

# Risk Mitigation in Bundled Payment

When to Hold Them and When To Fold Them

**Lily Pazand, MPH**  
NYU Langone Medical  
Center



**Jonathan Pearce, MBA,  
CPA, FHFMA**  
Singletrack Analytics



**Jessica Walradt, MS**  
Association of American  
Medical Colleges



# Opportunity or risk?

<b>Episode Family</b>	<b>Projected Annual NPRA</b>
COPD	\$ (430,000)
CHF	\$ (990,000)
Major joint replacement of the lower extremity	\$ (600,000)
Simple pneumonia and respiratory infections	\$ (1,400,000)
Stroke	\$ 1,500

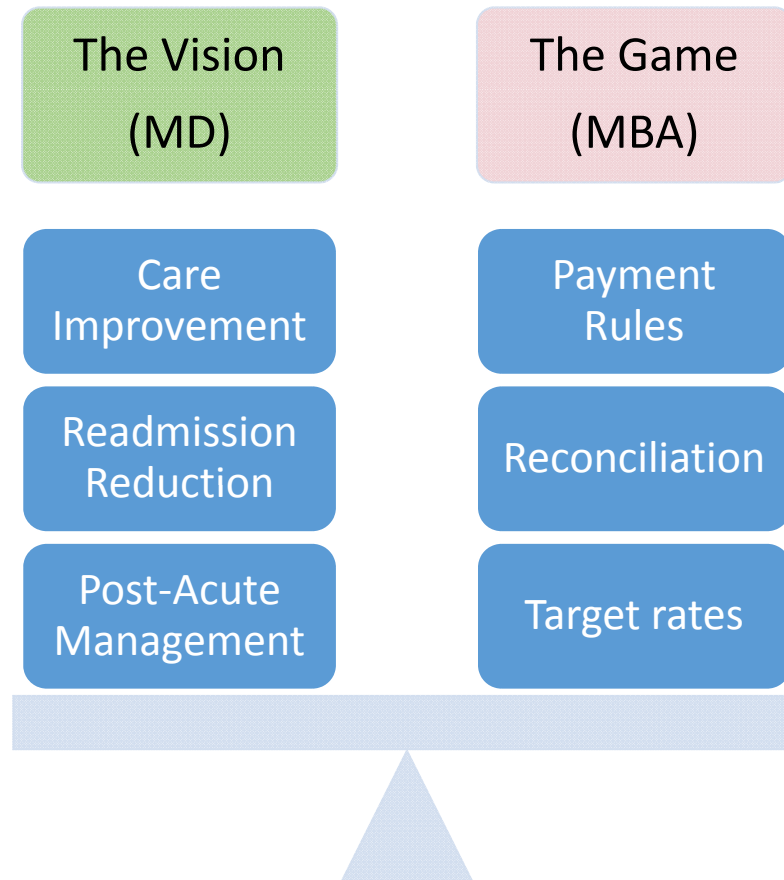
# Session Overview

Overview of BPCI Risks

Participation Decision Points for NYU Langone Medical Center

Lessons and Strategies from AAMC's Convened Group

# The Vision and the Game



# Different Types of Risks

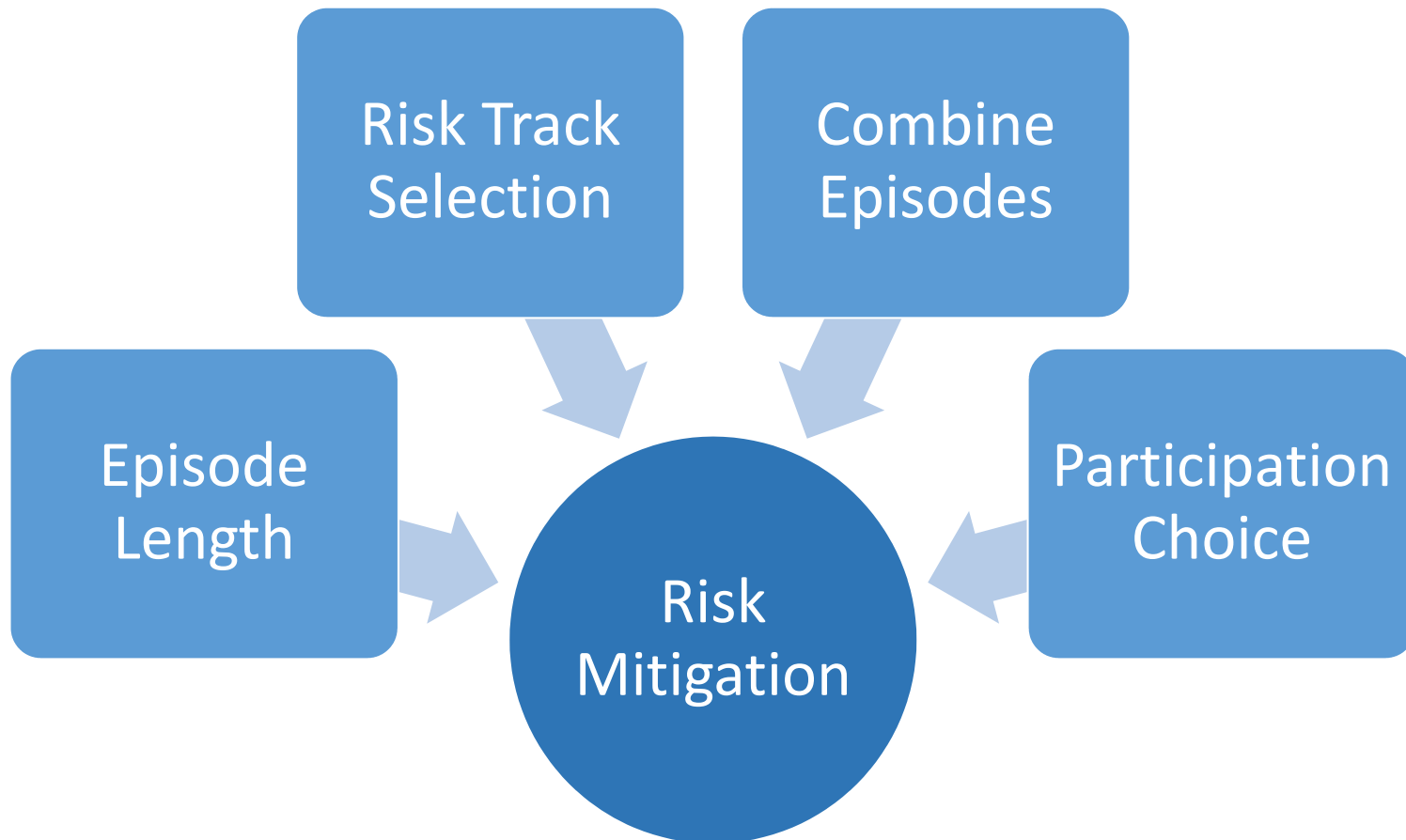
## “Vision” Risks

- Excessive readmissions
- Inability to control PAC services
- Increased complexity of patients

