

Opportunities and Risks in Bundled Payment Episodes

When You've Seen One, You've Seen One

Jonathan W. Pearce, CPA,
MBA, FHFMA
Principal
Singletrack Analytics, LLC



Lindsay Jubelt, MD, MSc
Senior Medical Director of
Population Health
Mount Sinai Health System



Slide 1

JWP1 Data is from \\DISKSTATION1\Encrypted\Montefiore\Models
Jon Pearce, 5/7/2017

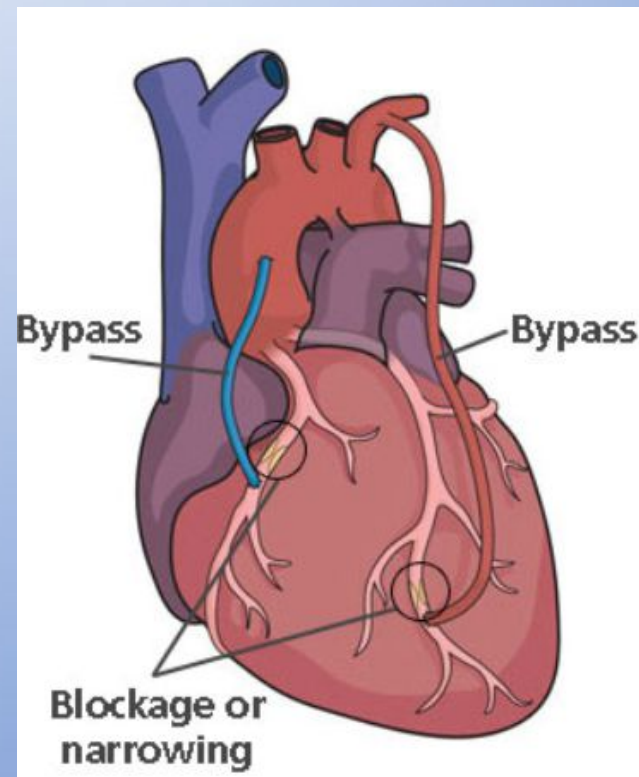
JWP2 JP_Montefiore_BPCI_360_v116_Oct2014B_XL2013.xlsx
Jon Pearce, 5/7/2017

Medicare Bundled Payment Episode Types

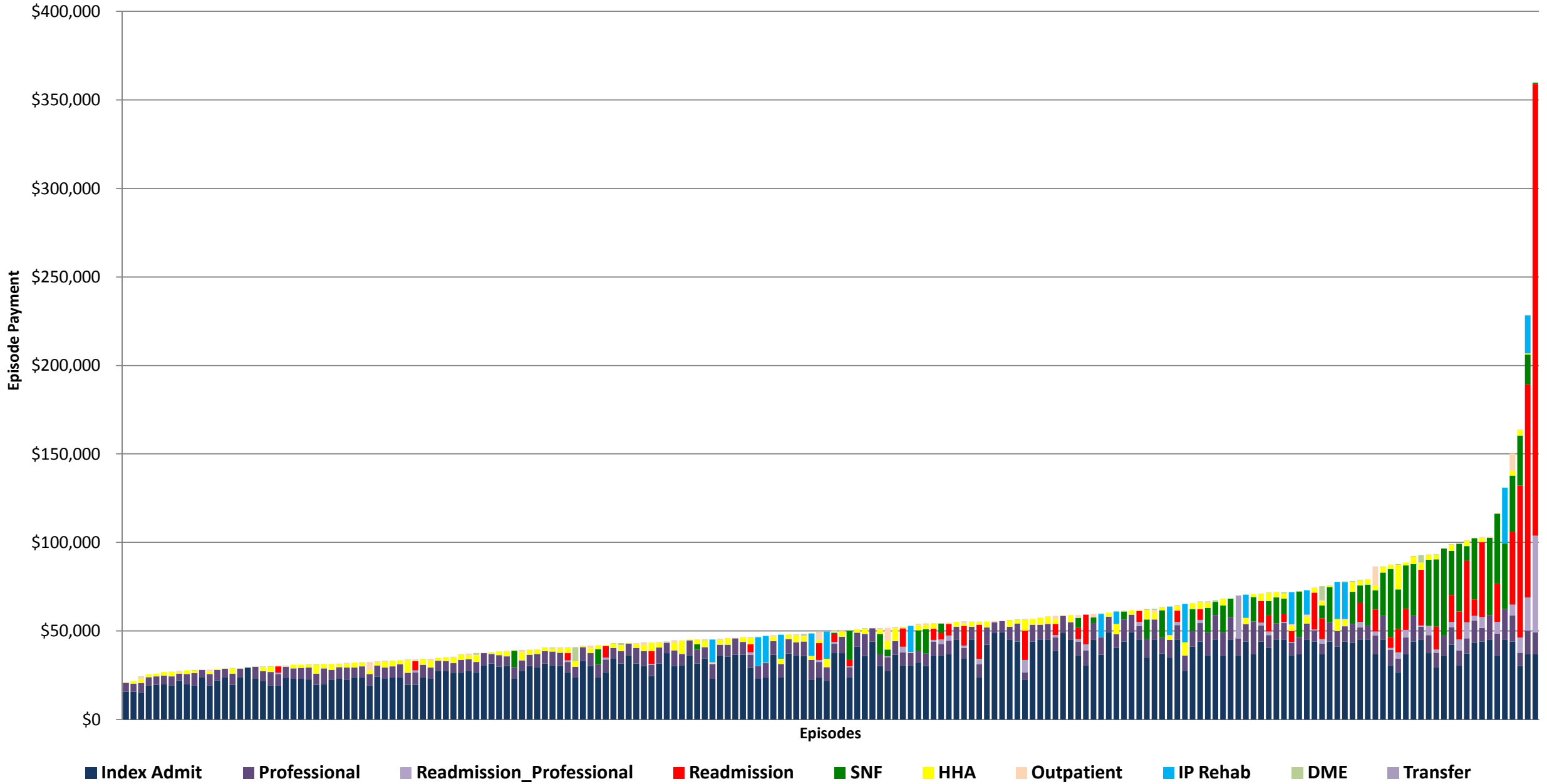
Joint Replacement



Cardiology



Acute Myocardial Infarction



Today's Session

Jon, MBA



Describe the risk and opportunity profiles of various types of episodes

Lindsay, MD



Describe the differences in care management strategies among different types of episodes

Characteristics of Episodes



Index admission – relative to overall episode cost

Composition of PAC services

- PAC Institutional
- Readmissions
- Proportion of the episode

Variation among episodes (smallest to largest)

Occurrence of train-wreck cases

Opportunities and Risks

Opportunities

- Ability to manage post-acute institutional cost
- Ability to manage readmissions

Risks

- Unmanageable inherent inter-episode cost variations
- High variation due to low volumes
- Frequency of extremely high-cost cases
- High index admit cost

