Lessons Learned from the Mandatory Joint Replacement Bundle
Session 194, February 22, 2017

Russell Hinz, Vice President, Health Informatics, Aurora Health Care
Naomi Levinthal, Practice Manager, The Advisory Board
Speaker Introduction

Russell Hinz, MS
Vice President, Health Informatics
Aurora Health Care

Naomi Levinthal, MA, MS, CPHIMS
Practice Manager

The Advisory Board
Conflicts of Interest

Russell Hinz, MS

Has no real or apparent conflicts of interest to report.

Naomi Levinthal, MA, MS, CPHIMS

Salary: The Advisory Board
Agenda

1. Introduction to Bundles
2. Aurora Healthcare’s Experience in the First Mandatory Bundle
3. Lessons Learned
Learning Objectives

• Compare bundled payments to other types of payment reforms
• Identify health IT strategies to prepare for bundled payments
• Apply bundled payment health IT requirements to your own setting
Value for Health IT: Bundled Payments

Value Area

- **T**: Treatment/Clinical
  - Action: Standardize care

- **E**: Electronic Information/Data
  - Action: Coordinate care in post-acute settings

- **S**: Savings
  - Action: Reduce costs of episodic spending, improve quality
Bundles One of Many Reform Strategies

Continuum of CMS\(^1\) Medicare Risk Models

<table>
<thead>
<tr>
<th>Pay-for-Performance</th>
<th>Bundled Payments</th>
<th>Shared Savings</th>
<th>Shared Risk</th>
<th>Full Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital VBP(^2) Program</td>
<td>• Bundled Payments for Care Improvement Initiative (BPCI)</td>
<td>• MSSP(^7) Track 1 (50% sharing)</td>
<td>• MSSP Track 2 (60% sharing)</td>
<td>• Next Generation ACO Model (full risk option)</td>
</tr>
<tr>
<td>Hospital Readmissions Reduction Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAC(^3) Reduction Program</td>
<td>• CJR(^4)</td>
<td></td>
<td>• MSSP Track 3 (up to 75% sharing)</td>
<td>• Medicare Advantage (provider-sponsored)</td>
</tr>
<tr>
<td>Merit-Based Incentive Payment System</td>
<td>• OCM(^5)</td>
<td></td>
<td>• Next Generation ACO(^8) Model (80-85% shared savings option)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• EPMs(^6) for cardiac care</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1) Centers for Medicare and Medicaid Services.
2) Value-based purchasing.
3) Hospital acquired conditions.
4) Comprehensive Care for Joint Replacement.
5) Oncology Care Model.
6) Episode payment models.
7) Medicare Shared Savings Program.
8) Accountable Care Organization.

Sources: CMS, Advisory Board research and analysis.
The Makeup of Bundled Payments

<table>
<thead>
<tr>
<th>Accountable Entity</th>
<th>Pre-Visit</th>
<th>Anchor DRG</th>
<th>PAC¹</th>
</tr>
</thead>
</table>

**Example Episodes, Triggers, and Sources of Cost Variation**

<table>
<thead>
<tr>
<th><strong>Length</strong></th>
<th><strong>Trigger</strong></th>
<th><strong>Source of Cost Variation</strong></th>
<th><strong>Accountable Entity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>90 days</td>
<td>Inpatient admission</td>
<td>Medicare: Overuse of post-acute care</td>
<td>Maternity 40 weeks plus 6 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commercial: Cost of index hospitalization, per-capita over-utilization of surgery</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Length</strong></th>
<th><strong>Trigger</strong></th>
<th><strong>Source of Cost Variation</strong></th>
<th><strong>Accountable Entity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>90 days</td>
<td>Inpatient admission</td>
<td>Avoidable acute hospital transfers; readmissions; Cost of index hospitalization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overuse of C-section</td>
<td></td>
</tr>
</tbody>
</table>


---

1) Post-acute care.
2) Acute myocardial infarction.
CMS Builds to Mandatory Bundles for Years

**Acute Care Episode (ACE) Demonstration**
- 3-years, 5 participants
- Cardiac, orthopedic DRGs\(^1\) including 469 and 470

**CJR**
November 16, 2015 CMS finalizes mandatory lower extremity joint replacement bundles for hospitals in 67 markets

**CMS’s CJR Goals**
- Assess whether bundled payments reduce costs while maintaining, improving quality
- Test bundling in multiple settings with large, diverse group of providers
- Remove selection bias of voluntary programs

**CMS Evolution to Mandatory Bundling**

1. **Acute Care Episode (ACE) Demonstration**
   - 3-years, 5 participants
   - Cardiac, orthopedic DRGs\(^1\) including 469 and 470

2. **BPCI**
   - 2013 – ongoing
   - 48 episodes, includes DRGs 469, 470
   - First year preliminary results available

3. **CJR**

Sources: CMS; Advisory Board research and analysis.