## “Game” Risks

- Base periods
- Target rate adjustments
- Payment parameters (CMS discount rate)

# Risk Mitigation Strategies



# Variation = Opportunity or Risk



## Opportunity

- Predictable
- Planned
- Care plans exist



## Risk

- Random
- Care plans ineffective
- No care plans exist



# Case Volume

## Adequate Volume

Episode Family	Annual Volume
Simple pneumonia and respiratory infections	439
Congestive heart failure	377
Major joint replacement of the lower extremity	350
Cardiac arrhythmia	305
Stroke	271
Chronic obstructive pulmonary disease, bronchitis, asthma	263
Urinary tract infection	238
Renal failure	208
Sepsis	197
Medical non-infectious orthopedic	187
Nutritional and metabolic disorders	164
Other respiratory	155
Cellulitis	154
Hip & femur procedures except major joint	123
Percutaneous coronary intervention	117
Major bowel procedure	105
Red blood cell disorders	98
Syncope & collapse	94
Medical peripheral vascular disorders	92
Pacemaker	75
Diabetes	73
Acute myocardial infarction	66

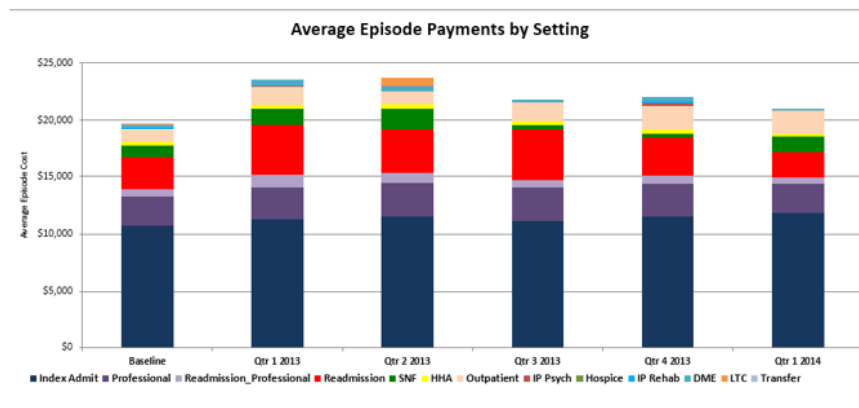
**≥ 100/year**

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# Low Volume = High Variation

## PCI Annual Volume = 450 Episodes

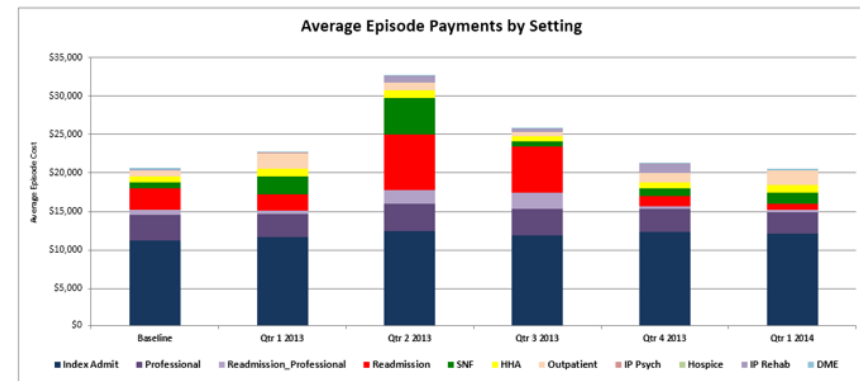


2013 CV: 0.71

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## PCI Annual Volume = 115 Episodes



2013 CV: 0.85

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# Decision Points in Risk Assumption