Risk and Opportunity Metrics

Percent PAC
Institutional

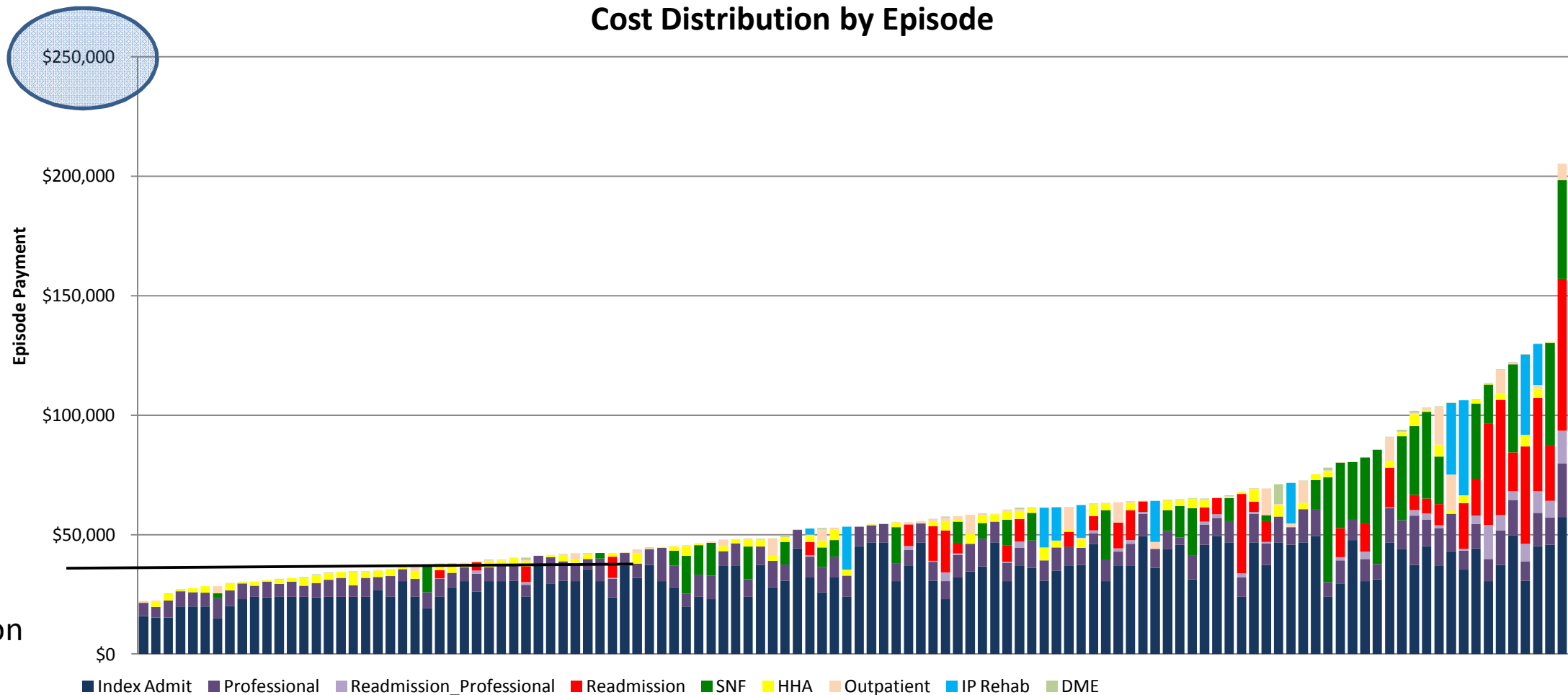
Percent
Readmissions

“Discount
funding”
percentage

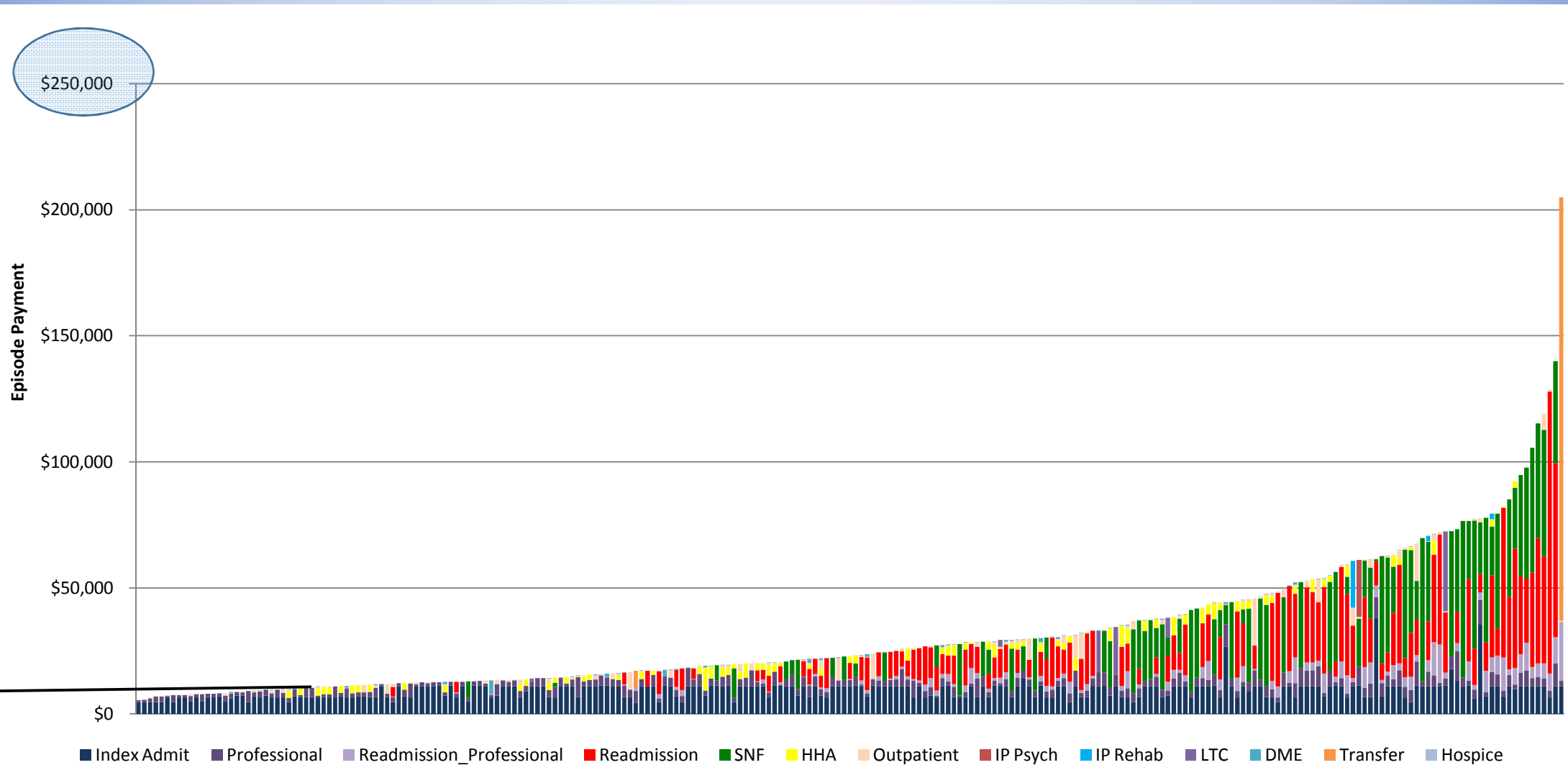
Low-volume
variation

Coronary Artery Bypass Graft

Cost Distribution by Episode

