



Capturing the Value Proposition: Repositioning hospital service lines

October 20, 2016

Agenda

Repositioning for the New Value Proposition: Total Cost of Care

A Health System Case Study

Actions to Align with Strategy

What is Total Cost of Care (“TCC”)?

Total Cost of Care – “the inclusive payments for the comprehensive basket of health care services utilized by a patient or a population.”

- CMMI



Components of Care Pathway

Diagnosis & Evaluation

Treatment

Follow-up & Readmission

Outpatient Drugs

TCC analytics enables a health system to identify multiple actions to expand margin



**Market Share
Improvement**



**Diagnosis-specific
Revenue Leakage**



**Market Value
Differentiation**



**Clinical Care
Optimization**

Enabled with Claims Data and Analytics

Those opportunities exist across multiple service lines

Sample of Health System Objectives by Service Line	
Service Line	Objective
Orthopedic Surgery / Physical Therapy	<ul style="list-style-type: none"> ■ Understand the leakage of follow-up physical therapy patients post discharge for orthopedic surgeries
Tertiary Pediatrics	<ul style="list-style-type: none"> ■ Define the value of post-discharge protocols to commercial payers in order to increase admissions as a destination quality provider
Total Joints	<ul style="list-style-type: none"> ■ Define the value of process of care and reallocate health system resources to match highest in-System performance and create rate capacity in value-based arrangement
Spinal Procedures	<ul style="list-style-type: none"> ■ Develop performance improvement initiatives to lower length of stay and reduce ancillary testing
Total Joints	<ul style="list-style-type: none"> ■ Identify highest performing partners in post-acute settings before entering into value-based arrangement
Sleep Services	<ul style="list-style-type: none"> ■ Identify populations within ACO that would benefit from sleep services and create shared savings
Stroke	<ul style="list-style-type: none"> ■ Create tele-stroke program with local community hospitals to create a network for tertiary admissions

