Improving Clinical Care Delivery Efficiency and Effectiveness For Value-Based Reimbursement Optimization

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Key Learning Objectives

• How do get from where we are, to where we need to be?
  • Present key approaches to enhance total resource management and revenue alignment
  • Enhance process improvement to reduce waste, decrease variation and improve care
  • Provide acceleration strategies in management of episodes of care and bundled payment
  • Enhance physician engagement techniques in these endeavors
Paradigm Shift Impacts All Providers

CMS State Innovation Models
Funding at the State level to Design and Test new payments models that emphasize value, quality, and controlling cost.

Commercial Bundled Payment Contracts
Over 30 Contracts in 17 states, contracted for bundles focused on multiple areas including Oncology, Orthopedic Surgery, Cardiovascular, and Women’s Health

CMS Health Innovation Awards: Round 2
Focused on New Payment and Delivery Models

Up to $1 Billion in Funding

CMMI Bundled Payment for Care Improvement Initiative
Over 400 Providers in 46 States

CMS Readmission Penalties
Up to 1% of Medicare Revenue is at risk due to 30 day readmissions, for Heart Failure, Pneumonia, and Heart Attack

Employer Bundled Payment Contracts
Multiple contracts across the county including Walmart, Lowes, Kroger, and health systems such as Geisinger, Scott and White, the Mayo Clinic, and others.

Patient Centered Medical Homes
PCMH are being implemented across the country as part of many organizations strive to improve their patient’s health through better coordinated care.

Financial Alignment Initiative to Manage Dual Eligible Beneficiaries
6 States are participating in Capitated Agreements: MA, OH, IL, CA, VA, NY

Comprehensive Primary Care Initiative (CPCI)
There are 497 primary care practices participating in the CPC initiative. This represents 2,347 providers serving an estimated 315,000 Medicare beneficiaries.

Medicare and Commercial ACOs
Currently there are a total of 492 Accountable Care Organizations, both Medicare approved, and with Commercial health Plans.

Sources and Notes:
Centers for Medicare and Medicaid Innovation: http://innovation.cms.gov/
* Congressional Budget Office, staff of Joint Commission on Taxation, May 2013
Rapid Market Expansion
In 5 years, bundled payments will represent 35% of revenue

Health Systems
Average Percentage of Hospital Revenues by 2018

- Fee-for-Service: 38%
- Bundled Payments: 35%
- Capitated or other payments with insurance risk: 27%

The Opportunity: Move The Industry Forward

Scale of 1-10, Readiness Full Effects of Reform & Population Health Mgmt

A few might be a “6, 7 or 8”

Most Providers in the Industry are “3” or “4” on a Scale of 10
Fundamental Challenge – Focusing on Value

Value* = \[
\frac{\text{Health Outcomes Achieved}}{\text{Cost of Achieving Outcomes}}
\]

“...providers that cling to today’s broken system will become dinosaurs. ....Maintaining current cost structures and prices in the face of greater transparency will be untenable”

*Source: Porter & Kaplan – HBR 2011
Porter’s Value Agenda Components

1. Organize into integrated practice units
2. Measure outcomes and costs for every patient
3. Move to bundled payments for care cycles
4. Integrate care delivery across separate facilities
5. Expand excellent services across geography
6. Build an enabling information technology platform
Bridging the Gap Toward Value

Essential Strategies

1. Clinician hospital alignment
2. Quality & patient safety
3. Efficiency through productivity and financial management
4. Integrated information systems
5. Integrate provider networks
6. Engaged employees and physicians
7. Strengthening finances
8. Payer-provider partnerships
9. Scenario-based planning
10. Population health improvement

Organizational culture enables strategy execution

Value-Based

Volume-Based

Source: Adopted from AHA RHEIT
Building Blocks for Cost and Quality Alignment

<table>
<thead>
<tr>
<th>Drive down supply costs</th>
<th>Achieve optimal clinical resource utilization</th>
<th>Capture all reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Leverage contracts to drive down costs of lab, pharma, and clinical supplies</td>
<td>- Use of treatment protocols to drive down costs and LOS</td>
<td>- Ensure accurate coding and documentation</td>
</tr>
<tr>
<td>- Engage physicians to down PPI costs</td>
<td>- Enable provider / physician alignment through episode of care systems</td>
<td>- Drive claims processing speed and accuracy</td>
</tr>
<tr>
<td></td>
<td>- Drive change management and physician support</td>
<td>- Connect full spectrum of providers relating to an episode of care for improved patient outcomes/preparation for bundled payment</td>
</tr>
</tbody>
</table>