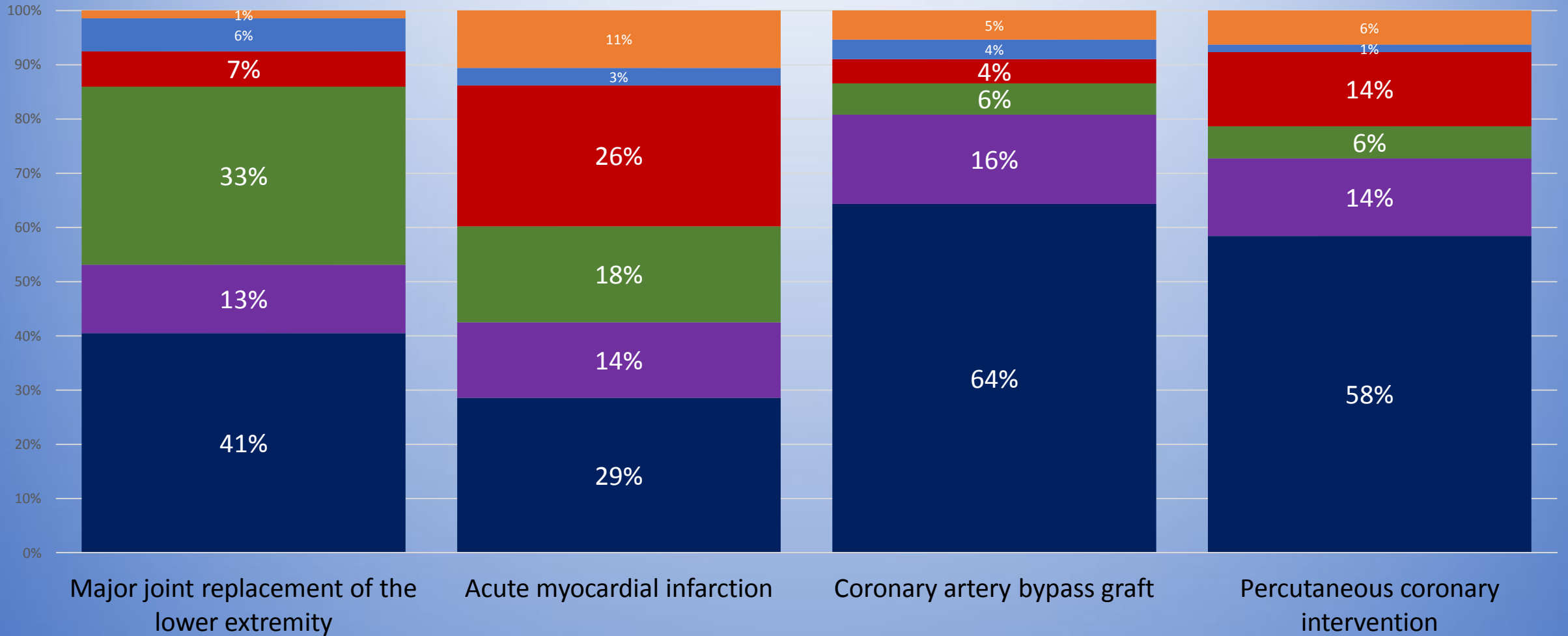


Acute Myocardial Infarction



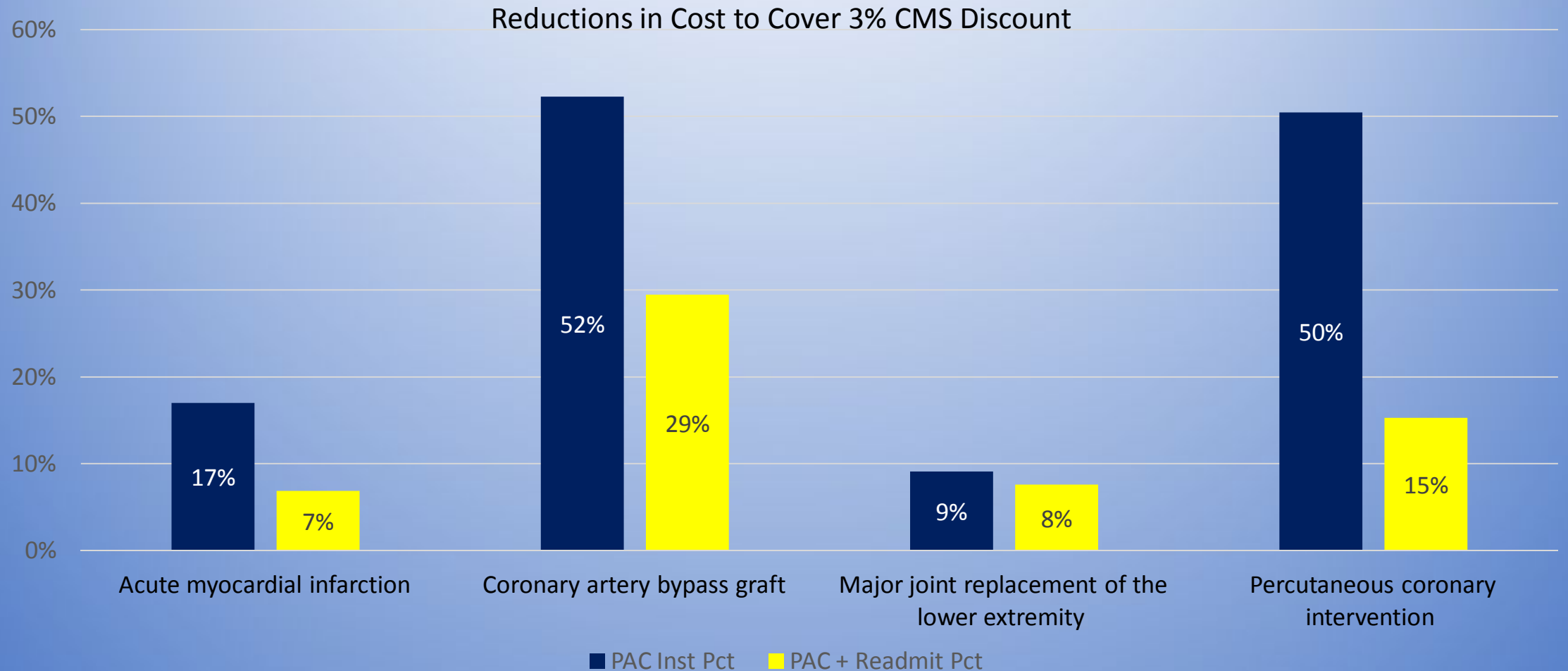
Index
Admit

Cost Components of Episodes



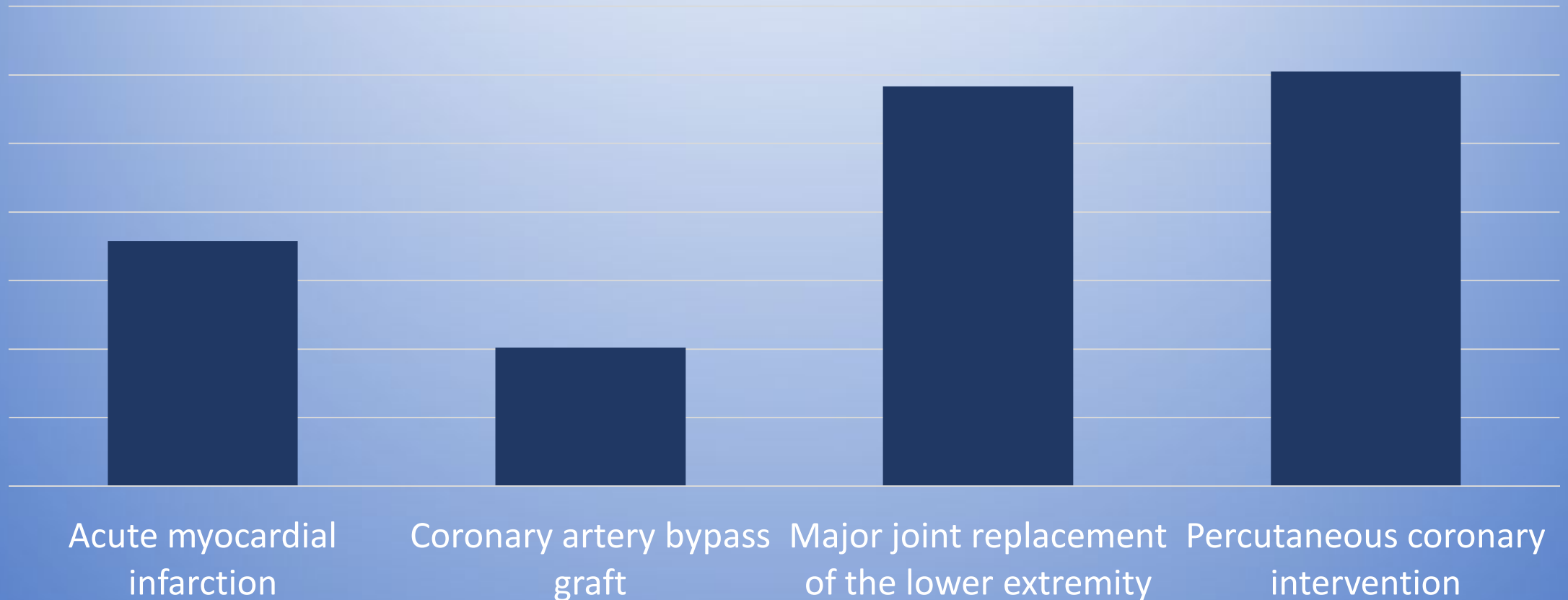
■ Index Admit ■ Professional ■ PAC Institutional ■ Readmission ■ HHA ■ Other