TCC analytics impacts 5 important elements of provider operations

1 Growing Market Share

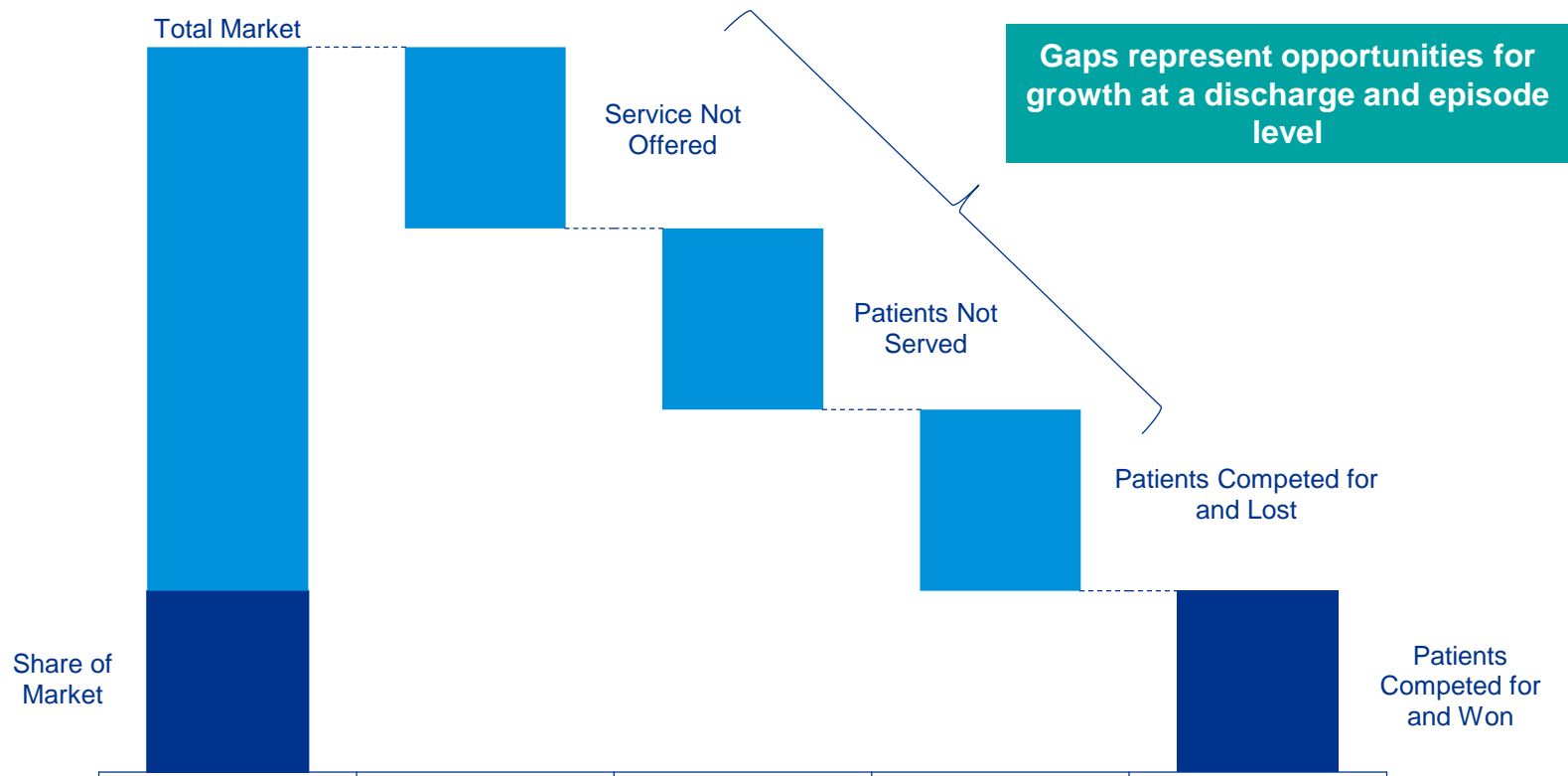
2 Revenue Generation

3 Reducing Cost

4 Expanding Margin

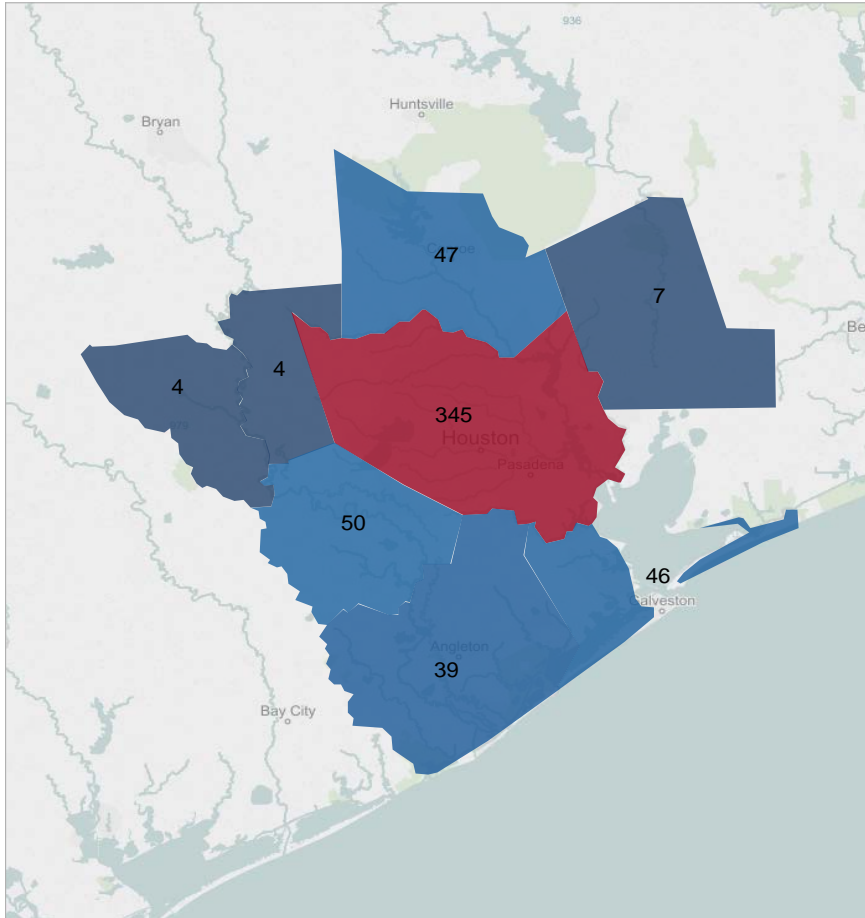
5 Enhancing Outcomes

Understand where your hospital is positioned in the market from a longitudinal perspective

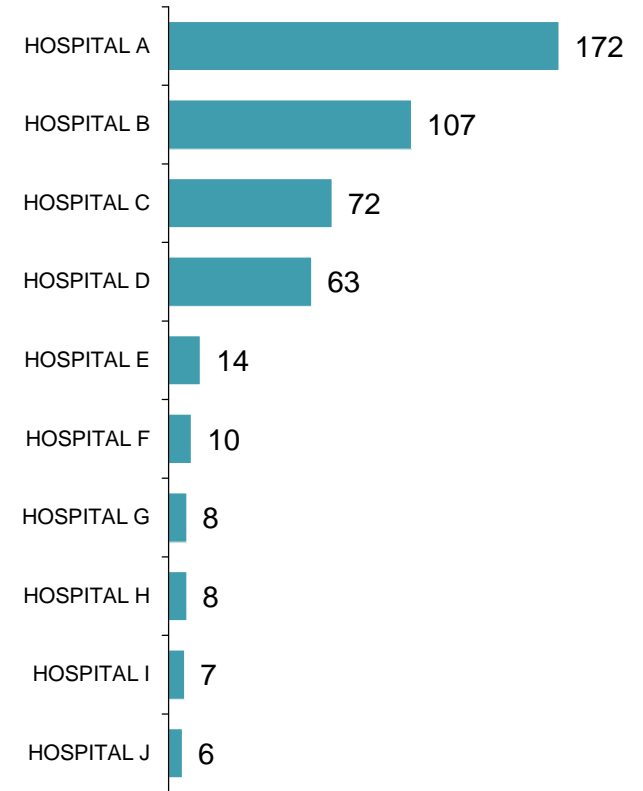


Source: Kenichi Ohmae, *The Mind of the Strategist – Business Planning for Competitive Advantage*.

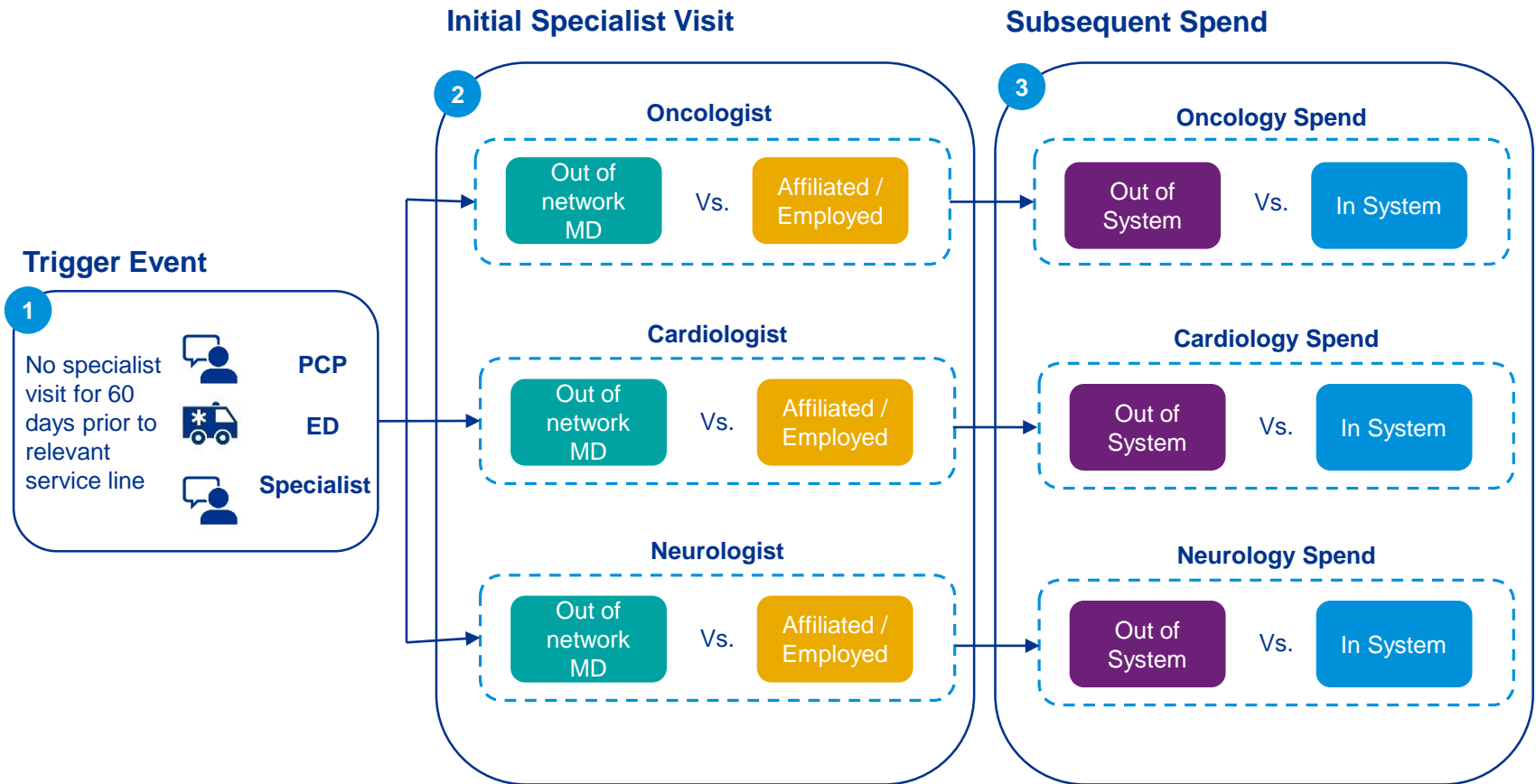
Growth in volume still drives hospital profitability