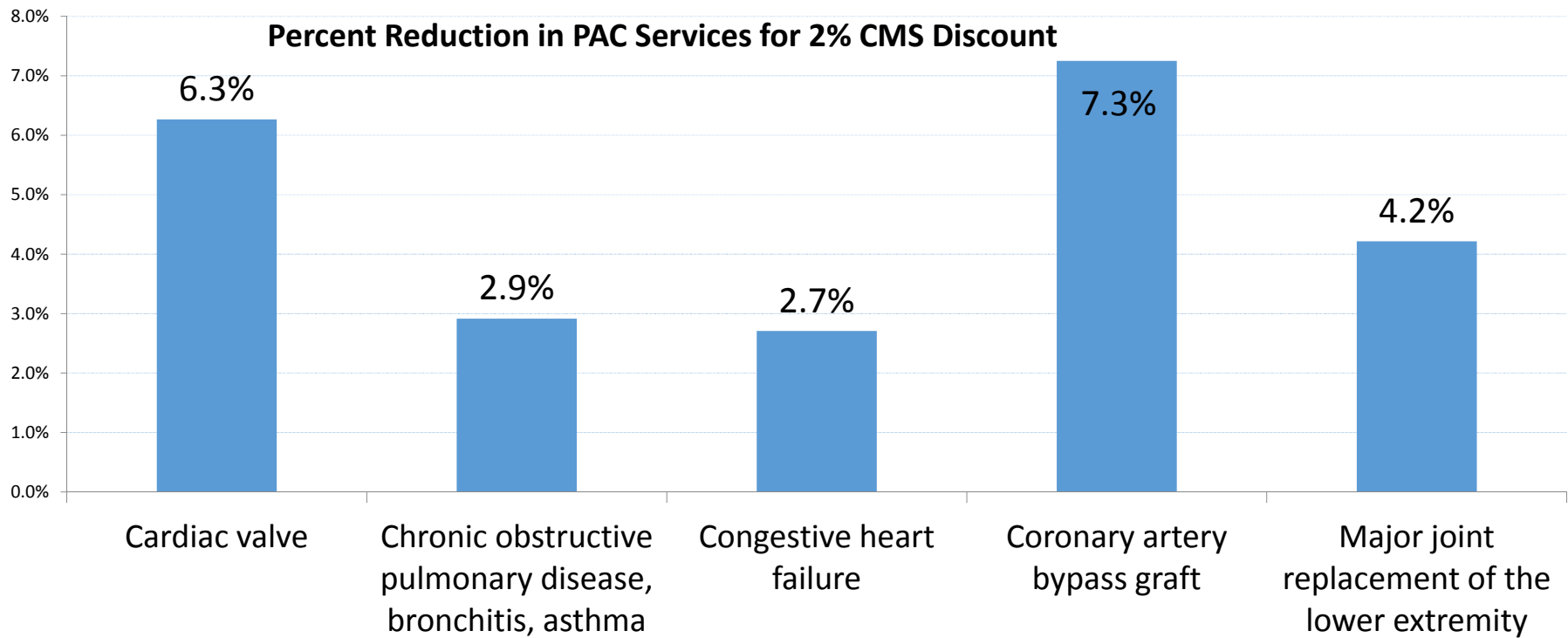








# Opportunities to Recover 2% CMS Discount



# Why did NYULMC choose Model 2?

- ❖ Clinical and financial opportunities **beyond hospital walls**
- ❖ Attribution is limited to **your facility**
- ❖ **Information + financial incentives = powerful combination**





# Selecting Episodes

## What we considered

### Clinical opportunity

- Strong clinical leadership
- Defined, discrete clinical episodes
- Relatively predictable

### Financial opportunity

- High volume
- Procedure-based
- Low volume of 1 day stays

## What we selected

### Total Joint Replacement

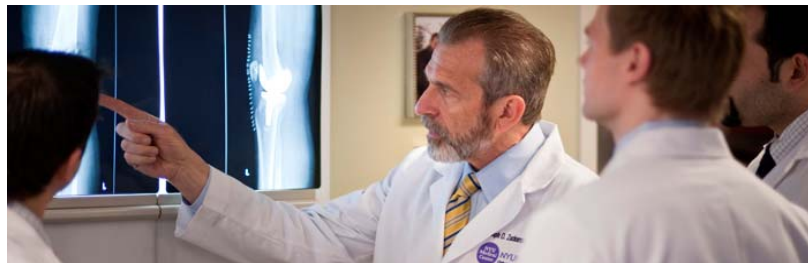
- 469-470 Major joint replacement of the lower extremity
  - 800 Medicare cases annually
  - 31 physicians; 55% employed / 45% voluntary

### Spinal Surgery

- 459-460 Spinal fusion (non-cervical)
  - 235 Medicare cases annually
  - 18 physicians; 56% employed / 44% voluntary

### Cardiovascular surgery

- 216-221 Cardiac valve
  - 260 Medicare cases annually
  - 8 physicians, 100% employed



# Cost Drivers

## Internal Cost Reductions

### Levers to reduce internal hospital cost:

- Reduce LOS
- Reduce implant, supply, and/or drug costs
- Reduce OR time



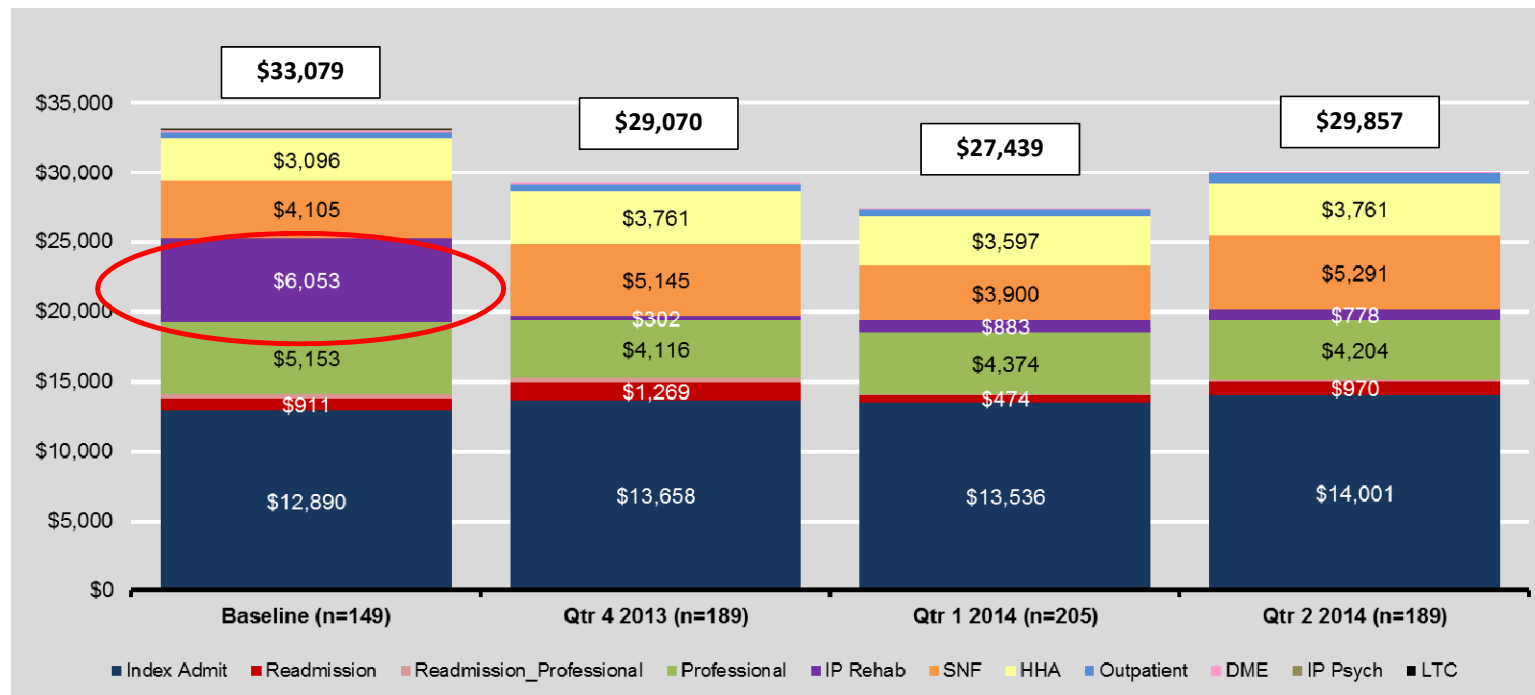
## 90-day Episode Spend Reductions

### Levers to reduce 90-day episode spend:

- Reduce readmissions
- Alter discharge patterns (home-based vs. facility-based care)
- Decrease utilization (e.g. consults, ancillary tests)
- Reduce SNF LOS