Covering the Discount



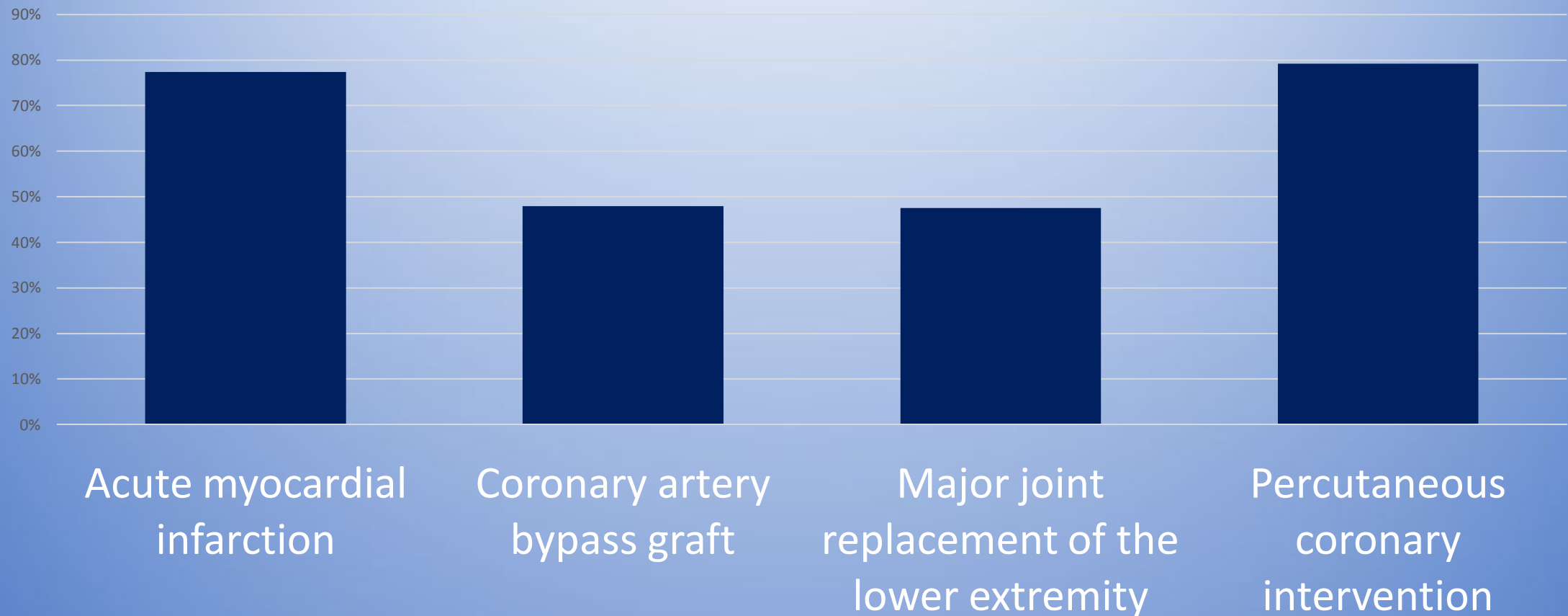
Episode Volume Affects Variation

Relative Episode Volume



Cost Variation Among Episodes

Intra-Episode Variation (CV)



