The New World of Value Driven Cardiac Care

Susan Nedza MD, MBA FACEP
Disclosures

MPA Healthcare Solutions is an analytic health care consultancy that provides clients with insight into clinical performance; aids them in the evaluation, implementation, and operation of alternative payment models; and supports strategic decision-making throughout the continuum of care.

Clients include hospitals, federal government agencies, physician groups, pharmaceutical industry, and state government agencies. I will not be making any endorsements or speaking about products or services during this presentation.
Objectives

- Discuss the transformation from FFS to value based care
- Define Emergency Medicine in value based models
- Discuss Alternative Payment Models (APMs)
- Review the CMS proposed bundled payment models
- Discuss potential impact on Cardiac Care Models
- Strategic considerations
The Transformation from FFS to Value Based Care
Medicare’s goal to transform payment models (FFS)

- **Move to Alternate Payment Models (ACO or Bundled Payments)**
  - 30% will be through these models by the end of 2016
  - 50% will be tied to these models by the end of 2018

- **Hospital Value Based Purchasing and Hospital Readmissions Reductions Programs**
  - 85% will be tied to these programs by 2016
  - 90% will be tied to these programs by 2018

CMS transition to “value”

Target percentage of Medicare FFS payments linked to quality and alternative payment models in 2016 and 2018

- All Medicare FFS (Categories 1-4)
- FFS linked to quality (Categories 2-4)
- Alternative payment models (Categories 3-4)

- 2016:
  - 30% All Medicare FFS
  - 85% FFS linked to quality
  - 5% Alternative payment models

- 2018:
  - 50% All Medicare FFS
  - 90% FFS linked to quality
  - 10% Alternative payment models

CMS trying to make each provider accountable for total $ spend

Medicare Expenditures (billions), 2014

Value-based purchasing programs

Medicare's Quality-Incentive Programs Leading up to Hospital Value-Based Purchasing, as Compared with Those before the Launch of the Physician Value-Based Payment Modifier

Emergency Medicine in Value Based Models
What is the issue?
The roll of emergency medicine is changing

- Front door to the hospital
- Revenue generation
- Isolated decision making unit
- FFS payment from health insurer (Medicare, Medicaid, private payer, uninsured)
- Path back to the community
- Cost center
- Integrated decision making unit
- Value-based payments from risk-bearing entity
- Shared savings models for cost of care savings
Important concepts: the role of emergency care

Alternative payment models (APMs) are about **financial risk**

The ED is a **cost center** under these scenarios

The opportunity is to **align with accountable entities** to drive cost savings

All APMs--bundles, ACOs, MSSP, PCMH--focus on cost, but **most savings go to the payer**

A great deal of **ED services occur at hospitals** other than the one that is the accountable entity
Types of care we provide

- Prevention
- Unscheduled
- Diagnostic
- Chronic
- Acute
- Episodic
- Hospice
Risk-bearing in emergency care: It is not just clinical any more.
Is this where risk occurs?
Is this where risk occurs?
Or is this?
Or is this?

Or this?
Alternative Payment Models
Alternative payment models
(Commercial, Medicare, Medicaid, Medicare Advantage)

**Alternative Payment Models (APM) Framework**

**Category 1**
Fee for Service – No Link to Quality & Value

**Category 2**
Fee for Service – Link to Quality & Value
- **A** – Foundational Payments for Infrastructure & Operations
- **B** – Pay for Reporting
- **C** – Rewards for Performance
- **D** – Rewards and Penalties for Performance

**Category 3**
APMs Built on Fee-for-Service Architecture
- **A** – APMs with Upside Gainsharing
- **B** – APMs with Upside Gainsharing/Downside Risk

**Category 4**
Population-Based Payment
- **A** – Condition-Specific Population-Based Payment
- **B** – Comprehensive Population-Based Payment

Medicare enrollment is trending towards managed care

70% Traditional Medicare
30% Medicare Advantage (>16 million)
Acute care: the facts

Acute care is common

1/3rd of all patient encounters
*(Health Aff, 2010)*

EDs admitted over 80% of unscheduled hospital admissions

65% increase from 2000 to 2009
*(Med Care, 2013)*

Large portion of US health spending is attributed to acute care

Emergency Medicine services account for 6% of Medicare Part B spending, $2.3 billion per year
*(NEJM, 2015)*
APMs reward entities that balance quality and efficiency (cost)—managing resource utilization is critical

A balanced approach

Effective

Efficient

MAKE GIFS AT GIFSOUP.COM
Reduce acute care costs

1. Decrease avoidable emergency care costs
   - Decrease inappropriate utilization
   - Improve diagnostic accuracy
   - Decrease unnecessary variability

2. Reduce avoidable hospitalizations

3. Prevent prolonged stay (ICU)

4. Reduce avoidable ED visits
Bundled Payments
What is a bundle?

A single payment to cover the entire **episode of care** from a period of time prior to admission through a defined period of time following discharge.