Recommend focus on high volume DRGs initially

Combined solution has ability to drive 10%+ margin improvement
Helping to Migrate to the “New World”

**PROBLEM**
But how does a doctor know which treatment to use?

**SOLUTION**
Evidence based care guidelines based on cost and quality data.

**NEW RESULT**
More compliance, lower cost, better quality, better reimbursement.

Past Focus
Remove Outliers

Future Focus
Shift Curve & Reduce Variance
Today – Significant Clinical Variation

Physician Variation
MSDRG 293 – Stage I Congestive Heart Failure

- Example representative of common patient population within ~4,000 U.S. hospitals
- Variable cost of clinical procedure only
- Wide variation of clinical protocols and resources consumed
- Goal: Reduce cost through consistent processes, and improve quality of care
Possible Future: Reduced Clinical Variation

Physician Variation
MSDRG 293 – Stage I Congestive Heart Failure

- IDN/ACO-type model binds all providers and payors to the same economic model
- Significantly lower clinical variation when all providers and payors are “at risk”
- More predictable cost and quality outcomes

Best Practice Scenario

Average Variable Cost

Avg. LOS

160% 200% 240% 280% 320% 360% 400% 440% 480%

$1,200 $1,600 $2,000 $2,400 $2,800 $3,200 $3,600 $4,000 $4,400

MedAssets
Readiness for Value-Based Payment Shift

• To deliver value – must consider core strategies as a whole unit

• Foundational elements
  – patient as “unit of measure”
  – identify “true cost” of care
  – identify “outcomes” associated with “true cost”

• Focus on clinical margin management

• Support ACO philosophy - aligned incentives for more effective coordinated care on high impact services

• Implement an effective and scalable bundled reimbursement system
Do you know your total cost of care?
Episode of Care Reimbursement
Know Best Practices for Implementation of Episode Payments

1) Choose the Right Episode Definition for your Organization
2) Determine the Right Episode Price
3) Identify Potential Savings Opportunities
4) Identify and Eliminate Variation in Services
5) Review Provider Performance, Identify High Performers
6) Manage Care Pathways, Improve Care Coordination
7) Assess Risk and Outliers, Understand the Impact
# Choose the Right Episode Definition

<table>
<thead>
<tr>
<th>Bundle Definition</th>
<th>Operational Parameters</th>
<th>Care Improvement Opportunities</th>
<th>Payment Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Trigger Event</td>
<td>- Clinical Guidelines</td>
<td>- Preventable Complications</td>
<td>- Risk Adjustment</td>
</tr>
<tr>
<td>- Pre-Acute Period</td>
<td>- Provider Attribution</td>
<td>- Preventable ER visits</td>
<td>- Stop-Loss Provisions</td>
</tr>
<tr>
<td>- Start and End</td>
<td>- Quality Measures</td>
<td>- Avoidable Readmissions</td>
<td>- Gain/Risk Sharing</td>
</tr>
<tr>
<td>- Clinically Relevant Services Included</td>
<td>- EBM Protocols</td>
<td>- Clinically Relevant Service Comparison</td>
<td>- Other Adjustments</td>
</tr>
<tr>
<td>- Exclusion Criteria</td>
<td></td>
<td>- Facility Comparison</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provider Comparison</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arkansas Payment Improvement</th>
<th>CMMI Bundled Payment for Care Improvement (Model 2)</th>
<th>MedAssets Proprietary Bundles</th>
<th>MedAssets Chronic Care Episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Methodology</td>
<td>Patient-level budget adjustment</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Share</td>
<td>Based on budget difference, budget specified</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>between patient-level and provider-specific</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>provider-specific budget</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Operational Parameters**

- Clinical Guidelines
- Provider Attribution
- Quality Measures
- EBM Protocols

**Care Improvement Opportunities**

- Preventable Complications
- Preventable ER visits
- Avoidable Readmissions
- Post-Acute Care
- Clinically Relevant Service Comparison
- Facility Comparison
- Provider Comparison

**Payment Methodology**

- Risk Adjustment
- Stop-Loss Provisions
- Gain/Risk Sharing
- Other Adjustments
Sample Risk Exposure due to Inclusion Criteria of Bundled Definitions

Risk Exposure Per Episode

Bundled Definitions and Pricing Drive Exposure Risk
Understand Your Readmission Exposure