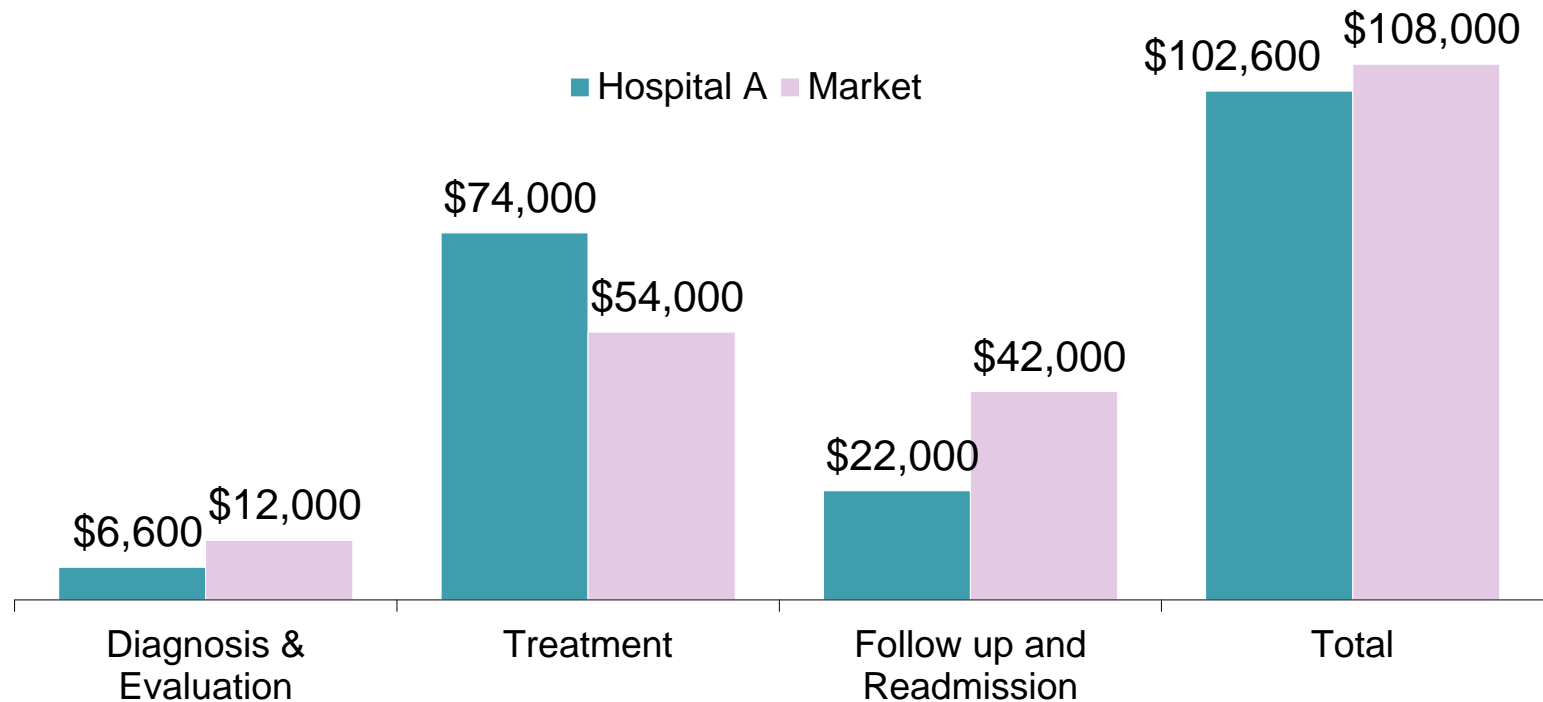
**Top 10 Hospitals with Craniotomy Discharges
CY 2013 – CY 2014**



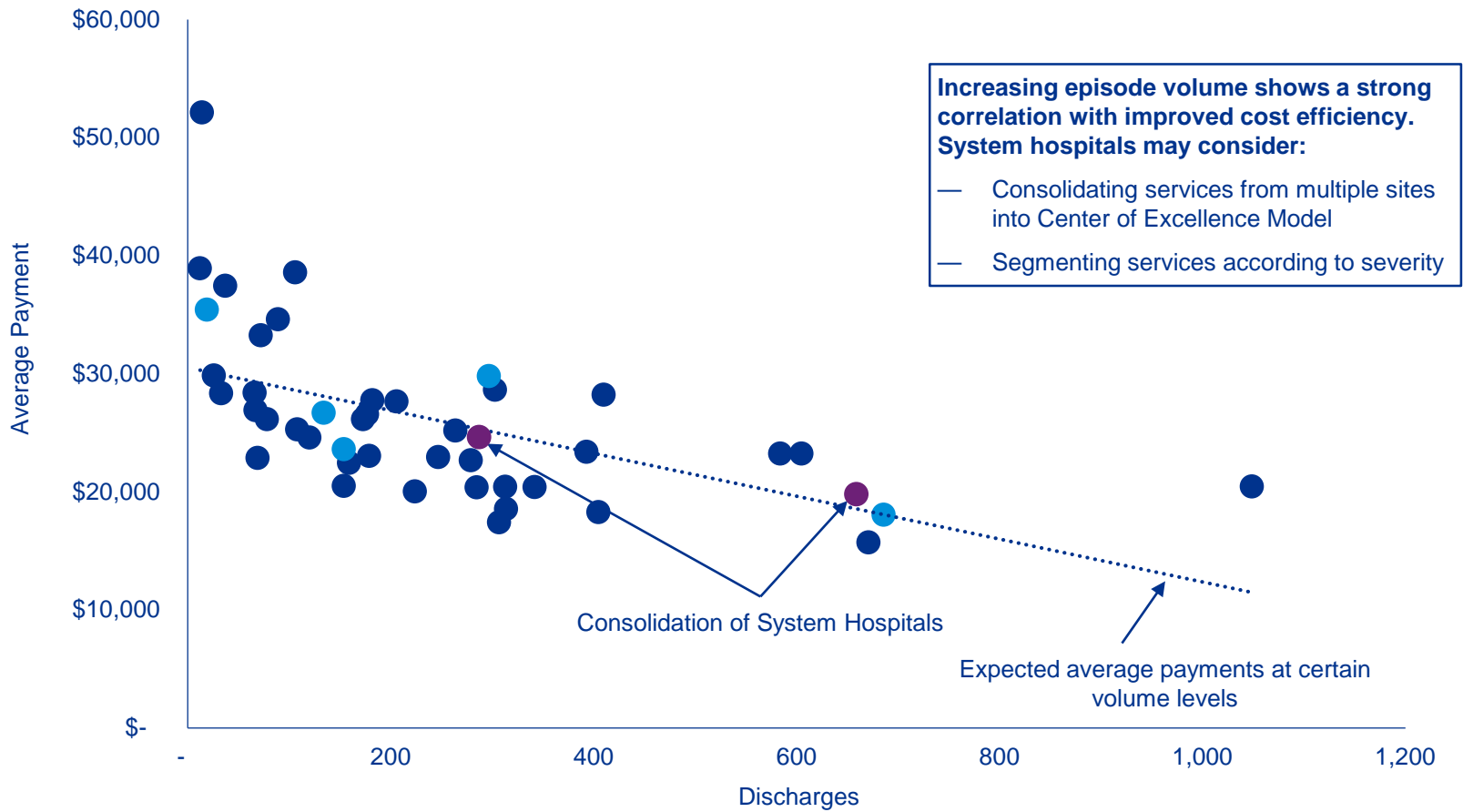
Capturing volume across the continuum allows a hospital to optimize value