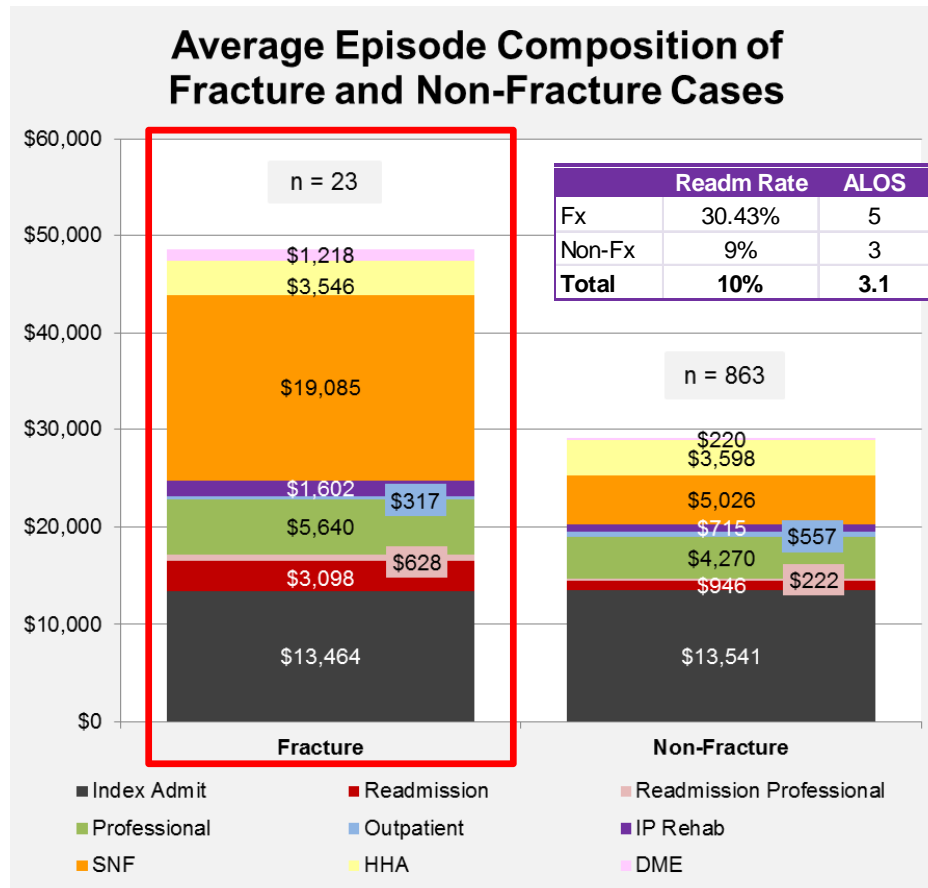
NYULMC studied the levers of cost and quality in a clinical episode when developing a care redesign structure. NYULMC's reporting and analytics tracks performance on these levers.

# Opportunities in Primary Joint Replacement



- Post-acute Period:** New clinical protocols, enhanced patient engagement, and a cultural shift among our physicians and care team

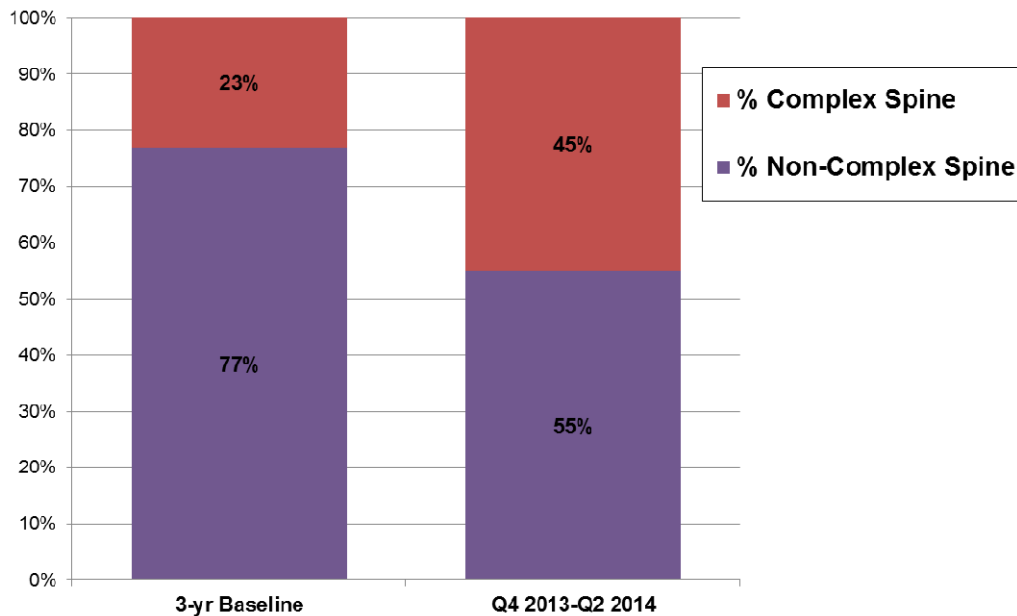
# Hip Fractures within Primary Joint Replacement



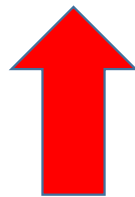
In collaboration with our clinicians and post-acute partners, NYULMC is developing a **hip fracture pathway** to encompass both the inpatient and post-acute period

