Centers for Medicare & Medicaid Services
Special Innovation Projects Overview

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October 2015
Objectives

- Provide an overview of the CMS Special Innovation Project (SIP) Awards
- Review timeline, target communities, interventions and performance measures incorporated into SIPs
- Discuss opportunities to partner with existing and potential initiatives for synergistic success
CMS Special Innovation Project Overview

- CMS Special Innovation Project (SIP) Awards
  - Special Innovation Project 1 – Transforming End of Life Care Initiative
  - Special Innovation Project 2 – Community Based Sepsis Initiative
- Two year contract award
  - September 18, 2015 – September 17, 2017
- Performance based measures
- Transforming End of Life Care
  - New York (IPRO)
- Sepsis Initiative – AQIN Based
  - New York (IPRO)
  - South Carolina (The Carolinas Center for Medical Excellence (CCME))
Innovations that Advance Local Efforts for Better Care at Lower Costs

- Procure a rigorous investigation on the effectiveness of new, pre-existing, or modified quality improvement intervention(s) that would address a local quality issue/outcome

- Link to CMS Quality Strategy goals
- Evidence-based approach (data, literature, and/or root cause analysis)
- Include a rigorous quality improvement methodology
- Include active teaming with Federal, state, and/or local organizations, and providers that know and understand the needs of their community as it relates to quality
CMS Special Innovation Project 1: Transforming End of Life Care Initiative Evidence

Institute of Medicine *Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life* (09/17/14)

- Identified need for public education and engagement about End of Life (EOL) care planning at several levels:
  - **Societal**
    - Build support for public and institutional policies that ensure high-quality, sustainable care
  - **Community and family**
    - Raise awareness and elevate expectations about care options, the needs of caregivers, and the hallmarks of high-quality care
  - **Individual**
    - Motivate and facilitate advance care planning (ACP) and meaningful conversations with family members and caregivers
CMS Special Innovation Project 1: Transforming End of Life Care Initiative Approach

Community Outreach

Educate New York’s Medicare beneficiaries and families/caregivers

- Importance of EOL care planning
- How to communicate with healthcare professionals about their EOL wishes
  - Understand the terminology used by medical professionals
  - Understand realistic outcomes resulting from CPR
- Prepare documentation to ensure EOL wishes are properly carried out to
- Prepare them for the possibility of being unable to make their own care decisions as they enter the advance stages of chronic illness

Community Based Adoption of MOLST & eMOLST

- Provide training & technical support to hospitals, skilled nursing facilities, home health agencies, EMS and physician practices for adoption, training and implementation of eMOLST
CMS Special Innovation Project 1: Transforming End of Life Care Initiative Approach

Target Region

- Nassau and Suffolk Counties
  - 2,851,884 NYS residents (NYS Vital Statistics 2013)
  - Over 530,000 Medicare beneficiaries (CMS 2014 Denominator File)
- Opportunity exists to improve health care provider adoption of MOLST and eMOLST

Recruitment

- Voluntary participation
- Prioritizing hospital recruitment as first step then downstream providers
- Strategizing approach
- Performing outreach to community stakeholders
CMS Special Innovation Project 1: Transforming End of Life Care Initiative Experts

**Patricia Bomba, MD, F.A.C.P**
Vice President & Medical Director, Geriatrics
Excellus BlueCross BlueShield & MedAmerica Insurance Company
Chair, MOLST Statewide Implementation Team & eMOLST Program Director
Chair, National Healthcare Decisions Day NYS Coalition

**Katie Orem, MPH**
Geriatrics & Palliative Care Program Manager
eMOLST Administrator
CMS Special Innovation Project 1: Transforming End of Life Care Initiative Measures

**Process Metrics**

- Number of beneficiary/caregiver outreach educational sessions performed
- Number of community based provider educational sessions performed
- Number of attendees for educational sessions performed categorized by healthcare provider and the general public

**Proximal Metrics**

- Pre- and post-level of knowledge among community-based providers regarding understanding of *ACP Five Easy Steps* program
- Pre- and post- levels of knowledge among Medicare beneficiaries and caregivers regarding EOL care planning and communication of their wishes to healthcare providers
- Number of media, social media and public services announcements targeting ACP knowledge and usage.
CMS Special Innovation Project 1: Transforming End of Life Care Initiative Measures