---

\(^1\) Diagnosis-related groups.
About the CJR

- **Mandatory** for hospitals in 67 markets, not for physicians, PAC providers, or BPCI
- **90 day episode** covering hips & knees (DRGs 469 and 470) with risk adjustment for hip fracture and eligible surgical hip/femur fracture treatment (SHFFT) cases (DRGs 480-482)
- Pricing based on mix of hospital and regional benchmarks, shifting to 100% regional by 2019
- **No downside until Year 2** (2017)
- **Composite quality scoring methodology** determines discount level applied
- **Phase in risk and reward**: Maximum upside “stop gain” and downside “stop loss” amounts modified from proposal
- Benchmarks set annually in advance, reimbursed on FFS basis with reconciliation at end of year

CJR by the Numbers

- **5** Years the program covers, 2016-2020
- **788** Expected number of participant hospitals
- **23%** Percent of national LEXJR episodes in the program
- **$438m** Estimate of episodic savings over 5 years

---

1) Lower extremity joint replacement.
2) Inclusive of hip and knee replacement and SHFFT DRGs.

Sources: CMS, Advisory Board research and analysis.
CJR Nearly Demands Coordinated IT Support

**Care Coordination**
- Activate hospital and PAC working relationships
- Curate preferred PAC network
- Track movement of patients

**Quality Reporting**
- Analyze historic performance, CMS uses two-year lookback periods
- Opt to report voluntarily quality measure (Patient-Reported Outcomes [PRO])

**Telemedicine**
- Organize telemedicine initiative, as CMS eased previous restrictions on site of care
- Provide follow-up care at patient’s home

**Business Intelligence**
- Identify high episodic costs and deviations from standard care practices
- Use CMS-supplied data to glean key insights

Source: Advisory Board research and analysis.
Aurora Health Care Quick Facts

- Private not-for-profit integrated health care provider
- 30 counties, 90 communities
- 15 hospitals
- 159 clinics
- 70 retail pharmacies
- 30,000 caregivers - including 1,500 employed physicians
- Largest homecare organization in Wisconsin
- More than 1.2 million unique patients
- 7.8 million patient encounters
- $4.1 billion in annual revenue

Source: Aurora Health Care
Aurora’s Challenges

1. Partial best practice implementation
   EMR functions had not been fully implemented. Vendor-suggested best practice workflows were appropriate, they had not been installed and used.

2. Unable to track CJR patients
   Functionality necessary to track particular CJR patients not available “out of the box.” Staff needed new dashboards to identify and track patients.

3. New workflow challenges
   In order to standardize care processes clinician “favorites” had to be disabled. Required clinician re-training and temporarily disrupted clinical workflow.

4. Care coordination low
   Complex care coordination challenges, particularly with long-term post-acute care providers without an EMR.

Source: Aurora Health Care
Aurora’s Approach to the CJR

**Clinical Variation**
Need: Institute clinical care protocols procedures across the orthopedic service line

**Lengthy Discharge Process**
Need: Reduce discharge delays that lead to increased avoidable costs

**Insufficient Care Coordination**
Need: Improve care coordination with settings that receive Aurora patients

COST DRIVERS:
Knee and Hip Replacement

Source: Aurora Health Care
Aurora’s Guiding Principle

Provider Value Equation

\[ V = \frac{Q + S}{\$} \]

Provider quality defined as:
- Clinical quality outcomes
- Safety
- Service

Provider cost defined as:
- Cost of providing care (direct and indirect)
- What care is provided
- Balance of payment and care model

Source: Aurora Health Care
Goal 1: Reduce Unnecessary Clinical Variation

**Identified orthopedic service line as key decision makers for CDS ownership within Epic EMR**

**Selected physician champions** from across system to lead order set and CDS review and revision

**Achieved consensus** using clinical knowledge management life cycle

Six-month process

Source: Aurora Health Care
Reduce Variation with CJR-Specific CDS

**CDS Knowledge Management Life Cycle**

- **Acquisition**
- **Retirement**
- **Incorporation**
- **Review & Update**

**Sources**: Literature, guidelines, updates from vendors

**Content Selection**: Review for applicability, evidence of positive impact

- Retire Obsolete CDS elements
- Regular review by content owners for currency
- Monitor adherence, overrides
- Update, fine-tune CDS
- Adapt for local environment
- Identify best CDS mechanisms
- Incorporation into workflow