Examples of the Exposure within the CMMI BPCI Episode Definitions

### Pneumonia  Mean Episode Payment: $17,278

<table>
<thead>
<tr>
<th>Admission Date</th>
<th>Discharge Date</th>
<th>MS-DRG Description</th>
<th>Claim Payment</th>
<th>Percent of Mean Episode Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/20/2009</td>
<td>05/22/2009</td>
<td>RENAL FAILURE W MCC</td>
<td>$41,589</td>
<td>241%</td>
</tr>
<tr>
<td>08/28/2009</td>
<td>09/21/2009</td>
<td>SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC</td>
<td>$36,566</td>
<td>212%</td>
</tr>
<tr>
<td>04/05/2009</td>
<td>04/21/2009</td>
<td>MAJOR GASTROINTESTINAL DISORDERS &amp; PERITONEAL INFECTIONS W MCC</td>
<td>$34,894</td>
<td>202%</td>
</tr>
<tr>
<td>05/22/2009</td>
<td>07/02/2009</td>
<td>INFECTIOUS &amp; PARASITIC DISEASES W O.R. PROCEDURE W MCC</td>
<td>$33,125</td>
<td>192%</td>
</tr>
<tr>
<td>05/19/2009</td>
<td>06/23/2009</td>
<td>PSYCHOSES</td>
<td>$27,731</td>
<td>160%</td>
</tr>
<tr>
<td>02/13/2009</td>
<td>03/02/2009</td>
<td>INFECTIOUS &amp; PARASITIC DISEASES W O.R. PROCEDURE W MCC</td>
<td>$27,304</td>
<td>158%</td>
</tr>
</tbody>
</table>

### Congestive Heart Failure  Mean Episode Payment: $18,546

<table>
<thead>
<tr>
<th>Admission Date</th>
<th>Discharge Date</th>
<th>MS-DRG Description</th>
<th>Claim Payment</th>
<th>% of Mean Episode Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/13/2009</td>
<td>03/12/2009</td>
<td>ECMO OR TRACH W MV 96+ HRS OR PDX EXC FACE, MOUTH &amp; NECK W MAJ O.R.</td>
<td>$78,019</td>
<td>421%</td>
</tr>
<tr>
<td>04/14/2009</td>
<td>05/30/2009</td>
<td>EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC</td>
<td>$44,564</td>
<td>240%</td>
</tr>
<tr>
<td>02/27/2009</td>
<td>03/12/2009</td>
<td>INFECTIOUS &amp; PARASITIC DISEASES W O.R. PROCEDURE W MCC</td>
<td>$43,640</td>
<td>235%</td>
</tr>
<tr>
<td>06/19/2009</td>
<td>07/03/2009</td>
<td>SEPTICEMIA OR SEVERE SEPSIS W MV 96+ HOURS</td>
<td>$37,169</td>
<td>200%</td>
</tr>
<tr>
<td>04/24/2009</td>
<td>05/13/2009</td>
<td>INFECTIOUS &amp; PARASITIC DISEASES W O.R. PROCEDURE W MCC</td>
<td>$32,446</td>
<td>175%</td>
</tr>
<tr>
<td>03/22/2009</td>
<td>04/06/2009</td>
<td>EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC</td>
<td>$32,213</td>
<td>174%</td>
</tr>
</tbody>
</table>
# A Comprehensive Approach to Chronic Episode Management

<table>
<thead>
<tr>
<th>Index Conditions</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Failure</td>
<td>Major circulatory system conditions that require long term care. These conditions share common risk factors and similar management.</td>
</tr>
<tr>
<td>Ischemic Heart Disease</td>
<td></td>
</tr>
<tr>
<td>Stroke/Transient Ischemic Attack</td>
<td></td>
</tr>
<tr>
<td>Peripheral Artery Disease</td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>Prevalent disorder and one of the important risk factors for circulatory diseases. E.g. Diabetes cited as a major cause for heart disease and stroke. Requires significant clinical coordination with other circulatory diseases.</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
</tr>
</tbody>
</table>

### Prevalence of Chronic Conditions in Medicare Beneficiaries, 2011

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>31%</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>46%</td>
</tr>
<tr>
<td>Ischemic Heart Disease</td>
<td>28%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>28%</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>16%</td>
</tr>
<tr>
<td>Depression</td>
<td>15%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>15%</td>
</tr>
<tr>
<td>COPD</td>
<td>12%</td>
</tr>
<tr>
<td>Cancer</td>
<td>8%</td>
</tr>
<tr>
<td>Asthma</td>
<td>5%</td>
</tr>
<tr>
<td>Stroke</td>
<td>4%</td>
</tr>
</tbody>
</table>