Why Quarterly Episode Cost Variation is Bad

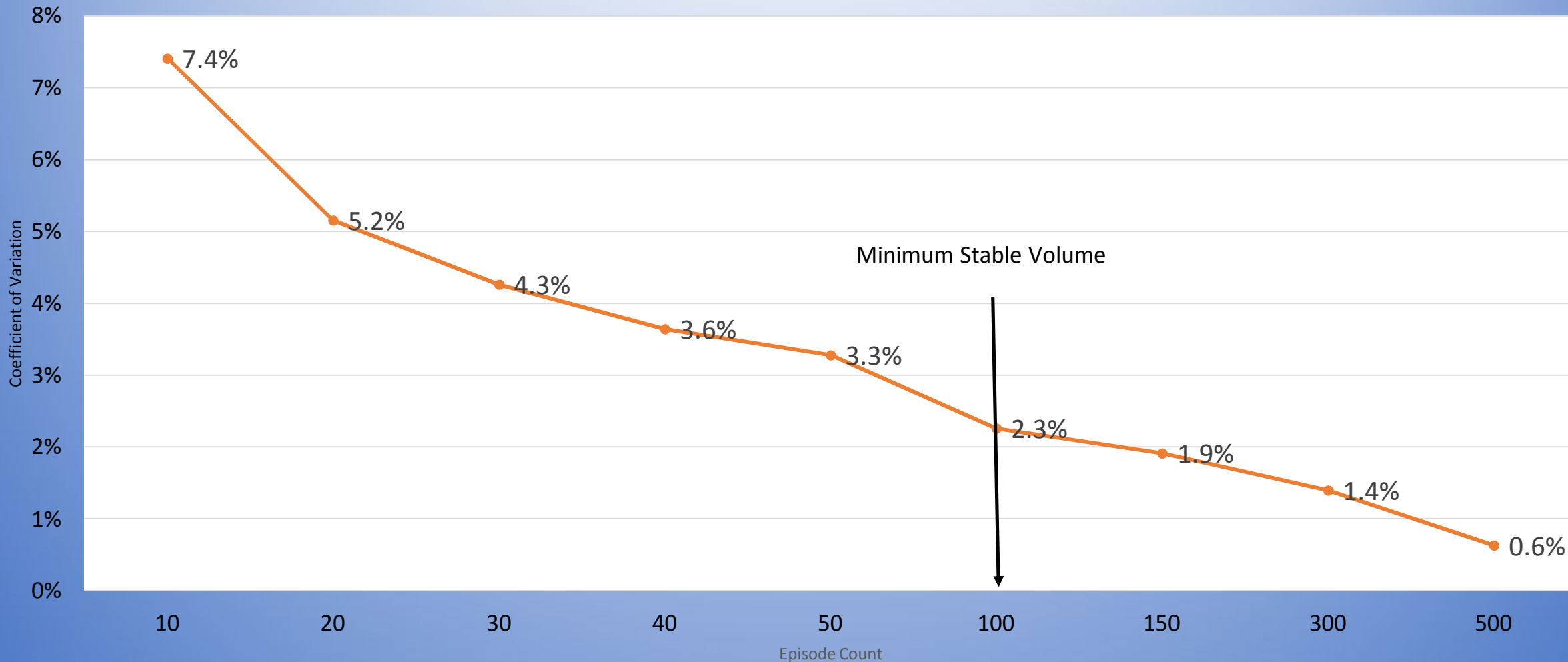
Unpredictable financial results

Possible cash flow issues

Inability to measure effectiveness of clinical measures

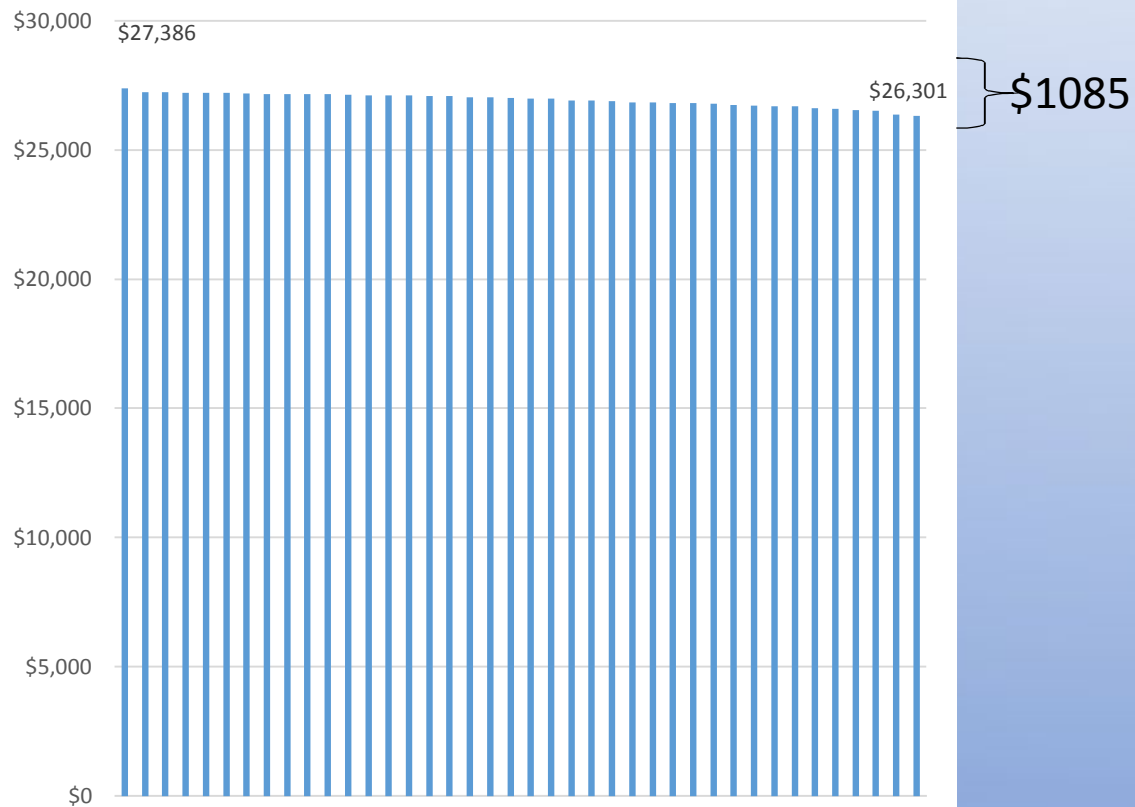
Cost Variance by Episode Volume

Average Episode Cost Coefficient of Variation Over Time

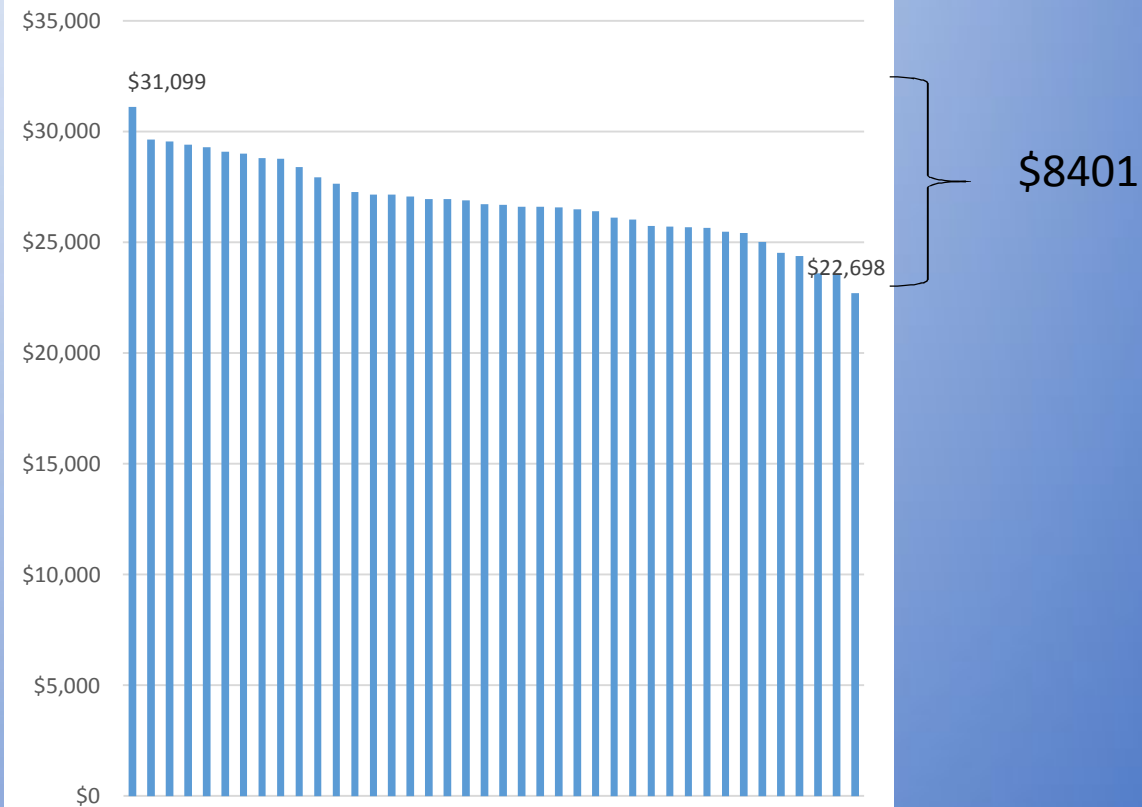


Small Population Creates Wide Cost Variations

