Policies and Regulations to Promote Prevention of Antibiotic Resistance and Infections

Dr. Shari Ling, CMS
Policies and Regulations to Promote Prevention of Antibiotic Resistance and Infections

Shari M. Ling, MD
Deputy Chief Medical Officer
Center for Medicare and Medicaid Services
CMS Authorized Programs & Activities

- Hospitals, Home Health Agencies, Hospices, ESRD facilities, all PAC, Nursing Homes

Survey & Certification
- Target surveys
- Quality Assurance Performance Improvement
- CLIA

Clinical Standards (CoPs, CfCs)

Quality Improvement
- Quality Improvement Organizations
- Hospital Engagement Networks - LEAPT
- ESRD Networks

Value based Purchasing

Payment

Quality & Public Reporting
- Physicians – Physician Quality Payment program
- Hospital Inpatient Quality Reporting
- Hospital Outpatient
- In-patient psychiatric hospitals
- Cancer hospitals
- Nursing homes
- Home Health Agencies
- Long-term Care Acute Hospitals
- In-patient rehabilitation facilities
- Hospices
- ESRD

Hospital Readmissions Reduction Program
- Health Care Associated Conditions Program

Physician Quality Payment Program
- Hospital VBP
- ESRD QIP
- Skilled Nursing Facility
- Home Health Agencies

Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria
CMS Authorized Programs & Activities

- CMS is the largest purchaser of health care in the world.
- CMS programs currently provide health care coverage to roughly 105 million beneficiaries in Medicare, Medicaid and CHIP; or roughly 1 in every 3 Americans.
- Millions will receive health care coverage through new health insurance exchanges authorized in the Affordable Care Act.
- Through various contractors, CMS processes over 1.2 billion fee-for-service claims annually
- Combined, Medicare and Medicaid pay approximately one-third of national health expenditures (approx $800B)
July, 2015, Proposed update of Long-Term Care Facilities Requirements included major changes to improve the care and safety of the nearly **1.5 million residents in the more than 15,000 long-term care facilities or nursing homes** that participate in the Medicare and Medicaid programs.

- Requires infection prevention and control program that includes an antibiotic stewardship program, which includes, among other things, antibiotic use protocols and a system to monitor antibiotic use in alignment with the CDC Core Elements.

- Final rule is in final clearance stages.
“Revisions to Patient’s Rights Conditions of Participation and Conditions for Coverage” (81 FR 39448)

- June, 2016, CMS released a proposed rule that included provisions incorporating antibiotic stewardship activities for hospitals and critical access hospitals as an effective means to improve hospital antibiotic-prescribing practices and mitigate patient risk for infections.
- The public comment period closed August 15, 2016.
- These revisions, which would apply to approximately 6,200 hospitals and critical access hospitals.
- With improving prescribing practices and mitigating risk, CMS anticipates potential reductions in morbidity and mortality for hospital and CAH patients.
- CMS estimates that these new requirements would potentially result in a net savings to society of up to $284 million.
NHSN AU Measure: Potential Use in CMS Hospital Quality Reporting

- Measure was included on CMS List of Measures Under Consideration for December, 2015
- Requested public comment in Hospital Inpatient Prospective Payment draft rule on the future inclusion of this measure in Hospital Inpatient Quality Reporting Program
- Public comment and CMS response is available in final rule published in Federal Register on August 22, 2016
- Public comment very helpful as CMS continues collaborations with CDC on potential future use of measure by CMS QR programs
## CMS Quality Reporting Programs

