey & Certification Process
  - Routine and complaint-driven
  - Surveyor guidelines assess compliance with Conditions of Participation
  - If deficiencies found can result in
    - Corrective actions: Far most common
    - Termination from Medicare Program
    - Referral to Office of the Inspector General
  - We could target readmissions as a focus if a policy decision were made

Regulatory Oversight

- Beneficiary Complaint Process
  - Many venues to register a complaint
    - 1-800-MEDICARE
    - QIOs
    - State Survey Agencies
    - CMS Central Office and Regional Offices
    - Office of Ombudsman
    - Contractors: MA Health Plans, Prescription Drug Plans, MACs, etc.
  - Hospital CAHPS (HCAHPS) Survey

Coverage and Payment

- Hospital Acquired Conditions policy extension a possibility
- National Coverage Decision process
  - "Never Events" extension possibility
- Others?

CMS Demonstrations

- Readmissions in Medicare Premier Hospital Quality Incentive Demonstration
  - Provides bonuses for high quality care in 5 clinical areas.
  - Readmissions included as a quality measure for hip and knee replacement
  - Test measure for AMI, CABG, pneumonia, and CHF
- Readmissions in the Acute Care Episode (ACE) Demonstration
  - Bundled payment currently covers only hospital and physician services provided during hospitalization
  - 30-day readmission rate is one of the quality measures for monitoring both cardiovascular and orthopedic procedures
  - Demonstration may include readmissions in future

CMS Demonstrations

- Readmissions in Post Acute Care (PAC) Demonstration
  - Demonstration is assessing use of a single post acute care tool to identify, monitor and address conditions across settings of care after discharge from an acute care hospital admission
  - May lead to consolidation of multiple payment systems to pay for episodes of care in hospitals, nursing homes, and other settings
  - Readmission to hospitals, as well as other settings, a key metric

Summary

- Preventable readmissions reflect low quality (care that should be unacceptable for patients) and low value (waste of dollars) and must be addressed NOW
- There are interventions that can and should be implemented immediately, while simultaneously addressing larger barriers and policy issues
- Payment reform will be one of several key components to reduce preventable readmissions
- Payment reform, by itself, won't correct all the issues
  - Some form of integration of the healthcare delivery system addressing care transitions and coordination will also be needed

Summary

- CMS is utilizing six strategies to address hospital readmissions reduction, in concert with other efforts by HHS and other federal government agencies
- Recent legislation, prior legislation, and the President's annual budget requests clearly target reduction of hospital readmissions as a quality and value priority for the nation's healthcare
- Federal efforts must be coordinated and in alignment with a community/local focus

Contact Information

Barry M. Straube, M.D.
CMS Chief Medical Officer, &
Director, Office of Clinical Standards & Quality
Centers for Medicare & Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Email: Barry.Straube@cms.hhs.gov
Phone: (410) 786-6841