Value can be measured against the market to differentiate a hospital in the market



One approach is to achieve cost efficiency through growth



Source: CY2014 Medicare LDS





A Health System Case Study

Context & Background

A nationally recognized Academic Medical Center was looking to grow inpatient volume outside of their core market

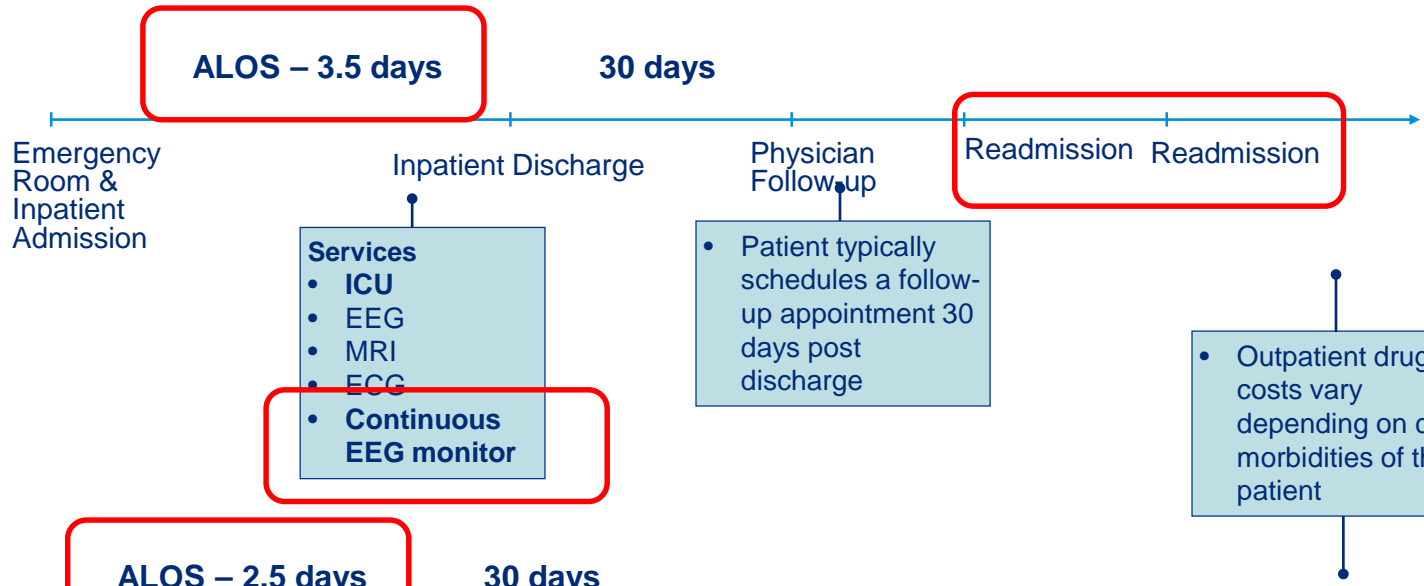
They approached payers in those markets to inquire about participating in their narrow network products

The payers would not consider including this hospital in a narrow network product because they believed their inpatient facility payments per discharge were too high in comparison to market peers

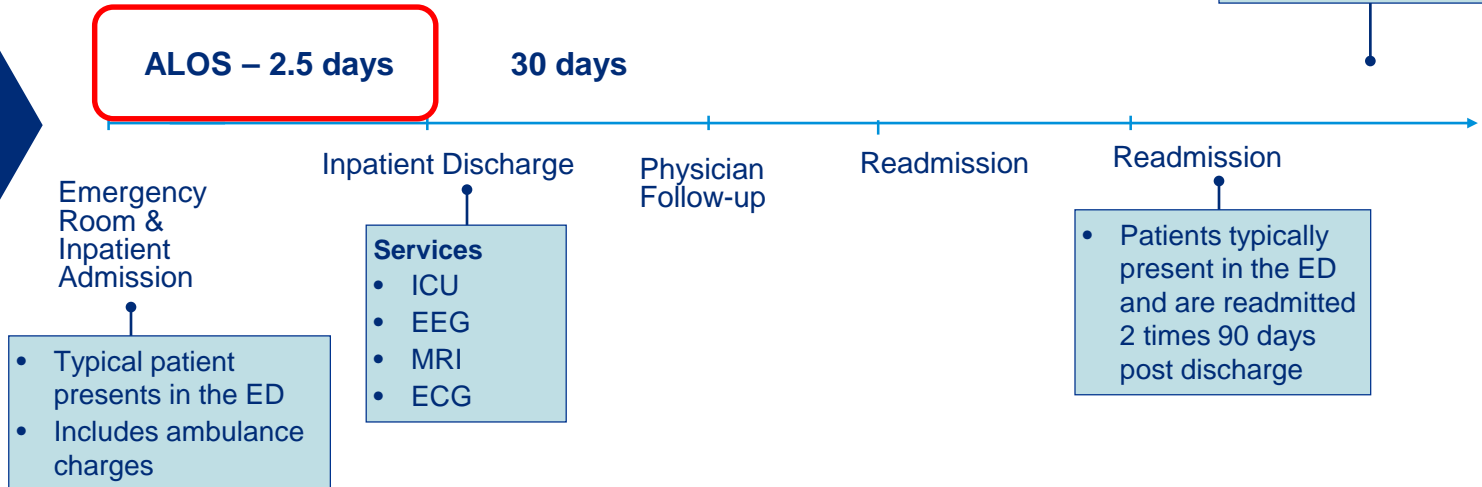
The Academic Medical Center had a hypothesis that although their inpatient facility rates may be higher than average, if the patient's outcome were studied over a longer time period, their value could be quantified.