Average Episode Cost - 500 Episodes



Average Episode Cost - 10 Episodes



Variation = Opportunity or Risk



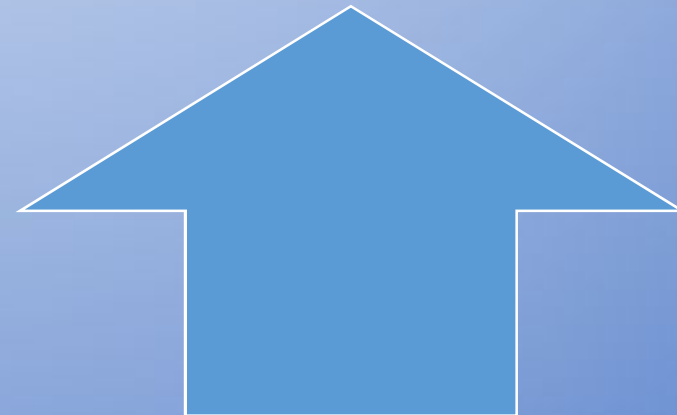
Opportunity

- Manageable
- Predictable
- Planned
- Care plans exist

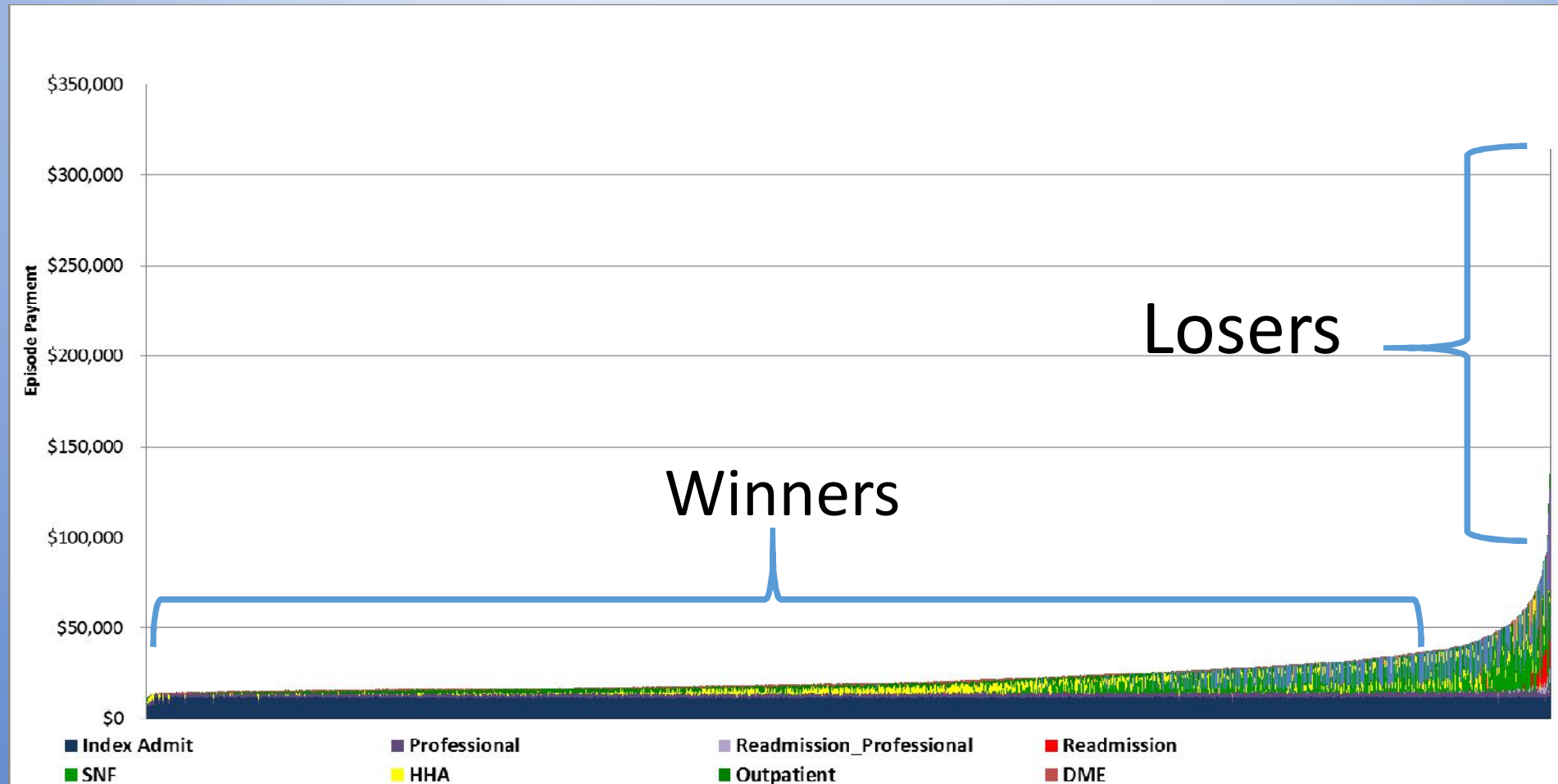


Risk

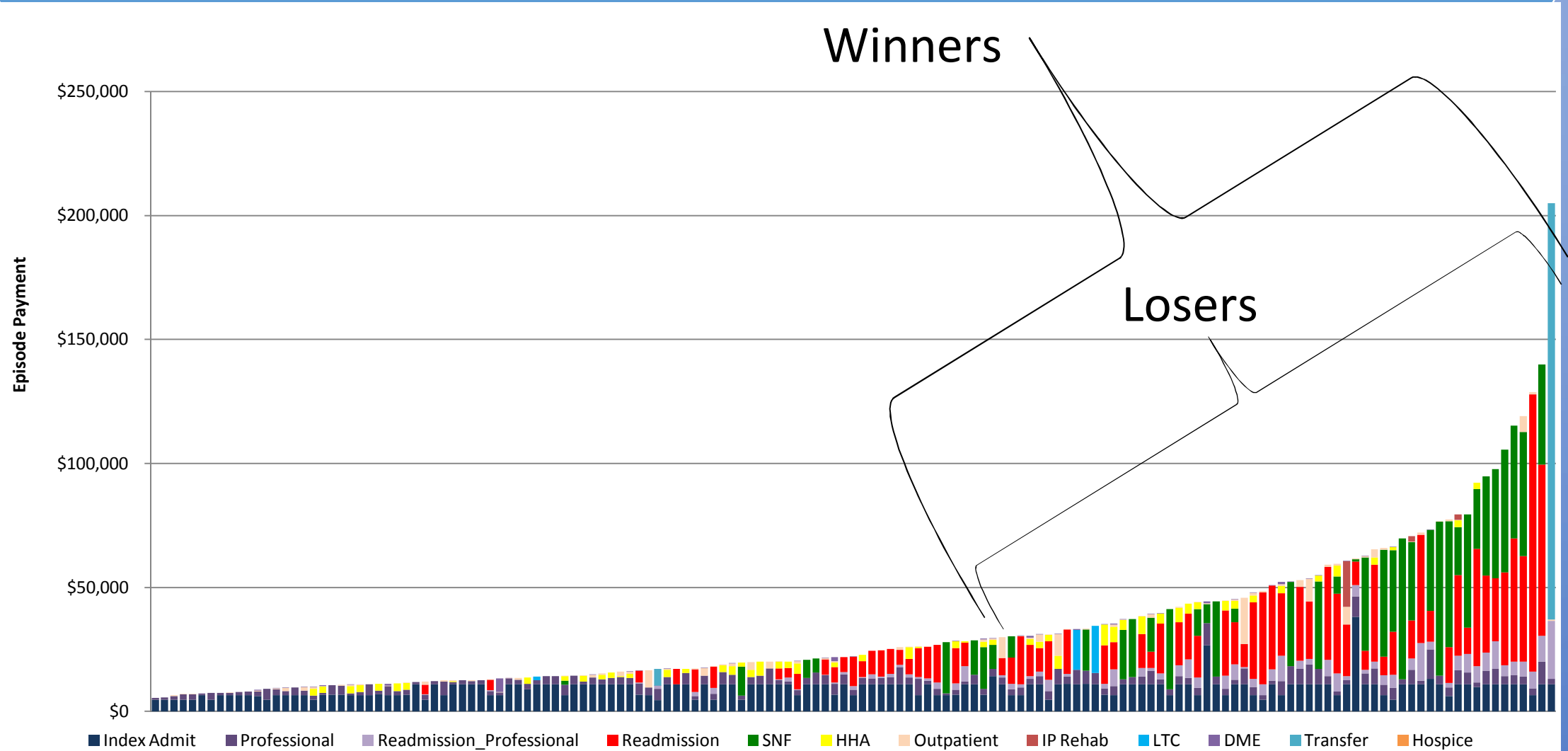
- Random
- Unmanageable - care plans ineffective
- No care plans exist