# Spinal Fusion (except cervical): Changes in clinical practice and case complexity

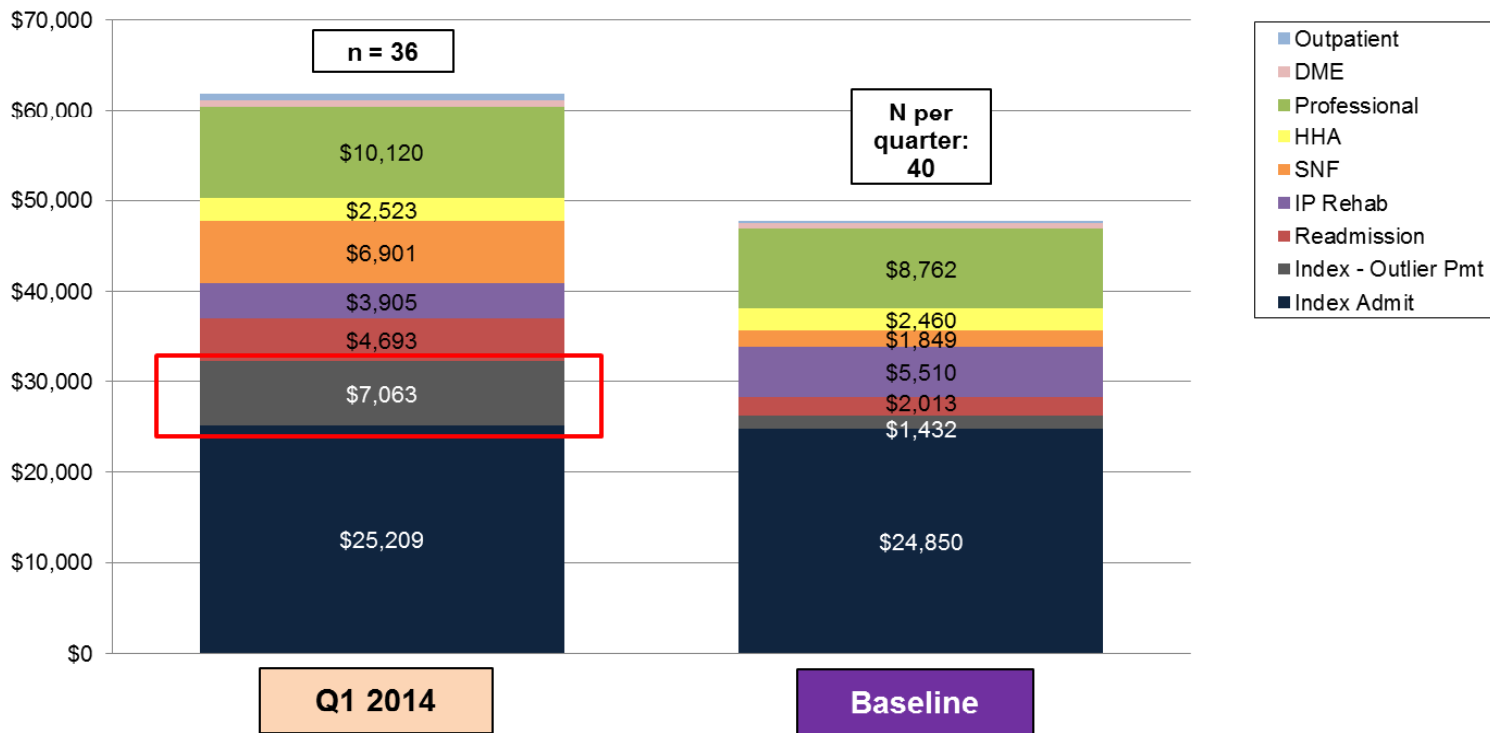
DRG 460: Spinal Fusion, except cervical w/o MCC



% Multi-level fusions

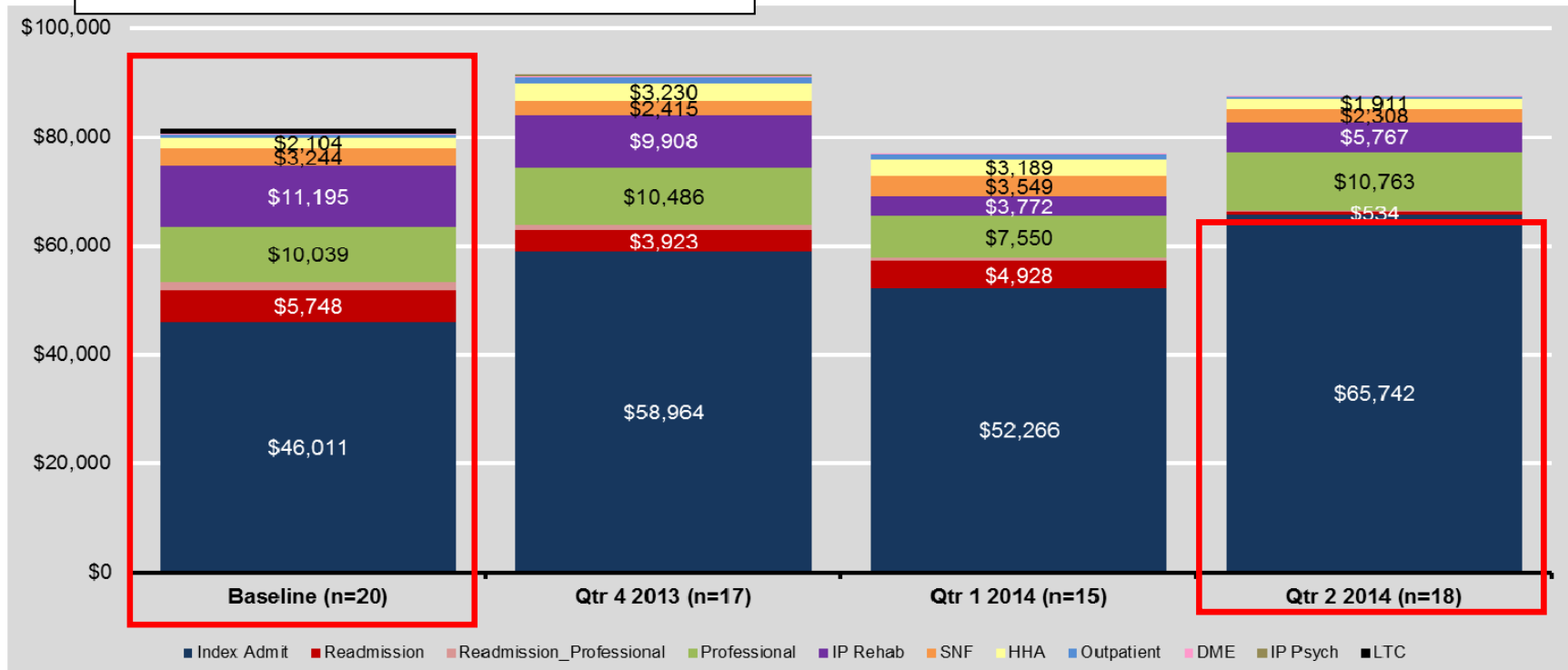


# Spinal Fusion (except Cervical): Index Admission Outlier Payments



# Cardiac Valve Surgery

DRG 219: Cardiac Valve w/o cath w MCC



# Medical Bundles

NYULMC: Current BPCI model impedes effective management of chronic conditions:

- **Using MS-DRG** to identify patients
- **Triggering** a bundle based on an **inpatient admission**
- 90 days is **too short**

## Recommendation:

Medical cases need to be managed in a specialty ACO-type model that begins in the ambulatory space.