Nuances in operations impact TCC

**Hospital A
Average TCC
\$59,690**

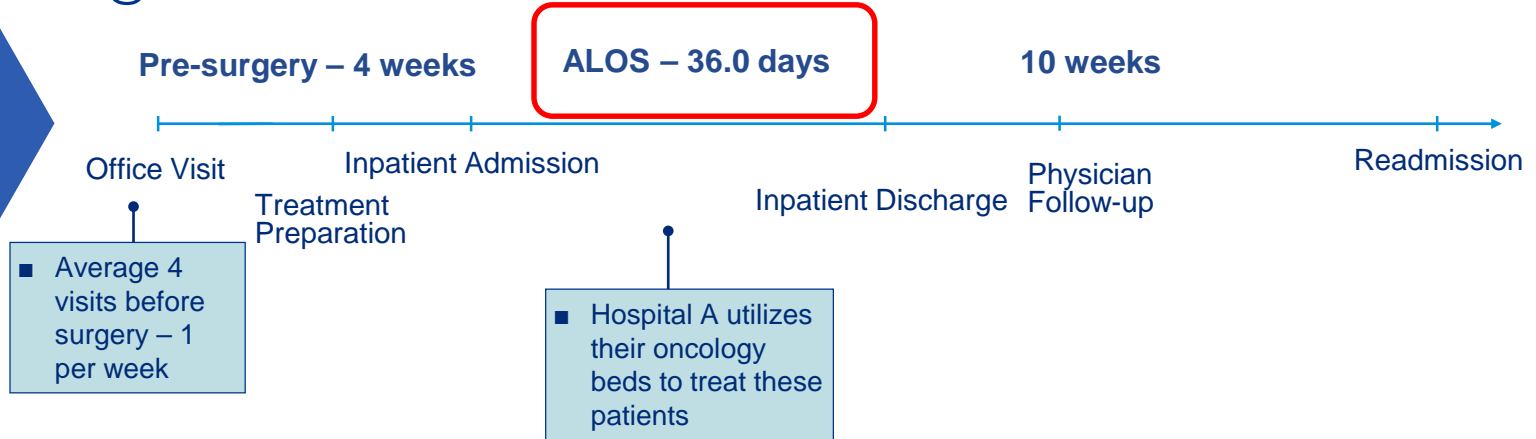


**Market
Average TCC
\$40,122**

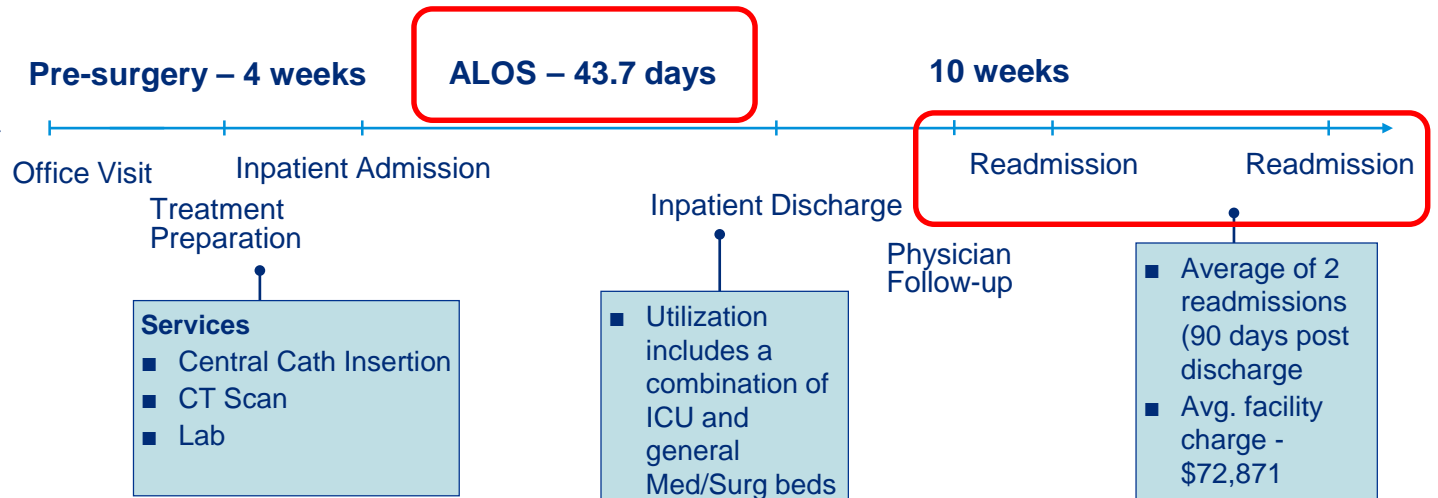


While specialty facilities may have operational advantages over the market

Hospital A
Average TCC
\$270,899



Market
Average TCC
\$523,416



Discovery of differences lead to actions

Payer Contracting Opportunities

- I. Direct To Employer Contacting**
- II. Contracting with ACOs in markets**
- III. Medicare Advantage Market Share**

Business Development and Affiliations

- I. Leakage Within Health System**
- II. In-Migration Opportunity**
- III. Broadening Network**
 - Radiology providers
 - Rehabilitation

Process of Care Optimization

- I. Documentation of Patient Satisfaction**
- II. LOS reduction at Affiliate Hospital**
- III. OR and Supply Utilization at Affiliate Hospital**



Actions to Align with Strategy

Targeted conditions: Joint replacement episode types



Total Hip Arthroplasty (THA):

Total Hip Arthroplasty (THA) is a surgery that removes damaged bone and cartilage in the hip and replaces them with prosthetic components. The most common cause of chronic hip pain and disability is arthritis.



Total Knee Ant Replacement (TKR):

Total knee replacement is a surgery for individuals who suffer from severe knee damage, often caused by arthritis. During this surgery, damaged cartilage and bone from the surface of the knee is replaced with man-made surface metals and plastic.

Targeted conditions: Overview of joint replacement

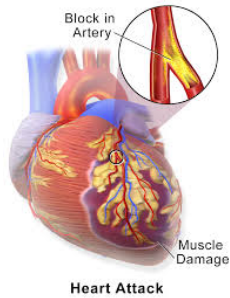
- Hip and knee replacements (MS-DRG 469 & 470) are the most common inpatient surgeries for Medicare beneficiaries
 - 400,000+ procedures
 - Costs \$7 billion+ for hospitalizations
 - \$16,500 to \$33,000 per episode of care across geographic areas
- Complications and implant failures result in:
 - Up to 3x higher at some facilities compared to others
 - Increased risk of readmission
- Risk factors for Joint Replacement surgery
 - Age: the majority of people who need joint replacements are 65 years of age and older
 - Osteoarthritis, rheumatoid arthritis, and traumatic arthritis

Selected performance metrics				
	Total knee replacement		Total hip replacement	
	Top 10%	Median	Top 10%	Median
Length of Stay (LOS)	2.9 days	3.3 days	3.4 days	4.2 days
30-day Readmission Rate	2.5%	5.3%	4.3%	9.0%
Inpatient Cost	\$11,700	\$16,400	\$12,800	\$17,500

Source: CMS, *Comprehensive Care for Joint Replacement*



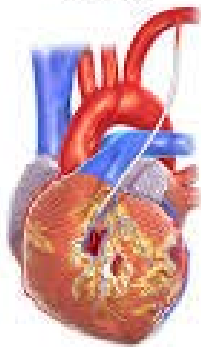
Targeted conditions: Cardiac care episode types



Acute Myocardial Infarction (AMI) (aka heart attack):

Commonly known as a heart attack, acute myocardial infarction (AMI) occurs when the blood flow that brings oxygen to the heart muscle is severely reduced or cut off completely. This happens because coronary arteries that supply the heart muscle with blood flow can slowly become narrowed from a buildup of fat, cholesterol and other substances that together are called plaque.