Outcome Metrics

- A 10% relative improvement in number of completed advance directives within the NYS eMOLST registry
- A 20% relative improvement in number of healthcare organizations adopting and implementing eMOLST
- A 2% relative improvement in inpatient mortality rate of acute care hospitals in target region
- A 2% relative improvement in admissions during the last 6 months of life for acute care hospitals in target region
- A 2% relative improvement in readmissions during the last 6 months of life for acute care hospitals in target region
- A 2% relative improvement in inpatient days during the last 6 months of life for acute care hospitals in target region
CMS Special Innovation Project 2 Focus

Interventions that are Ready for Spread and Scalability

- Procure a rigorous investigation on the effectiveness of quality improvement intervention(s) that if implemented at scale would greatly improve healthcare quality

- Interventions that result in:
  - reduced mortality
  - reduced harm
  - reductions in healthcare disparities
  - cost reduction
  - produce a high return on investment
  - approaches that link value to quality
Sepsis treatment protocols and provider education are primarily limited to Emergency Medical Services (EMS) and the acute care hospital setting, specifically the Emergency Department (ED) and critical care units

- 80% of sepsis cases are identified within acute care EDs in contrast to hospital inpatient stay occurrences.*

- Sepsis strikes quickly, and earlier recognition and improved care management can reduce sepsis-related morbidity and mortalities. †

- Ideal outcomes require team-based tactics with pre-hospital providers (home healthcare (HHC) staff, skilled nursing facility (SNF) personnel, physician practices, and EMS responders) and the public at large through education and awareness of signs of severe sepsis and septic shock. ‡

- Sepsis is one of the most under recognized and misunderstood conditions by healthcare providers and the public. Therefore, delivering information, education, and resources to the public and providers about the risks and symptoms of sepsis is critical. **

* Sepsis Alliance, 2015  
** Sepsis Alliance, 2015  
† Castellanos-Ortega A et al, 2010  
‡ Sterling et al, 2015
For Medicare nationally, septicemia (except in labor) is the principal discharge diagnosis exceeding 700,000 hospital discharges a year, and is the costliest diagnosis condition, consuming 6.9% of all Medicare payments yearly (AHRQ)

In New York, septicemia is the number one driver of 30-day readmissions (21.3%) and has a mortality rate of 17% which is three times greater than the all-diagnosis Medicare in-hospital mortality rate of 4.2%

New York is the first state in the nation to enact sepsis regulations requiring every hospital to identify and implement a sepsis recognition and treatment protocol that aligns with current evidence and addresses:

- Recognition of risk factors, early signs and symptoms of sepsis
- Resuscitation, including but not limited to fluids and early antibiotic administration, upon diagnosis of sepsis
- Training for staff
- Measurement and evaluation, including use of a standardized data dictionary, centralized data repository, and development of a risk-adjusted mortality measure
CMS Special Innovation Project 2: Community Based Sepsis Initiative Evidence

### NYS Resident MCFFS With Primary DX OF Sepsis In-Hospital Deaths In NY State Acute Care Facilities July 2013 Thru June 2014

<table>
<thead>
<tr>
<th>Length Of Stay Prior To Death (Days)</th>
<th>Number Of Patients</th>
<th>Percent Of All In-Hospital PDX Sepsis Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>578</td>
<td>7.8%</td>
</tr>
<tr>
<td>1</td>
<td>1,085</td>
<td>14.7%</td>
</tr>
<tr>
<td>2</td>
<td>723</td>
<td>9.8%</td>
</tr>
<tr>
<td>3</td>
<td>519</td>
<td>7.0%</td>
</tr>
<tr>
<td>4</td>
<td>478</td>
<td>6.5%</td>
</tr>
<tr>
<td>5</td>
<td>449</td>
<td>6.1%</td>
</tr>
<tr>
<td>6</td>
<td>386</td>
<td>5.2%</td>
</tr>
<tr>
<td>7</td>
<td>349</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

### New York Re-admission Counts for Primary Diagnosis of Septicemia By Reported Patient Disposition July 1, 2013 – June 30, 2014

<table>
<thead>
<tr>
<th>Reported Disposition</th>
<th>Number Of Discharges</th>
<th>Number Returned To The Hospital Within:</th>
<th>Percent 30-Day Readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOME</td>
<td>8,873</td>
<td>566, 988, 1,294, 1,628</td>
<td>18.3%</td>
</tr>
<tr>
<td>SNF</td>
<td>14,938</td>
<td>1,601, 2,703, 3,511, 4,267</td>
<td>28.6%</td>
</tr>
<tr>
<td>HHC</td>
<td>7,111</td>
<td>664, 1,132, 1,500, 1,859</td>
<td>26.1%</td>
</tr>
<tr>
<td>HOSPICE</td>
<td>2,133</td>
<td>33, 48, 60, 66</td>
<td>3.0%</td>
</tr>
<tr>
<td>REHAB</td>
<td>712</td>
<td>67, 122, 180, 215</td>
<td>30.2%</td>
</tr>
<tr>
<td>OTHER</td>
<td>1,636</td>
<td>188, 275, 351, 412</td>
<td>25.2%</td>
</tr>
<tr>
<td>Total</td>
<td>35,403</td>
<td>3,119, 5,268, 6,896, 8,447</td>
<td>23.9%</td>
</tr>
</tbody>
</table>