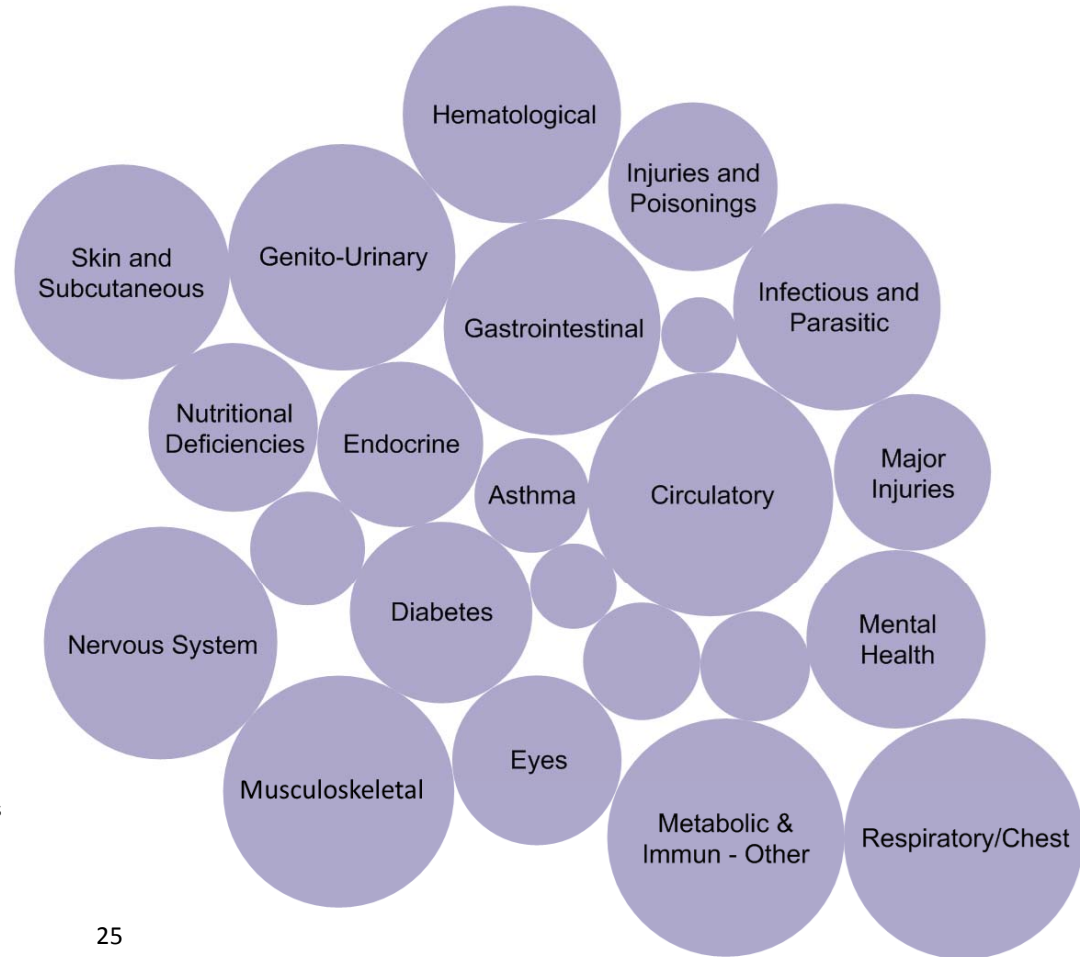
VS.





# Comorbidities: Congestive Heart Failure

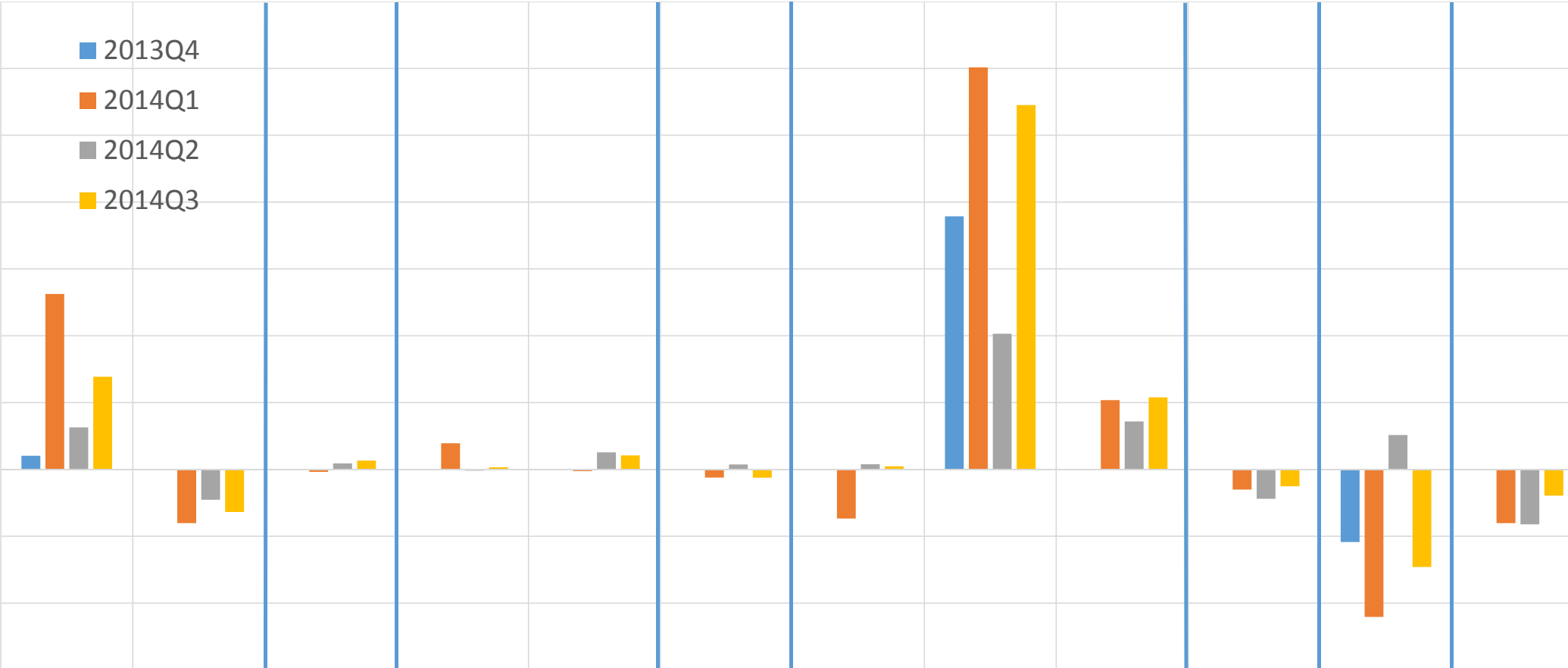
Medical patients included in bundles have a similar combination of complex conditions