### National Per Capita Spending for Dual Eligibles by Number of Chronic Conditions, 2011

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Non-Dual Eligibles</th>
<th>Dual Eligibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 1</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>2 to 3</td>
<td>$5,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>4 to 5</td>
<td>$15,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>6 or more</td>
<td>$25,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>7 or more</td>
<td>$35,000</td>
<td>$40,000</td>
</tr>
</tbody>
</table>
Identify Care Improvement and Potential Savings Opportunities

Setting Clinical and Financial Benchmarks

Gold Standard Patient

- Facility specific data- Compare within your own patient population.
  - Identify the Patients with the best outcomes, aka: The Gold Standard Patients
  - Compares patient population to the Gold Standard
  - Calculate the difference in reimbursement as the savings opportunity

Gold Standard Physician

- Facility specific data- Compare within your own provider population.
  - Identify the Physicians with the Best Outcomes aka: The Gold Standard Physicians
  - Compare physician population to the Gold Standard physicians
  - Calculate the difference in reimbursement as the potential savings opportunity, based on physicians performing at the benchmark (Best) physicians
## Core Metrics in the New Paradigm

### Old KPIs
- Average Daily Census
- ALOS
- Patient Days
- Cost per patient day
- Occupancy Rate
- Support staff cost per physician
- Average revenue per bed
- Average case load per physician FTE

### New KPIs
- Number of episodes
- LOS by episode
- Variance in budget to episode
- Average profit per episode
- Cost per episode
- Physician ranking per episode
- Preventable Complication Rates
- Preventable Readmissions
- Preventable ER Visits

### DRGs
- Based on grouping for single inpatient stay
- Reward cost avoidance
- Reward shifting to post-acute setting
- Insensitive to health status impacts
- No incentive to coordinate care after discharge
- Not patient centric

### Episodes
- Based on the time span that includes the complete case/episode
- Reward outcome improvement by reducing preventable complications
- Consider care rendered in all settings to control total case cost
- Based on clinical guidelines
- Foster care coordination among providers
- Patient and outcome centered
Are you participating in CMMI’s BPCI Program?
A Sample Transitional Strategy - From FFS to Risk Based Reimbursement

**FFS**
- Reduce complications in acute care
- Reduce LOS and ensures high patient volume management
- Identify care redesign initiatives
- Physician Engagement - Identify high performance physicians

**Phase 1**
Acute Episode Contracts Activated
- Select high savings areas, acute only. e.g. Colon resection, Hysterectomy, COPD
- Align all physicians to 50% Performance Benchmark
- Activate care redesign initiatives

**Phase 2**
- Expand clinical areas
- Align physicians to top 20% benchmark.
- Expand clinical imp initiatives
- Identify high performance post-acute care facilities and partners
- Identify care redesign initiatives for post acute care

**Phase 3**
- Acute Episode Contracts Expanded
- Post-Acute Contracts Activate
- Expand market share, contract with additional Payors
- Activate post-acute care improvement initiatives
- Move high performance care management outside your organization

**FFS**
- Reduce complications in acute care
- Reduce LOS and ensures high patient volume management
- Identify care redesign initiatives
- Physician Engagement - Identify high performance physicians
Understand Systemic Areas to Improve Patient Care, Across Multiple Episodes

- Understand how claims would look under a value based model.

- Evaluate preventable complications, ER Utilization rates, avoidable readmissions, and mortality rates within each episode. Identify when these events occur, during the acute, and which section of the post acute phase. Understand the care setting in which these events occur, and which have better care outcomes.

- Evaluate patterns of preventable complications that occur within the acute phase across multiple episodes- signaling a systemic improvement opportunity.

- Quantify the achievable savings opportunity for each episode.

- Understand the variation of payments within each episode, identify outliers to standardize care delivery.

- Partner with your Providers to develop best care practices to reduce variation in care.
Identify which physicians are performing best based on key criteria such as low complication and readmission rates, mortality rates, and ER utilization.

These Providers are your key Change Agents.

It is important under a episodic reimbursement model to identify these high performing physicians to develop standardized best practices, and align poor performing providers to shadow and learn from these high achievers.