Source: CMS Medicare FFS Paid Claims Data
CMS Special Innovation Project 2: Community Based Sepsis Initiative Approach

- Facilitate education and build awareness of sepsis among pre-hospital providers and caregivers in contact with at-risk community dwelling Medicare beneficiaries.

- Identify best practice protocols and educate pre-hospital providers on the recognition and importance of efficient referral to the next level of care for emergent care management.

- Improve processes of care transitions and care pathways with sepsis treatment between pre-hospital and hospital/emergency care setting providers and post acute discharge to the community.

- Increase public awareness of the signs, symptoms, and contributing factors to sepsis through community outreach, public service announcements, and social media.
CMS Special Innovation Project 2: Community Based Sepsis Initiative Approach

Target Region for NY

- Albany and Syracuse Hospital Referral Regions
  - Albany HRR has a mortality rate of 14.6% and ranks 8th in the NYS HRRs for sepsis admissions
  - Syracuse HRR has a mortality rate of 15.6% and ranks 7th in the NYS HRRs for sepsis admissions
- 3,230,419 NYS residents (NYS Vital Statistics 2013)
- Over 601,000 Medicare beneficiaries (CMS 2014 Denominator File)

Target Region for South Carolina

- Charleston region
- 372,913 residents (SC Vital Statistics 2013)
- 61,946 Medicare beneficiaries (CMS 2014 Denominator File)

Recruitment

- Voluntary participation
- Prioritizing hospital recruitment as first step then downstream providers
- Performing outreach to community stakeholders
Sepsis Alliance

- Charitable organization run by a team of dedicated laypeople and healthcare professionals who share a strong commitment to battling sepsis.
- Founded in 2007, by Dr. Carl Flatley, whose daughter Erin died of sepsis at the age of 23
- Created to raise sepsis awareness among both the general public and healthcare professionals

Home Care Association of New York State

- Quality Council efforts focusing on resources for early identification of the signs and symptoms of sepsis and referral to the next level of care

Rory Staunton Foundation

- Seek to reduce the number of sepsis caused deaths through education and outreach aimed at faster diagnosis and effective treatment of sepsis, particularly in children
- Created by Rory Staunton’s parents, Ciaran and Orlaith Staunton
CMS Special Innovation Project 2: Community Based Sepsis Initiative Measures

Process Metrics

- Number of beneficiary/caregiver outreach educational sessions performed
- Number of community based provider educational sessions performed
- Number of attendees for educational sessions performed categorized by healthcare provider and the general public

Proximal Metrics

- Pre- and post-level of knowledge among community-based providers regarding identification of sepsis, severe sepsis, and septic shock
- Pre- and post-level of knowledge among Medicare beneficiaries and caregivers regarding identification of sepsis and how to communicate signs and symptoms to healthcare providers
- Number of media, social media and public services announcements facilitated by AQIN targeting knowledge and early identification of sepsis signs and symptoms.
CMS Special Innovation Project 2: Community Based Sepsis Initiative Measures

Outcome Metrics

- Number of inpatient admissions of Medicare FFS patients by stage of sepsis: 1) Sepsis; 2) Severe sepsis; 3) Septic shock

- Inpatient mortality for Medicare FFS patients by stage of sepsis: 1) Sepsis; 2) Severe sepsis; 3) Septic shock

- Acute Length of Stay with mortality by stage of sepsis: 1) Sepsis; 2) Severe sepsis; 3) Septic shock

- Acute Length of Stay without mortality by stage of sepsis: 1) Sepsis; 2) Severe sepsis; 3) Septic shock

- Reduction in 30, 60 and 180 day readmissions for Medicare FFS patients with a principal diagnosis of sepsis
CMS Special Innovation Project 2: Community Based Sepsis Initiative Next Steps

- Analysis of baseline data
  - 09/18/14-03/17/15
- Assessment of existing initiatives in target regions
- Recruitment
  - Healthcare providers
  - Community stakeholders
  - Advisory Council
- Evidence based tools and resources
- Environmental assessment of target regions
- Identification of senior outreach venues
- Strategic Work Plan development