Payment covers both routine care and care of complications*.

*with certain exclusions and may include costs 3 days prior to admission.

Prior to Hospitalization:
- $ Outpatient services
- $ Professional costs

Entire Hospitalization:
- $ Hospital costs
- $ Professional costs

Post-discharge care:
- $ Post-acute care
- $ Professional costs
- $ Hospital costs (readmissions)
- $ ED costs
## Episode of care payments: bundled payments

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic care: capitation of PCMH</td>
<td>Risk bearing PCMH for populations</td>
</tr>
<tr>
<td>Elective care</td>
<td>Maternity or joint replacement</td>
</tr>
<tr>
<td>Treatment episode</td>
<td>Cancer care</td>
</tr>
<tr>
<td>Comprehensive episode</td>
<td>CHF, appendicitis, PCTA, maternity</td>
</tr>
<tr>
<td>Unscheduled and acute care</td>
<td>Rapid diagnosis and management</td>
</tr>
</tbody>
</table>
CJR and other bundles include a comprehensive list of services

- Physicians’ services
- Inpatient hospitalization
- Inpatient hospital readmission
- Ambulance Services
- Long-term care hospital
- Skilled nursing facility
- Home health agency
- Hospital outpatient services
- Outpatient therapy
- Clinical laboratory
- DME
- Part B drugs and biologicals
- Hospice
- PBPM payments (CMMI)
First CMS mandatory bundle: Comprehensive Care for Joint Replacement (CJR) Program

**Goal:** Reduce CMS $7 billion annual spend on lower extremity joint replacement

Over 800 hospitals began mandatory participation on April 1, 2016

The bundle must include all related care within 90 days of discharge, including ED visits

Total expenditures for both Part A and B (with few exceptions) will be compared to the Medicare target episode price
An acknowledgement
An APM Example: Emergency Care within a Bundled Payment Model
Analysis of a Medicare joint replacement population*

Retrospective case study using CMS MEDPAR and outpatient research identifiable (RIF) data for the state of Texas, 2011-2012

Total Joint Replacement

- Cases qualified when index claim was coded as MS-DRG 466-470
- Enrolled in Fee for Service (FFS) Medicare for 30 days prior to index claim and 90 days afterward

Patients

- Medicare FFS Beneficiaries
- Age 65 or older
- Medicare primary payer
- No ESRD

* The population represents a subset of potential covered beneficiaries in CJR.
Frequency of 90-day postdischarge ED visits

<table>
<thead>
<tr>
<th>Total Hip Replacement</th>
<th>Total Knee Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total eligible patients</td>
<td>18,719</td>
</tr>
<tr>
<td>Patients discharged live*</td>
<td>18,473</td>
</tr>
<tr>
<td>Patients with an ED visit</td>
<td>4,167 (22.6%)</td>
</tr>
<tr>
<td>Total ED visits</td>
<td>5,775</td>
</tr>
</tbody>
</table>

* 246 patients (1.3%) died during inpatient stay

<table>
<thead>
<tr>
<th>Total Hip Replacement</th>
<th>Total Knee Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total eligible patients</td>
<td>30,386</td>
</tr>
<tr>
<td>Patients discharged live*</td>
<td>30,361</td>
</tr>
<tr>
<td>Patients with an ED visit</td>
<td>4,653 (15.3%)</td>
</tr>
<tr>
<td>Total ED visits</td>
<td>6,044</td>
</tr>
</tbody>
</table>

* 25 patients (0.01%) died during inpatient stay

Source: MPA analysis of CMS RIF data for the state of Texas (2011-2012)
Variation in selected ED discharge disposition

### Total Hip Replacement

<table>
<thead>
<tr>
<th>Disposition</th>
<th>% ED claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharged home</td>
<td>43.5%</td>
</tr>
<tr>
<td>Admitted</td>
<td>45.1%</td>
</tr>
<tr>
<td>Observation stay</td>
<td>5.8%</td>
</tr>
<tr>
<td>Transferred</td>
<td>3.2%</td>
</tr>
<tr>
<td>Discharged to SNF</td>
<td>1.4%</td>
</tr>
<tr>
<td>Died</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