Bubble size corresponds to volume of patients

# Lessons from AAMC's Convened Group

■ 2013Q4  
■ 2014Q1  
■ 2014Q2  
■ 2014Q3



Hospital 6    Hospital 1    Hospital 2    Hospital 3    Hospital 2    Hospital 4    Hospital 5    Hospital 6    Hospital 4    Hospital 7    Hospital 6    Hospital 3

Cardiac valve

Chronic obstructive pulmonary disease, bronchitis, asthma

Congestive heart failure

Coronary artery bypass graft

Major joint replacement of the lower extremity

Percutaneous coronary intervention

Spinal fusion (non-cervical)

Stroke

# Challenges

## Chronic Diseases

- High variability
- Sicker patients
- Readmission reduction

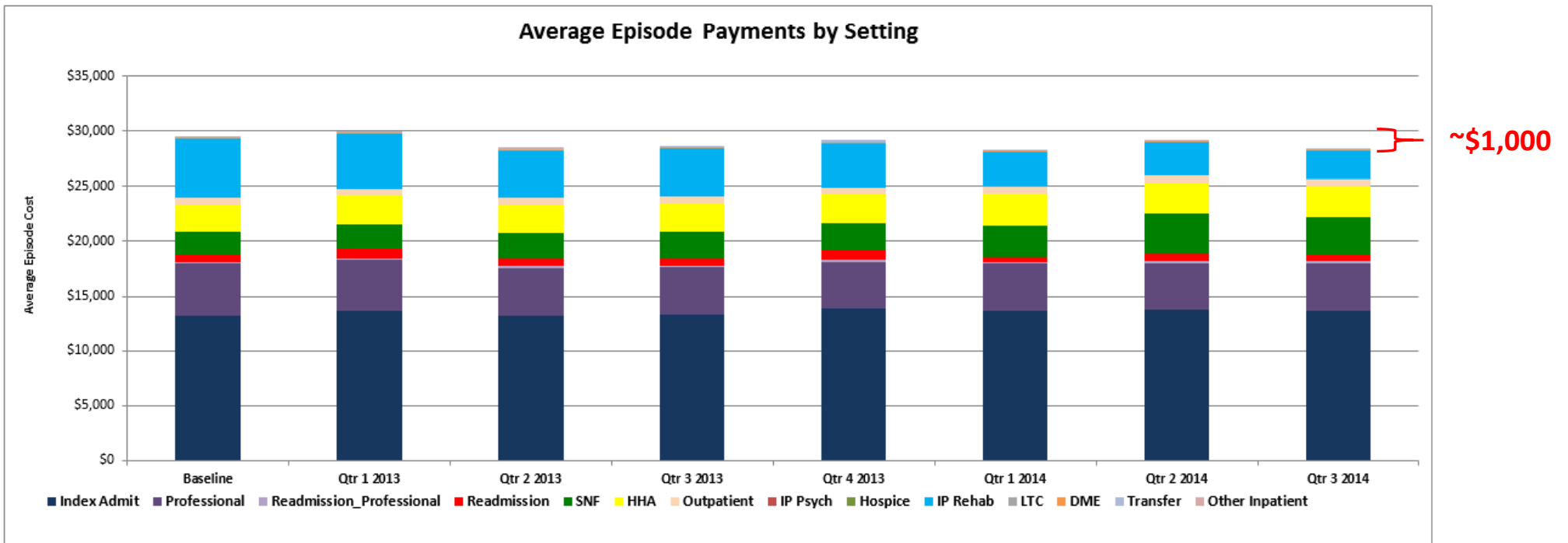


# Ongoing Policy Challenges

CHF	% Change in Payment (Baseline - 2013)
DRG 291	<b>31%</b>
DRG 292	<b>14%</b>
DRG 293	<b>46%</b>

Row Labels	Total Prorated Pmt
2114-00213142468909102013	\$69,742
J2260 Inj milrinone lactate / 5 ML	\$66,435
A4222 Drug infusion pump supplies	\$2,287
E0781 External ambulatory infus pu	\$645
A4221 Maint drug infus cath per wk	\$294
E0143 Walker folding wheeled w/o s	\$60
A4253 Blood glucose/reagent strips	\$21
2114-00213142468908182013	\$69,452
J2260 Inj milrinone lactate / 5 ML	\$66,022
A4222 Drug infusion pump supplies	\$2,336
E0781 External ambulatory infus pu	\$717
A4221 Maint drug infus cath per wk	\$294

# The Efficient Provider



CV = 0.26

# Barriers to Success

Lack of preparation >  
dropping out

- Insufficient analytic review at onset
- Lack of understanding of target derivation

Lack of engagement >  
dropping episodes

- Competing hospital priorities
- No internal champions
- Short-term view

Lack of coherent vision  
> missed opportunity

- Assumed no BPCI opportunity without detailed analysis
- Picked track C assuming no PAC opportunity