Managing the Clinical Knowledge Life Cycle, The Advisory Board

Sources: Aurora Health Care and Advisory Board research and analysis.
Goal 2: Discharge Before Noon Initiative

Implement Discharge Best Practice
Identify and deploy discharge best practice, use Checklist

Assess Providers
Aggregate scores for all providers, and share feedback

Develop Scorecard
Compile system scores into Hospital Efficiency program scorecard

Follow-up with Key Stakeholders
Conduct follow-up with facility leadership on implementation progress

Source: Aurora Health Care
Goal 3: Care Coordination

Convened Care Transitions Task Force, a multidisciplinary team of clinicians, informatics, and operations experts

Implemented EMR-enabled readmission risk stratification tool, L.A.C.E.¹

Deploy context-based order sets enabled to better coordinate care across the continuum

¹ L = Length of Stay, A = Acuity of admission, C = Charlson Index of co-morbidities, E = Number emergency room visits in prior six months.

Source: Aurora Health Care
Aurora’s Results

Aurora Health Care was successful in their efforts to prepare for the CJR, they:

1. Reconfigured EMR workflow to encourage standard care processes with clinical decision support rules. They also deployed real-time patient dashboards monitored by orthopedic and informatics staff on a daily basis.

2. Instituted processes to improve discharge efficiency.

3. Utilized a special set of community care workers to ensure patients had appropriate follow up visits.

4. Ensured that a risk stratification tool was used during discharge to predict potential readmission risk.

Source: Aurora Health Care
Aurora’s Results

- Reconfigured EMR workflow to encourage standard care processes with CDS.
- Rolled out real-time patient dashboards monitored by orthopedic and informatics staff on a daily basis.
- Deployed a special set of community care workers to ensure patients had appropriate follow up visits.
- Ensured that a risk stratification tool was used during discharge to predict potential readmission risk.
- Improved discharge process efficiency.

Source: Aurora Health Care
Lessons Learned

IT Engagement

Engage clinical quality and finance staff to ensure IT’s “seat at the table,” IT is critical to success in bundles

Key Areas of Focus in CJR

Focus on clinical standardization, discharge processes, and care coordination in order to succeed in the CJR

Be Prepared for Future Bundles

Perform a systems-check on readiness for bundled payments, as more bundles are mandated in the future
Let’s Get Ready to Bundle!

1. Choose your bundles
Evaluate bundled payments that you can participate in. If you have been given mandatory bundles from CMS to work with, look to where your post-acute care spending is out of control.

2. Establish care standards
Health systems need to establish physician teams that will develop consensus-based care standards for the target bundles to reduce treatment variations and create efficiency.

3. Curate your network
Hospitals need to have a curated, narrow network for post-acute care sites (especially look at skilled nursing facilities). Look to CMS data on quality metrics, such as length-of-stay, and then prepare to negotiate with nursing homes.

4. Identify appropriate PAC type
Identify level of post-acute care sites needed for each patient (skilled nursing facility, home health, hospice, long-term acute care hospital, etc.).

# A Summary of How Benefits Were Realized for the Value of Health IT

## Value Area

<table>
<thead>
<tr>
<th>Value Area</th>
<th>Action</th>
<th>Aurora Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment/Clinical</td>
<td>Increase Standardization in Care Process</td>
<td>Implement CDS</td>
</tr>
<tr>
<td>Electronic</td>
<td>Coordinate Care in Post-Acute Settings</td>
<td>Use context-based orders to encourage better coordination</td>
</tr>
<tr>
<td>Information/Data</td>
<td>Assess the Quality and Cost of Care</td>
<td>Reduce episodic spending</td>
</tr>
<tr>
<td>Savings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Value Area Diagram

- **T** - Treatment/Clinical
- **E** - Electronic Information/Data
- **S** - Savings

**Value Area**
- **S** - Satisfaction
- **T** - Treatment/Clinical
- **E** - Electronic Information/Data
- **P** - Patient Engagement and Population Management
- **S** - Savings
Questions

• Our contact information:

  **Russell Hinz**, MS
  Vice President, Health Informatics
  Aurora Health Care
  Email: Russell.Hinz@aurora.org | Twitter: @russhinz | LinkedIn: https://www.linkedin.com/in/russhinz

  **Naomi Levinthal**, MA, MS, CPHIMS
  Practice Manager
  The Advisory Board
  Email: levinthn@advisory.com | LinkedIn: www.linkedin.com/in/naomi-levinthal

• Please complete online session evaluation