### Total Knee Replacement

<table>
<thead>
<tr>
<th>Disposition</th>
<th>% ED claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharged home</td>
<td>59.1%</td>
</tr>
<tr>
<td>Admitted</td>
<td>30.3%</td>
</tr>
<tr>
<td>Observation stay</td>
<td>7.3%</td>
</tr>
<tr>
<td>Transferred</td>
<td>2.5%</td>
</tr>
<tr>
<td>Discharged to SNF</td>
<td>0.5%</td>
</tr>
<tr>
<td>Died</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: MPA analysis of CMS RIF data for the state of Texas (2011-2012)
## ED visits by procedure

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Total episodes</th>
<th>Episodes with ED visits</th>
<th>Total ED visits</th>
<th>ED visits to a different facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective Hip Replacement</td>
<td>218</td>
<td>54 (24.8%)</td>
<td>81</td>
<td>27 (33.3%)</td>
</tr>
<tr>
<td>Hip Replacement with Fracture</td>
<td>205</td>
<td>67 (32.7%)</td>
<td>106</td>
<td>24 (22.6%)</td>
</tr>
<tr>
<td>Knee Replacement</td>
<td>376</td>
<td>76 (20.2%)</td>
<td>102</td>
<td>29 (28.4%)</td>
</tr>
</tbody>
</table>

*Source: MPA analysis of CMS RIF data for the state of Texas (2011-2012)*
Variation in discharge diagnoses for ED visits in the first 7 days

<table>
<thead>
<tr>
<th>ICD-9 Discharge Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elective Hip Replacement</strong></td>
</tr>
<tr>
<td>486: Pneumonia- organism NOS</td>
</tr>
<tr>
<td>99642: Dislocate prosthetic joint</td>
</tr>
<tr>
<td>0389 : Septicemia NOS</td>
</tr>
<tr>
<td>V5481: Aftercare following joint replacement</td>
</tr>
<tr>
<td>99812: Hematoma proc cx</td>
</tr>
<tr>
<td><strong>Hip Replacement with Fracture</strong></td>
</tr>
<tr>
<td>99642: Dislocate prosthetic joint</td>
</tr>
<tr>
<td>2859 : Anemia NOS</td>
</tr>
<tr>
<td>78060: Fever NOS</td>
</tr>
<tr>
<td>5990 : Urinary tract infection NOS</td>
</tr>
<tr>
<td>5070 : Food/vomit pneumonitis</td>
</tr>
<tr>
<td><strong>Knee Replacement</strong></td>
</tr>
<tr>
<td>2859 : Anemia NOS</td>
</tr>
<tr>
<td>7802 : Syncope and collapse</td>
</tr>
<tr>
<td>7295 : Pain in limb</td>
</tr>
<tr>
<td>7823 : Edema</td>
</tr>
<tr>
<td>99812: Hematoma proc cx</td>
</tr>
</tbody>
</table>
Study captures variations in cost based upon discharge disposition

11,819 ED visits occurred within 90 days of discharge for over 280 diagnoses.

4,773 readmissions (40.4% of visits) occurred to either the same hospital or another hospital within 90 days.

778 visits (6.6%) resulted in an observation stay:
- $605 for hip replacement
- $487 for knee replacement

For admitted patients, the average allowed ED related Part B charges following procedure were:
- $1,980 for hip replacement, and
- $1,547 for knee replacement cases.

For patients discharged home, the average allowed Part B charges following the procedure was:
- $402 for hip replacement, and
- $240 for knee replacement cases.

1,958 (14.5%) of visits to the ED occurred within the first 7 days after discharge.

Of these 610 patients (31.2%) had 2 or more visits to the ED during this time period.

Emergency Department visits are common following joint replacement

Source: MPA analysis of CMS RIF data for the state of Texas (2011-2012)
Non-professional component*

<table>
<thead>
<tr>
<th>Index procedure</th>
<th>Admitted*</th>
<th>Observation stay</th>
<th>Discharged home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hip replacement</td>
<td>$2250</td>
<td>$631</td>
<td>$260</td>
</tr>
<tr>
<td>Knee replacement</td>
<td>$2164</td>
<td>$646</td>
<td>$216</td>
</tr>
</tbody>
</table>

*Includes facility and services such as radiology

Source: MPA analysis of CMS RIF data for the state of Texas (2011-2012)
Impact on Cardiac Care Models
Bundled payments: cost shifting or care innovation?

Initial results of CMMI Bundled Care Payment Initiative (BCPI) - Joint Replacement

- Shortened length of stay
- Move from SNF to home health*
- Cost of device is a driver of overall episode costs
- Savings driven off discounted rate based upon prior services
The **AMI model** would waive the SNF 3-day rule for coverage of a SNF stay following the anchor hospitalization beginning in performance year 2.