# Live Episodes, July 2015

**CABG**

**Cardiac Valve**

**Cervical spinal fusion**

**CHF**

**COPD**

**Double joint replacement of the lower extremity**

**Major bowel**

**Major joint replacement of the lower extremity**

**Spinal fusion (non-cervical)**

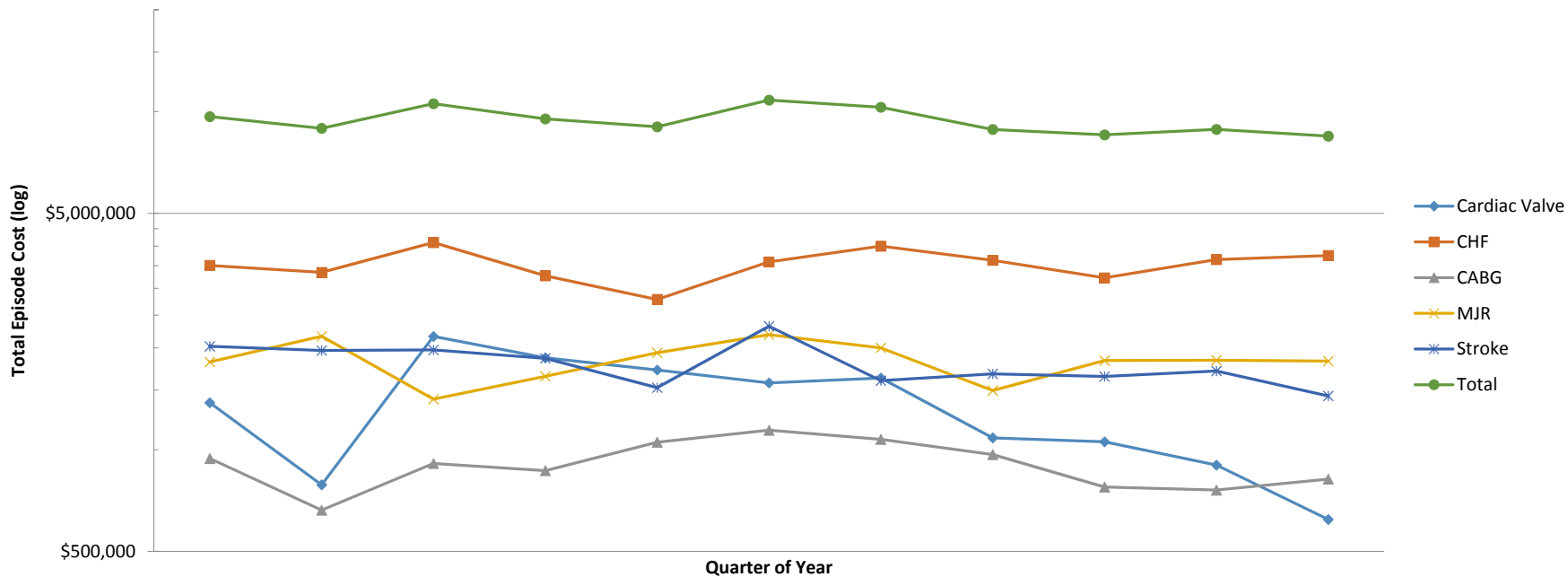
**Stroke**

## Combining Cardiology Episodes to Create Opportunity

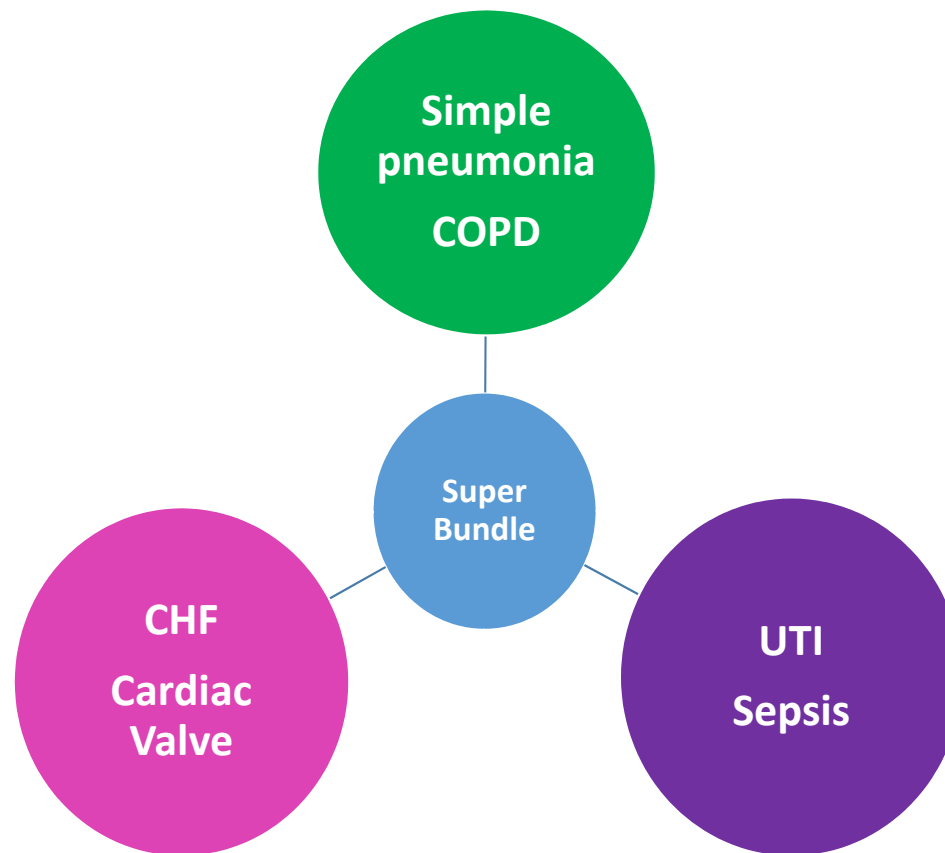
	CHF	Cardiac Valve	CABG	AMI	PCI	Combined
Annual Episode Count	184	74	36	28	97	419
Qtr CV	14%	11%	16%	39%	20%	9%
Annual Medicare Cost	\$4.8M	\$5.0M	\$1.8M	\$.8M	\$2.8M	\$15M
PAC % of Cost	77%	28%	32%	73%	51%	52%

# In Union There is Strength

## Quarterly Episode Cost by Episode Family



# Looking Ahead: October 2015



# Contact Information



**Jessica Walradt**  
Senior Payment Reform Specialist  
Health Care Affairs

**Association of American Medical  
Colleges**  
[jwalradt@aamc.org](mailto:jwalradt@aamc.org)  
202-862-6067

**Lily Pazand, MPH**  
Assistant Director, Managed  
Care Payment Reform

**NYU Langone Medical Center**



**Jonathan Pearce**  
Principal

**Singletrack Analytics**  
[jon@singletrackanalytics.com](mailto:jon@singletrackanalytics.com)  
856-762-0605