Under an episode of care, it is recommended that organization align care practices within their physicians, and provide standard care protocols to help eliminate variation in care outcomes and cost.
Understand Your Readmission Exposure
Acute Myocardial Infarction (AMI) Outlier Example

Post-Acute Care Revenue at Risk: $95,733

May 1st, 2011
Patient is discharged from their Acute Stay, for AMI Episode

Base DRG Payment for MS-DRG 281= $5,872
Episode Payment, to cover both the acute and post acute care = $22,178

May 16th, 2011
Patient is readmitted to another facility, Facility B, outside the index facility for a related diagnosis. The index facility has no control over the care provided to their patient.

The $8,177 that would be paid under a FFS model is now included in the bundled payment amount, not separately reimbursed.

May 29th, 2011
The next day, the patient is readmitted back to the index facility for a related diagnosis.

The $4,855 that would be paid under a FFS model is now included in the bundled payment amount, not separately reimbursed.

July 2nd, 2011
Patient is readmitted again, back to Facility B, not the index facility. Again, the index facility has no control over the care provided to their patient. Patient is discharged the next day.

The $2,641 that would be paid under a FFS model is now included in the bundled payment amount, not separately reimbursed.

July 3rd, 2011
Later that same day, the Patient is readmitted again, back to the index facility.

This time, this patient stays in the index facility for almost a month. The claim payment of $80,060 that would have been paid under a FFS model, is considered included under a bundled payment.

Note: Episode Payment amount includes the acute and post-acute care, for both the facility and the professional claims. The FFS amounts used in this example only include the facility claim payment amounts.
Patient trajectories: Highlight Readmission Exposure Risk by Facility

Mean Payment and Patient Readmission by Facility

- Facility Name
- Mean Payment
- Patient Count

- Facility A: $5,617
- Facility B: $7,394
- Facility C: $6,511
- Facility D: $7,101
- Facility E: $5,707
- Facility F: $5,121
- Facility G: $5,707

Index: $5,617

Mean Payment
Patient Count
Identify variations in post-acute care: Creates the right partnerships for success
Are you delivering Value to patients?
Improving the Delivery of Patient Care
What Does Lean Do?

• Lean is an approach:
  – For evaluating and designing care that provides the Patient exactly what they want when they want it, defect free for the least cost.

• How does it do that?
  – By assessing current work flows in their ability to provide value to the patient, identifying the inefficiencies and eliminating them.

Lean is about making the right work easier to do.
The Fundamental Concept of Lean

Patient and Customer Focused

- Giving Treatment
- Doing the Surgery
- Providing Education and Information
- Helping them with choices

Value-Added

Non-Value Added

- Searching for meds
- Waiting for OR to be cleaned
- Entering duplicate information
- Unnecessary use of materials or services
The 8 Faces of Waste

Everything the organization does needs to be treated as a process that serves the patient/customer.

Steps that don’t directly provide better care to the patient/customer must be considered Non-Value added or WASTE!

• **Defects**
• **Over-Production**
• **Waiting**
• **Not Clear (Confusion)**
• **Transporting**
• **Inventory**
• **Motion**
• **Excess Processing**

RN Time Distribution

- Direct Patient Care 19%
- Indirect Patient Care 24%
- Regulatory 12%
- Waste 45%
The Construct for Improving Care

A3 Process
Follows
Scientific
Method

Problem
Cause
Solution
Action
Measurement

Similar To Healthcare
Familiar
PDCA
Build in Reliability

Lean is about knowing normal from abnormal right now and responding right now

Adapted from slide by John Shook: U. Michigan
Efficiency and Predictability
Large Academic Medical Center in Philadelphia

Joint Replacement - LOS

Start of Lean Initiatives

HIP ALOS  KNEE ALOS
The Problem: Unnecessary COPD Hospitalizations

MD gives patient prescription for inhaler, but no training

Patient is discharged without training in use of inhaler

Patient gets inhaler from pharmacy, but no training

Patient fails to use inhaler properly, leading to hospitalization

Patient is treated with nebulizer during hospital stay

Patient is discharged without training in use of inhaler
Improving Quality Metrics
PA Urban Medical Center (NFP)

Reduction in COPD Readmissions
(After Implementation)

Before: 12.4%
After: 6.4%

48% decrease in readmissions (sustained and improving)
Physician Engagement Framework

Finding Common Ground & Shared Purpose

Find the Opportunity for The Mutual Exchange of Value

A Partnership

Respect Physicians Time

Provide Good Data & Respectful Feedback
How to Contact MedAssets for Additional Information

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