Beneficiaries discharged pursuant to the waiver must be admitted to SNFs rated 3-stars or higher on the CMS Nursing Home Compare website.

Beneficiaries **must NOT** be discharged prematurely to SNFs, and they must be able to exercise their freedom of choice without patient steering.
What are the new proposed bundles?

The new EPMs would test bundled payments for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) and surgical hip and femur fracture treatment (SHFFT) across a broad cross-section of hospitals.

The new CR Incentive Payment model would test incentive payments to increase utilization of CR services for AMI and CABG patients, both alongside the AMI and CABG EPMs as well as in conjunction with traditional fee for service (FFS) Medicare payments.

These payment models would be implemented through rulemaking, and the performance periods would begin on July 1, 2017 and continue through December 31, 2021 (5 performance years).
EPM episode definition: episode initiation

Episodes would be initiated by hospitalizations of eligible Medicare beneficiaries **discharged with specified MS-DRGs:**

<table>
<thead>
<tr>
<th>AMI (AMI MS-DRGs: 280-282 &amp; PCI MS-DRGs: 246-251 with AM ICD-CM diagnosis code)</th>
<th>CABG (MS-DRGs: 231-236)</th>
<th>SHFFT (MS-DRGs: 480-482)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• IPPS admissions for AMI treated medically or with revascularization via percutaneous coronary intervention (PCI)</td>
<td>• IPPS admissions for surgical coronary revascularization irrespective of AMI diagnosis</td>
<td>• IPPS admissions for hip/femur fracture fixation, other than joint replacement</td>
</tr>
</tbody>
</table>
Acute MI: transport and transfer options

AMI with subsequent CABG during the same hospitalization
- Emergency Department management
- Decision making between cardiologist and CV surgeon regarding patient selection for CABG

Transfer to another facility for management (AMI or CABG)*
- From one system hospital to another
- From an outside hospital to another

Readmission after medical management of an AMI (readmission for CABG)
- Admitted to the same hospital where initial care was provided
- Admitted to a different hospital for CABG

Readmission for PCI is considered a complication of care.

Readmission for CABG is considered an appropriate clinical pathway for some patients

* Each hospital will have its own CMS Target Prices
Strategic considerations

- Hospital systems may change focus cardiac care at certain facilities based upon different hospital target prices.
- Will hospitals continue programs that are designed to attract these patients?
- How will these delivery models impact the ED relationship with skilled nursing facilities?
Strategic Considerations
Expanded scope

Alternative Routes
Giving emergency responders the flexibility to manage less-urgent 911 calls without taking patients to hospital emergency departments could generate substantial savings for Medicare, according to estimates from a Rand Corp. study.

<table>
<thead>
<tr>
<th>15.6%</th>
<th>$1 billion</th>
<th>$560 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portion of all Medicare-covered ambulance rides for patients whose conditions are not urgent or could be treated by primary-care providers</td>
<td>What Medicare spends annually on EMS and emergency-department costs for 911 patients who potentially could be treated outside of the hospital</td>
<td>Annual savings if some lower-level 911 cases were managed in less-expensive settings</td>
</tr>
</tbody>
</table>

Source: Health Affairs, 2013

THE WALL STREET JOURNAL.
EPM program rule waivers: home visits

The **EPMs would waive the “incident to” rule** for physician services.

Allows the licensed clinical staff of a physician to **furnish a home visit in the beneficiary’s home**.

Permitted only **for beneficiaries who do not qualify for Medicare coverage of home health services**.

Waiver **allows a maximum of 13 visits during an AMI model episode and 9 visits during a CABG or SHFFT model episode**, billed under the Physician Fee Schedule using a HCPCS code created specifically for the models.
**EPM program rule waivers: telehealth**

- **Waives the geographic site requirement** and the originating site requirement for telehealth services to permit telehealth visits to originate in the beneficiary’s home or place of residence.

- Telehealth visits under the waiver cannot be a substitute for in-person home health services paid under the home health prospective payment system.

- Requires all telehealth services to be furnished in accordance with all other Medicare coverage and payment criteria.

- The facility fee paid by Medicare to an originating site for a telehealth service is waived if the service was originated in the beneficiary’s home.
Preparation for CMS cardiac EPMs

- Identify hospitals in your systems that are participating in these programs
- **Determine the frequency of EMS services for chest pain**
- Determine EMS utilization of patients 90-days post-discharge for AMI or CABG
- Determine the number of cases that might potentially have been diverted away from one of these facilities
- Begin local conversations regarding the value EMS services bring to bundled payment initiatives
Thank you

Susan M Nedza MD, MBA FACEP
Senior Vice President
Clinical Outcomes
MPA Healthcare Solutions
snedza@consultmpa.com