How To Make Money in MJR Episodes



How to Make Money in AMI Episodes

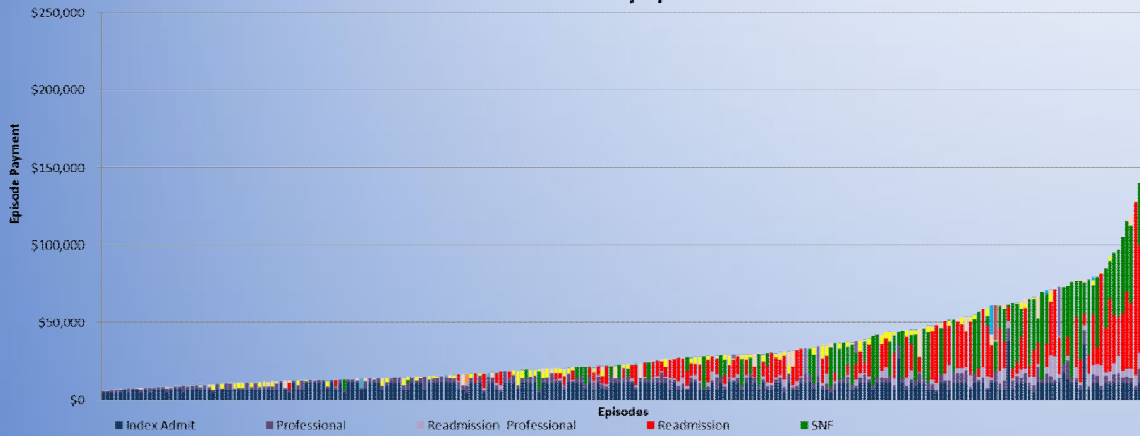


This is the end of Jon's slides

Drivers of variation in cost differ by condition

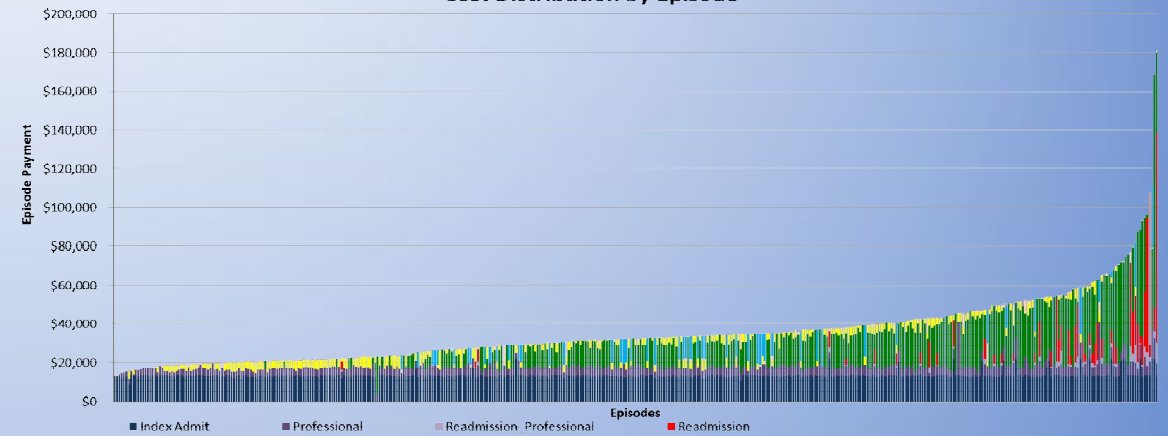
AMI

Cost Distribution by Episode



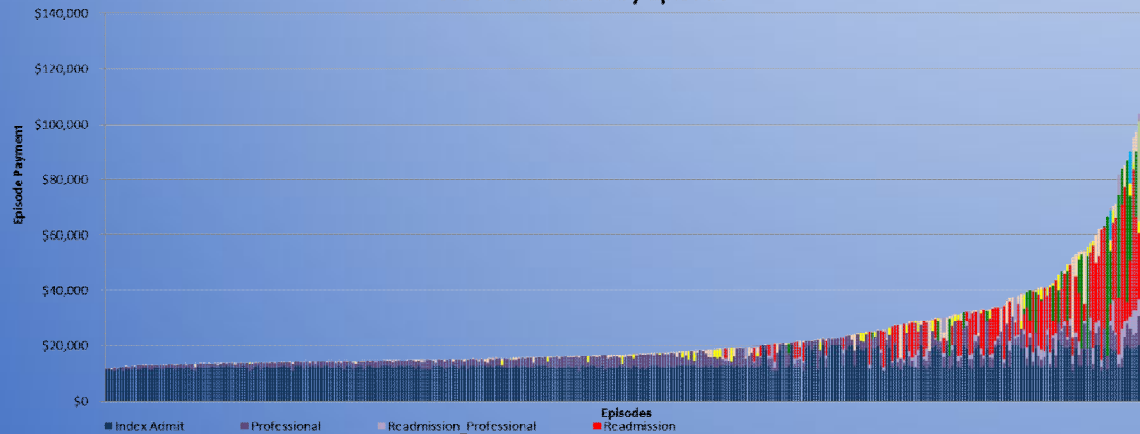
MJR

Cost Distribution by Episode



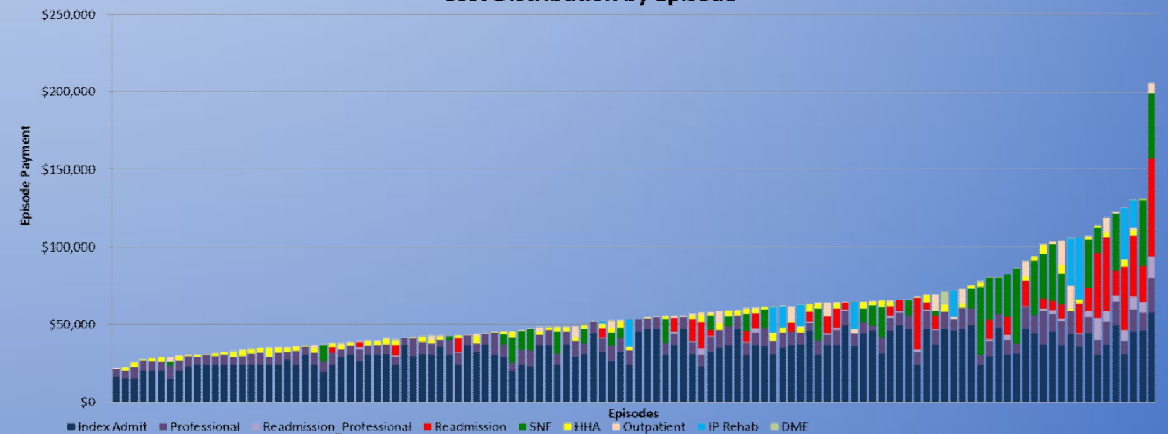
PCI

Cost Distribution by Episode



CABG

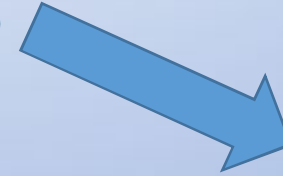
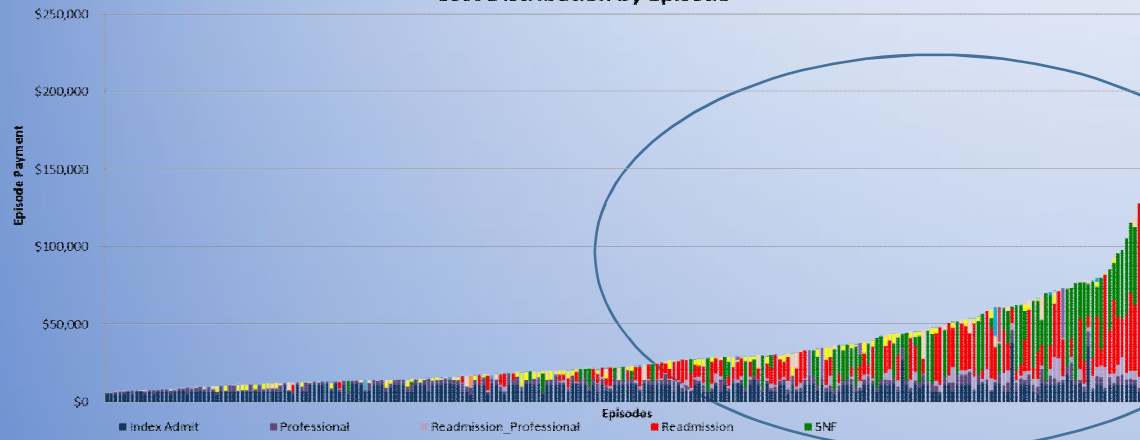
Cost Distribution by Episode



For AMI and PCI, readmission is the dominant driver of variation in cost

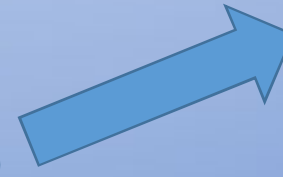
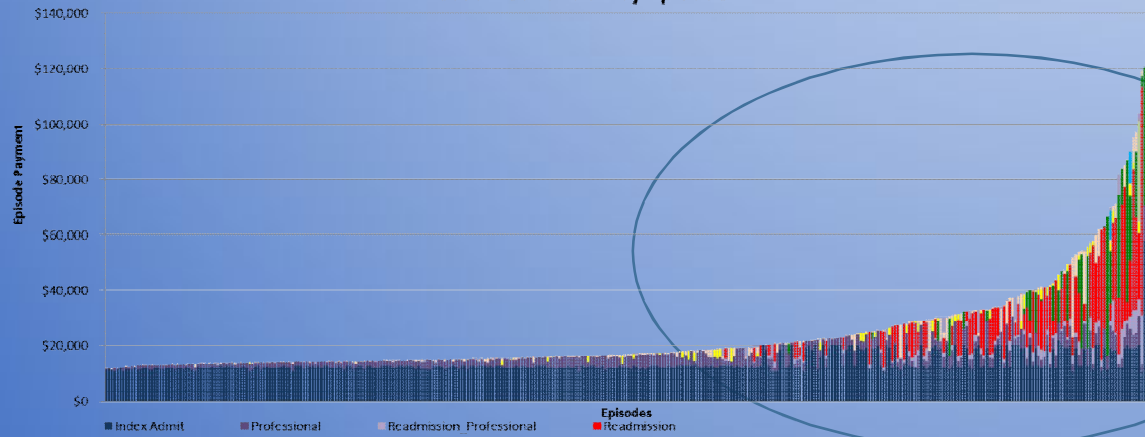
AMI

Cost Distribution by Episode



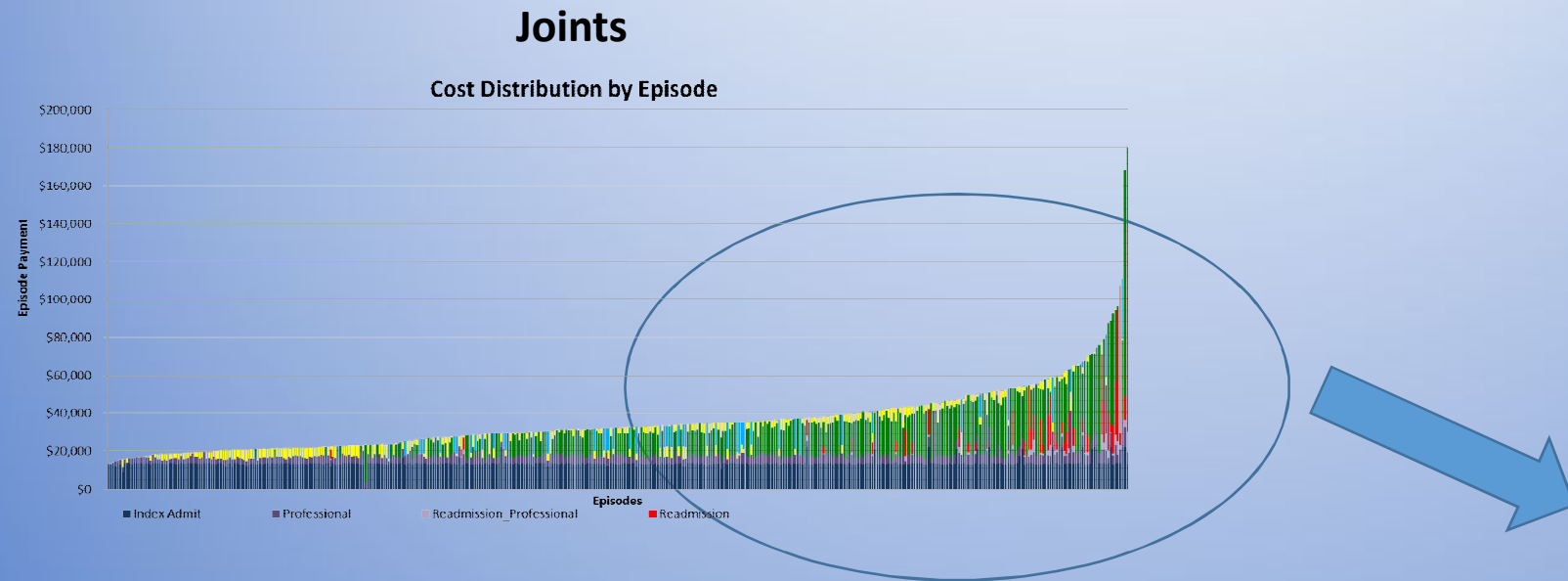
PCI

Cost Distribution by Episode



Readmissions

For major joint replacement, post-acute care use is the dominant driver of variation in cost