<table>
<thead>
<tr>
<th>Hospital Quality</th>
<th>Physician Quality Reporting</th>
<th>PAC and Other Setting Quality Reporting</th>
<th>Payment Model Reporting</th>
<th>“Population” Quality Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inpatient Quality Reporting</td>
<td>• PQRS</td>
<td>• Inpatient Rehabilitation Facility</td>
<td>• Medicare Shared Savings Program</td>
<td>• Medicaid Adult Quality Reporting</td>
</tr>
<tr>
<td>• HAC payment reduction program</td>
<td>• Medicare and Medicaid EHR Incentive Program</td>
<td>• Nursing Home Compare Measures</td>
<td>• Hospital Value-based Purchasing</td>
<td>• CHIPRA Quality Reporting</td>
</tr>
<tr>
<td>• Readmission reduction program</td>
<td>• eRx quality reporting</td>
<td>• LTCH Quality Reporting</td>
<td>• Physician Feedback/Value based Modifier</td>
<td>• Health Insurance Exchange Quality Reporting</td>
</tr>
<tr>
<td>• Medicare and Medicaid EHR Incentive Program</td>
<td>• Value-based modifier</td>
<td>• ESRD QIP</td>
<td>• MIPS</td>
<td>• Medicare Part C</td>
</tr>
<tr>
<td>• PPS Exempt Cancer Hospitals</td>
<td>• MIPS</td>
<td>• Hospice Quality Reporting</td>
<td></td>
<td>• Medicare Part D</td>
</tr>
<tr>
<td>• Inpatient Psychiatric Facilities</td>
<td></td>
<td>• Home Health Quality Reporting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ambulatory Surgical Centers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fiscal Year 2017 Hospital Value-Based Purchasing Program

Patient and Caregiver Centered Experience of Care/Care Coordination

- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey Dimensions:
  1. Communication with Nurses
  2. Communication with Doctors
  3. Responsiveness of Hospital Staff
  4. Pain Management
  5. Communication about Medicines
  6. Cleanliness and Quietness of Hospital Environment
  7. Discharge Information
  8. Overall Rating of Hospital

Clinical Care Outcomes

1. **MORT-30-AMI**: Acute Myocardial Infarction (AMI) 30-Day Mortality Rate
2. **MORT-30-HF**: Heart Failure (HF) 30-Day Mortality Rate
3. **MORT-30-PN**: Pneumonia (PN) 30-Day Mortality Rate

Clinical Care Process

1. **AMI-7a**: Fibrinolytic Therapy Received Within 30 Minutes of Hospital Arrival
2. **PC-01**: Elective Delivery Prior to 39 Completed Weeks Gestation
3. **IMM-2**: Influenza Immunization

Safety

1. **AHRQ PSI-90**: Complication/patient safety for selected indicators (composite)
2. **CDI**: Clostridium difficile Infection
3. **CAUTI**: Catheter-Associated Urinary Tract Infection
4. **CLABSI**: Central Line-Associated Blood Stream Infection
5. **MRSA**: Bacteremia
6. **SSI**: Surgical Site Infection Colon Surgery & Abdominal Hysterectomy

Efficiency and Cost Reduction

1. **MSPB**: Medicare Spending per Beneficiary (MSPB)
Hospital Acquired Conditions Reduction Program

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Safety Indicator 90 Composite</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(pressure ulcer, catheter related blood stream infection, post-op hip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fracture, PE/DVT, sepsis, wound dehiscence, puncture/laceration)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central line-associated bloodstream infection</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Catheter associated urinary tract infection</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Surgical site infection (colon and hysterectomy)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MRSA bacteremia</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>C. difficile</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Quality Improvement: Partnership for Patients

- AHRQ National Scorecard show 16.8 percent improvement from 2010 through 2013.

![Graph showing percent improvement in various healthcare indicators from 2010 to 2013.]


Note: AHRQ’s data cover 9 of the 10 PIP focus areas: adverse drug events (ADE), catheter-associated urinary tract infection (CAUTI), central line-associated bloodstream infections (CLABSI), falls, other obstetrical (OB) adverse events (OB-Other), pressure ulcers, surgical site infections (SSI), ventilator-associated pneumonia (VAP), and “other HACs.” (Respirations are not included.)