Single



Coronary Artery Bypass Graft (CABG):

Coronary artery bypass grafting (CABG) is a type of surgery that improves blood flow to the heart. The surgery is performed to treat people who have severe coronary heart disease (CHD). During CABG, a healthy artery or vein from the body is connected, or grafted, to the blocked coronary artery. The grafted artery or vein bypasses the blocked portion of the coronary artery. This creates a new path for oxygen-rich blood to flow to the heart muscle.

Targeted conditions: Overview of cardiac care

- About 720,000 people in the U.S. suffer heart attacks each year, with an average cost per episode of \$24,200.
- More than 395,000 CABGs were performed in the United States, with an average cost per episode of care of \$47,000.
- Complications in cardiac care can lead to:
 - Increased risk of readmission, length of stay, and mortality.
- Risk factors for AMI and Heart Disease requiring CABG:
 - Age: The majority of people who die of coronary heart disease are 65 or older.
 - Smoking
 - High LDL cholesterol
 - Diabetes

Selected performance metrics		
	AMI	CABG
	Median	Median
Length of Stay (LOS)	4.6 days ¹	8 days ³
30-day Readmission Rate	19.9% ²	16.8% ³
Inpatient Cost	\$24,200	\$47,000

Source: AHRQ, HCUP, Statistical Brief # 172: Conditions With the Largest Number of Adult Hospital Readmissions by Payer, 2011



Fitting into the 'value-based' world

As healthcare shifts from 'volume to value', providers will need to articulate how better clinical outcomes are generated at a more effective cost

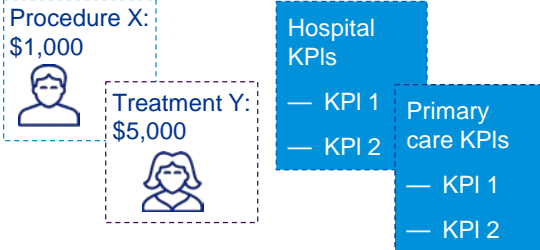
Before

A system with...

A fragmented view of cost and quality



Activity based bundles



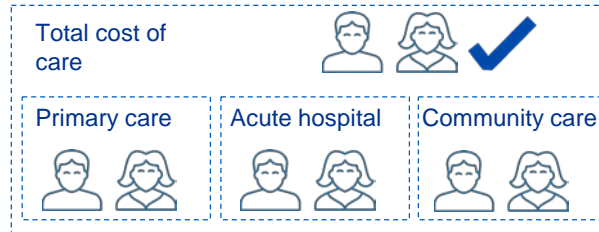
Disparate reporting on multiple systems



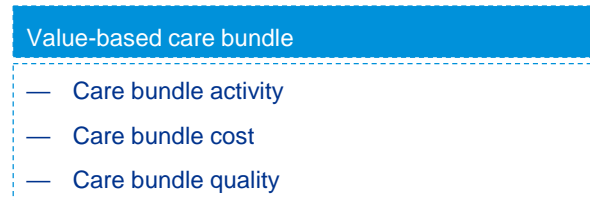
After

To a system with...

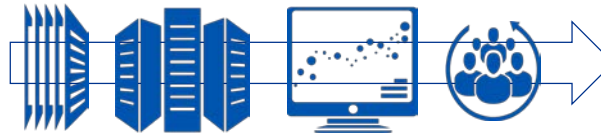
Sight of the patient's journey and total cost of care



Value based bundles



A single analytics infrastructure allowing unified analysis, reporting and benchmarking



Implications

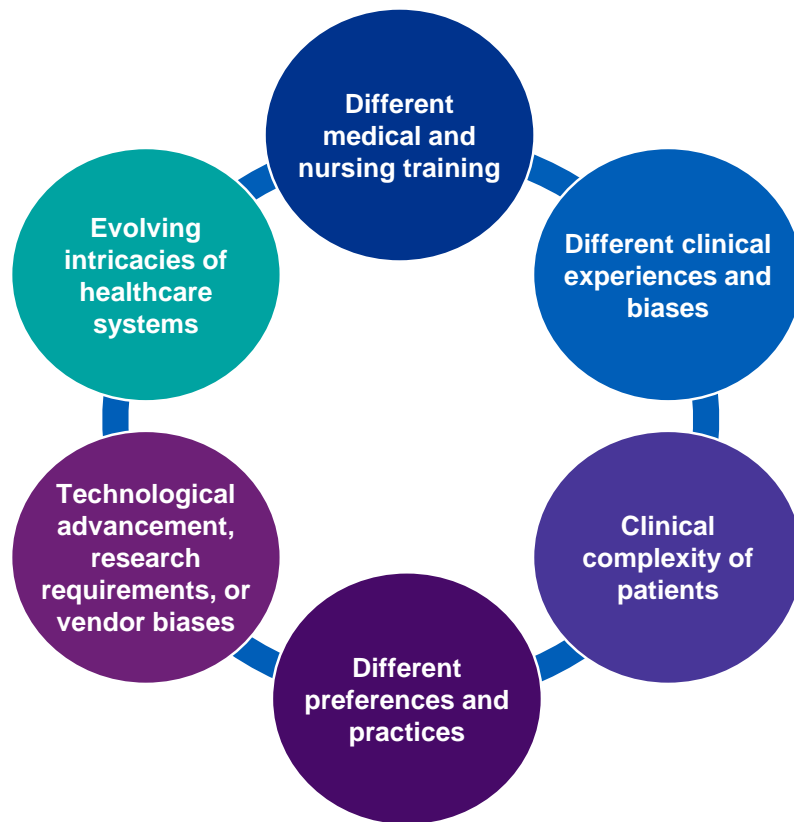
Providers will be measured across the patient's cross-continuum journey for their outcomes

Payment won't simply reflect activity, but demonstrated clinical outcomes compared to cost (the 'value')

To measure outcomes and value, integrated data and analytics are required to support this system

Reducing clinical/operational variance

Variation is found in all organizations and generally derived from a variety of factors:



Actions to align with strategy: Reducing Clinical Variation



Keys to managing variation:



Data and analytics are key to identifying variation



Building a culture open to learning, innovation, and new practices



Overcoming historical deference with individual decision-making and clinician discretion

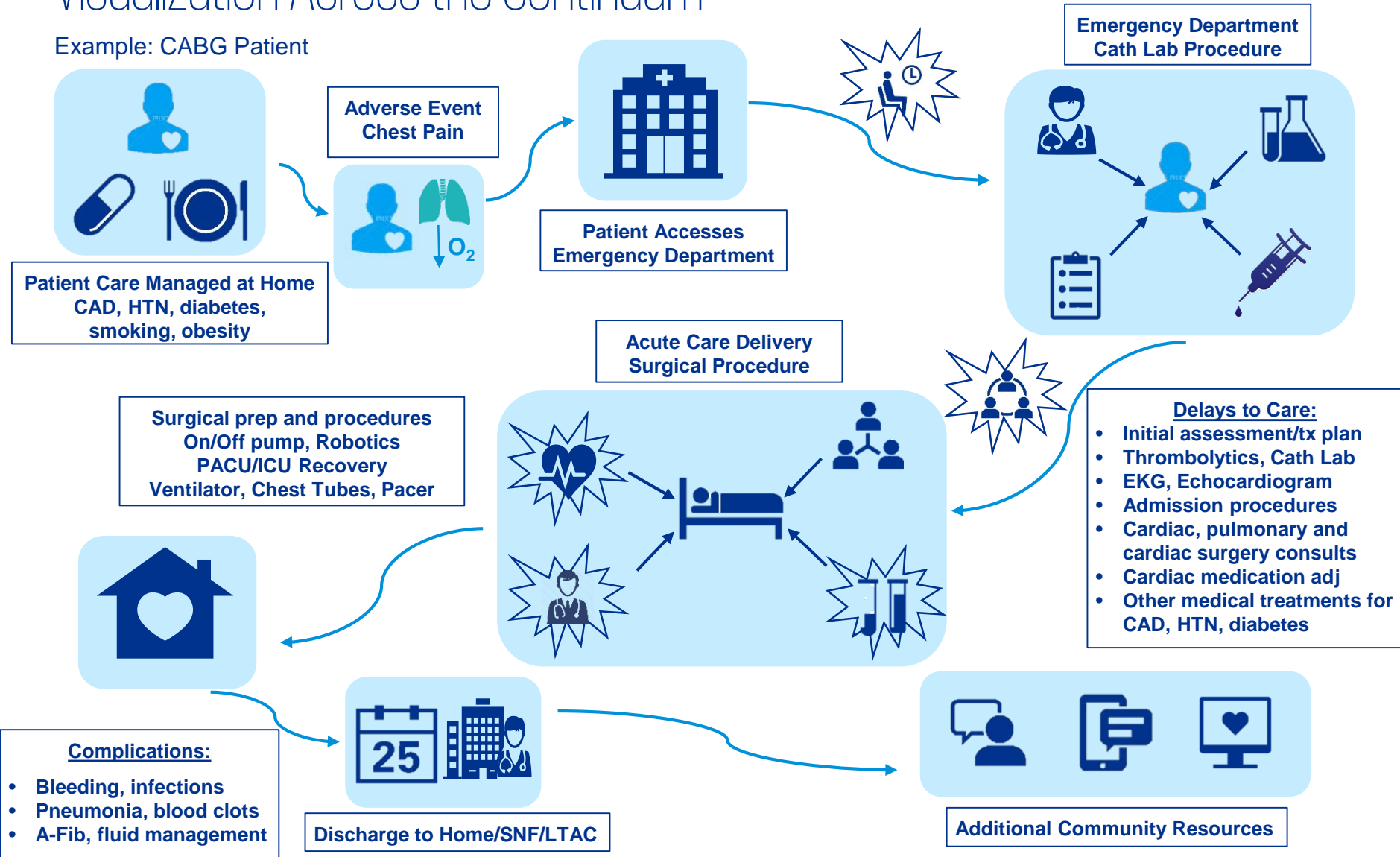


Aligning to leading-practice, evidence-based standards of care

Care Continuum Optimization

Visualization Across the Continuum

Example: CABG Patient



Process for clinical improvement

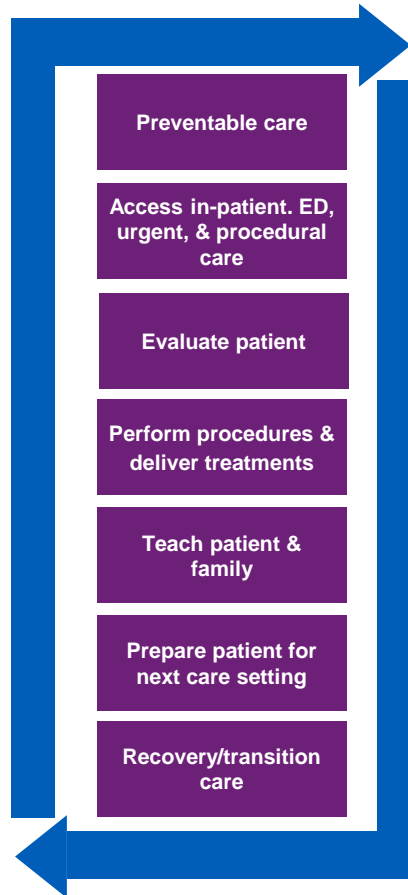
Inputs



Standards of care implemented through:

- Case Management redesign
- Care Progression Rounds with Physicians
- Clinical governance structure, concurrent monitoring and escalation protocols
- Clinical variation reduction addressing:
 - Targeted DRG's, Tests and treatments
 - Palliative Care/Hospice Care
 - Medical and Nursing practice patterns

Care delivery process



Outputs/metrics

Outcome metrics

Results of care delivery:

- LOS, Cost per Case
- Critical Care utilization
- Quality (PPR's, Mortality, PPC's etc.)
- Patient/family satisfaction

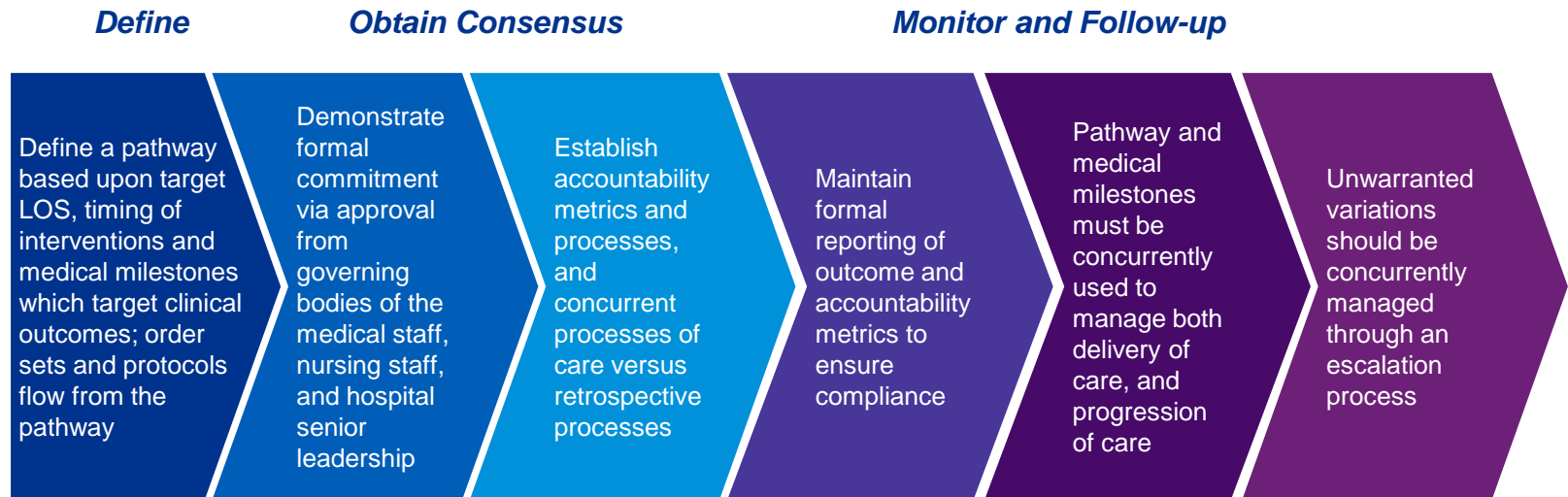
Process metrics

Measurement of selected care activities to document compliance and to drive accountability:

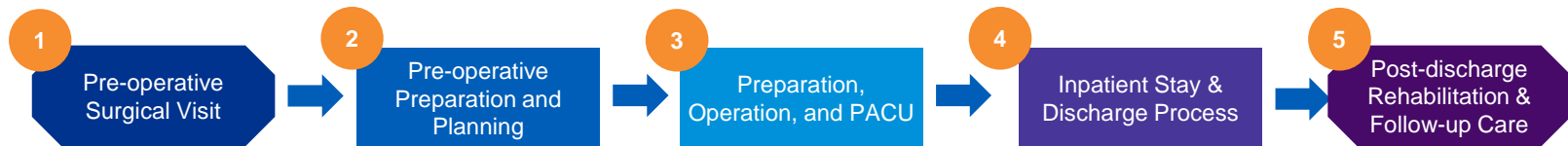
- Pathway/order set utilization
- Time from consult ordered to consult completed
- Concurrent Case Management and Care Progression metrics
- Pharmacy and clinical supply utilization
- Other metrics determined based on population patterns and needs

Opportunities for clinical improvement: Establish a standard of care

The standard of care embodies the evidence-based pathway, and requires a process of definition, consensus and approval, and monitoring



Emphasizing standards of care: Leading practices for joint replacement



Period 1: The Pre-operative Surgical Office includes the last surgical visit prior to surgery, and the care and consults that are initiated during this time period. This visit typically occurs 4 to 6 weeks prior to surgery.

Period 2: The Pre-Operative Preparation and Planning time period should be completed within 30 days of surgery, allowing for as much time between testing and surgery as possible to optimize care and mitigate risks.

Period 3: The Preparation, Operation, and PACU time period is typically completed within 6 hours. It begins when the patient arrives at the hospital for surgery and ends when the patient is discharged to the inpatient floor.

Period 4: The Inpatient Stay and Discharge Process time period is typically completed within 3 days. It begins when the patient arrives at the inpatient floor and ends when the patient is discharged from acute care.

Period 5: the Post-discharge Rehabilitation and Follow-up Care time period lasts for 12 months after the patient is discharged from the hospital following the initial surgery; the first 90 day period is monitored for quality measures tied to penalties. However, ongoing monitoring typically continues throughout the patient's life to assess for deterioration of the implant.

Source: IHI Clinical Pathway; IHI

Emphasizing standards of care: Leading practices for AMI

Actions to align with strategy: Reducing Clinical Variation



Diagnosis and Assessment: Perform a clinical examination, physical and necessary tests and screenings. Collect appropriate blood work including measurements of serum natriuretic peptides and echocardiography within 48 hours of admission

Treatment Post-stabilization: Determine if beta-blocker treatment is necessary based on vital signs and symptoms or offer angiotensin-converting enzyme inhibitor. Closely monitor the person's renal function, electrolytes, heart rate, blood pressure and overall clinical status during treatment and ensure that the person's condition is stable for typically 48 hours after starting or restarting beta-blockers and before discharging from hospital.

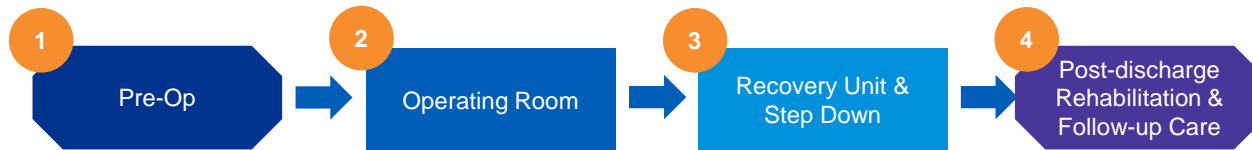
Treatment Pre-stabilization: Determine whether patient needs pharmacological or non-pharmacological treatment. Closely monitor the person's renal function, weight and urine output during diuretic therapy. Discuss with the person the best strategies of coping with an increased urine output

Post Discharge and Rehab: Schedule follow-up clinical assessment with a member of the specialist heart failure team within 2 weeks of the person being discharged from hospital. Continue ongoing care management in primary care, including ongoing monitoring and care provided by the multidisciplinary team and communicate information about the patient's condition, treatment and prognosis

Source: Modified from IHI Clinical Pathway; IHI and other existing materials

Emphasizing standards of care: Leading practices for CABG

Actions to align with strategy: Reducing Clinical Variation



Pre-Op: Perform a clinical examination, physical and necessary tests and screenings. Collect appropriate blood work. Educate patient and family or caregiver and establish expectations of the surgery and the process of care

Operating Room: Determine specific procedures depending on patient conditions for CABG surgery.

Recovery and Step Down: After surgery, patient may be taken to the recovery room before being taken to the intensive care unit (ICU) to be closely monitored or may be taken directly to the ICU from the operating room.

Post Discharge and Rehab: Schedule follow up appointments and provide education for ongoing care management in primary care, including ongoing monitoring and care provided by the multidisciplinary team.

Source: Modified from IHI Clinical Pathway; IHI and other existing materials



© 2016 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

Organizational self-assessment

High maturity organizations have a ‘population health’ focus, which means they look beyond their ‘four walls’; these organizations typically consider the following:



What is our organizations understanding of EPM and the quality metrics that drive payment?



What are our current gaps and processes within our organization that are hindering good outcomes?



What are our clinical pathways, order sets, protocols, and metrics that guide patient care through the acute and post acute episodes of care?



How do we use patient data from the EMR to facilitate the care of the patient?



What is our current care management structure, and how does it focus on coordinating transitions of care, driving quality, and reducing readmissions through all patient care settings?



How does the Interdisciplinary Care Coordination process use medical milestones to foster efficient movement and transitions through the appropriate sites of service back to home and the community?



How does Clinical Variation Management drive increased quality and safety, improve clinical outcomes, and ensure medically appropriate care and resource utilization?



Q&A



Thank you



kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2016 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss entity. All rights reserved.

The KPMG name and logo are registered trademarks or trademarks of KPMG International.