- There was an increase of 5.67 percent from 2011 to 2012 in SSI, after a -14.01 percent decrease from 2010 to 2011. The increase from 2011 to 2012 is not represented in the figure.

- There was an increase of 3.24 percent from 2011 to 2012 in VAP events after the -11.79 decrease from 2010 to 2011. The total decrease from 2010 to 2013 was 1.58 percent. The increase from 2012 to 2013 is not represented in the figure.

- There was an increase of 5.62 percent from 2011 to 2012 in VTE events after the -11.35 percent decrease from 2010 to 2011. In 2012-2013 there was a sharp -33.22 percent decline in VTE events which resulted in the total of a -17.22 percent decline from 2010-2013. The increase from 2011-2012 is not represented in the figure.
### Sepsis, Antibiotic Stewardship, and C. difficile High Areas of Opportunity & Spread

#### JUNE, 2016

<table>
<thead>
<tr>
<th>Participation</th>
<th># of HENs</th>
<th># of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis</td>
<td>14</td>
<td>2,755</td>
</tr>
<tr>
<td>C. difficile</td>
<td>13</td>
<td>2,559</td>
</tr>
</tbody>
</table>

#### AUGUST, 2016

<table>
<thead>
<tr>
<th>Participation</th>
<th># of HENs</th>
<th># of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis</td>
<td>15</td>
<td>3,213</td>
</tr>
<tr>
<td>C. difficile</td>
<td>14</td>
<td>3,086</td>
</tr>
</tbody>
</table>

### Reporting

#### JUNE, 2016

<table>
<thead>
<tr>
<th>Reporting</th>
<th># of HENs</th>
<th># of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis</td>
<td>14</td>
<td>2,401</td>
</tr>
<tr>
<td>C. difficile</td>
<td>15</td>
<td>2,816</td>
</tr>
<tr>
<td>Antibiotic Stewardship</td>
<td>13</td>
<td>245</td>
</tr>
</tbody>
</table>

#### AUGUST, 2016

<table>
<thead>
<tr>
<th>Reporting</th>
<th># of HENs</th>
<th># of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis</td>
<td>15</td>
<td>3,154</td>
</tr>
<tr>
<td>C. difficile</td>
<td>15</td>
<td>3,844</td>
</tr>
<tr>
<td>Antibiotic Stewardship</td>
<td>7</td>
<td>599</td>
</tr>
</tbody>
</table>

---

Source: June 2016 HEN Hospital Reporting Template.  
Note: Antibiotic Stewardship is not captured in the participation data from the monthly Hospital Reports.  
Note: Differences in data sources led to more HENs/hospitals reporting C. difficile measures than participating.
Quality Improvement Project to Reduce C-Difficile in Nursing Homes

• Recruiting approximately 2,300 nursing homes to participate in the CDI Reporting and Reduction project in collaboration with CDC
  • QIN-QIOs will support recruited homes to enroll into the NHSN database & submit CDI data
  • Expect to have a national baseline rate for CDI in nursing homes for the first time by late 2017.

• Antibiotic Stewardship Training in collaboration with CDC and AHRQ
  • Six train the trainer sessions on AS principles and practices and CDI management and prevention
  • Includes TeamSTEPPS communication methods to improve quality and safety.
  • QIN-QIOs to complete training of recruited nursing homes by September, 2018.
Infection Prevention and Control (IPC) Pilot Surveys

Goals:

– Improve assessment of IPC regulations in nursing homes and hospitals, including antibiotic stewardship and during transitions of care.
– Develop and test new draft Nursing Home Infection Control Worksheet (ICW) and revised Hospital ICW
– Promote transparency of regulations
– Prevent HAIs in hospital patients and nursing home residents

Activities and Timelines

– 2016: 10 pilot nursing home surveys
– 2017: 40 hospital and 40 nursing home pilot surveys
  • Review findings
  • Provide technical assistance
– 2018: Revisit surveys