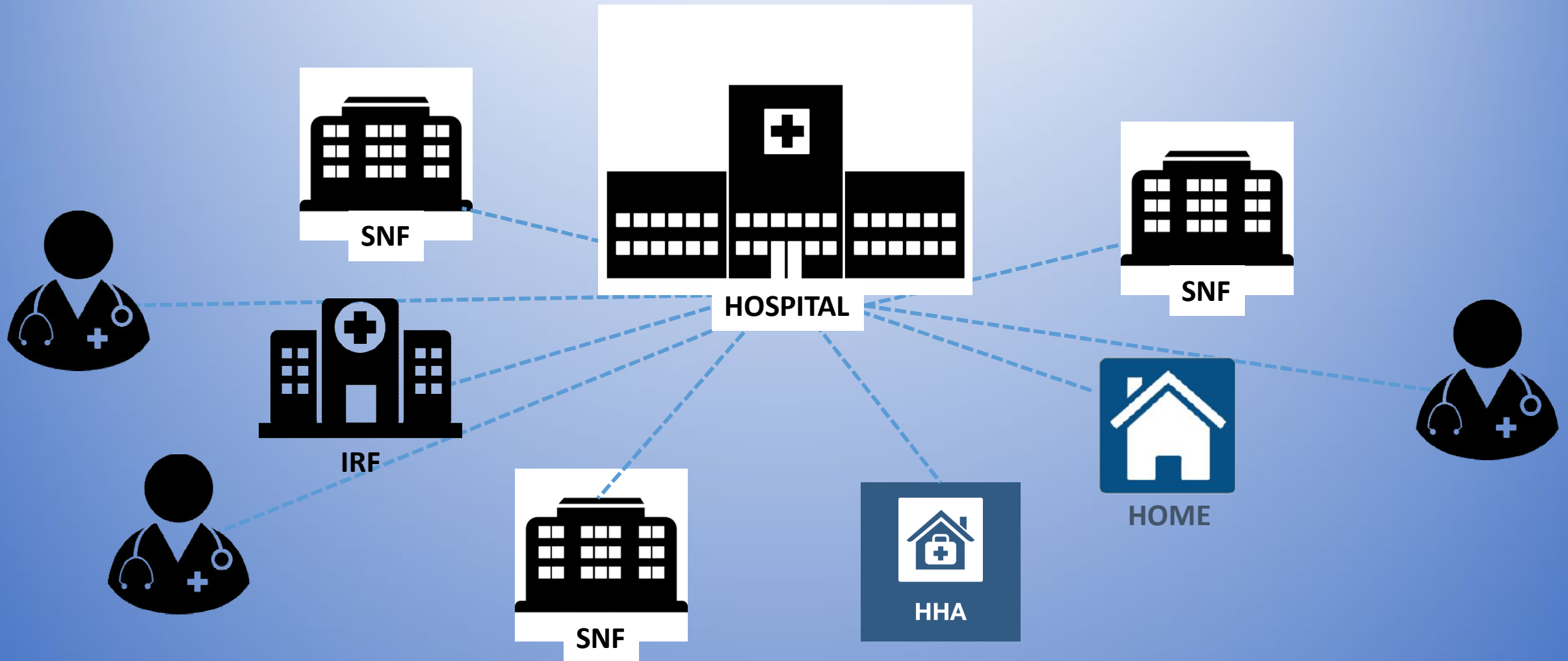


SNF Use

For CABG, variation in cost is driven by both readmission and post-acute care use.



Reducing post-acute care costs and readmissions overlapping yet divergent strategies



To reduce post-acute care costs, follow three rules

1

Reduce use of
post-acute care
services

2

Refer to less
expensive sites of
care

3

Refer to high value
providers



Reduce use of PAC services: for many conditions, discharge to home is not just cheaper, it has better outcomes



Fewer adverse events

Fewer readmissions

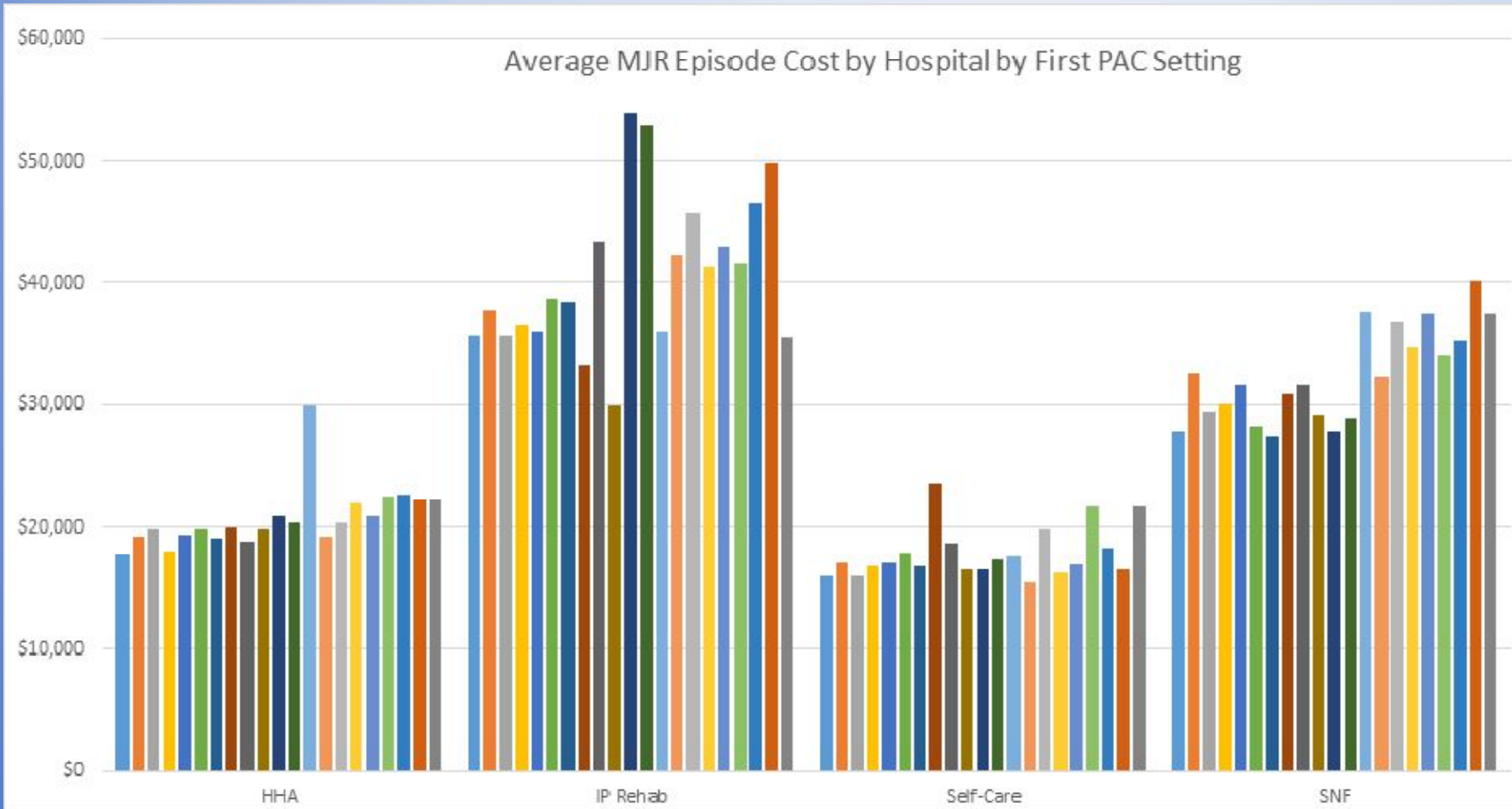
Better functional outcomes

1 Rissman, C. M., Keeney, B. J., Ercolano, E. M. & Koenig, K. M. *J. Arthroplasty* 31, 36–41 (2016).

2 Bini, S. A. *et al J. Arthroplasty* 25, 114–117 (2010).

3 Keswani, A. *et al. J. Arthroplasty* (2016).

Shift to lower cost sites of service.



First PAC setting	Average Episode Cost
HHA	\$19,708
IP Rehab	\$31,404
Self-Care	\$16,882
SNF	\$30,980

Refer to high value providers: develop a high-value post-acute network.



Select service providers based on shared goals and performance

Develop care pathways for post-acute care

Monitor performance on cost, quality, and patient experience

Hold partners accountable to outcomes

Characteristics of post-acute care management

Characteristic	Quality
Time period of intervention	Short
Concepts to discuss with patient	Few
Stakeholders to coordinate	Few
Variation in episode characteristics	Uncommon
New staff required	None or few
Effect of intervention	Large

Readmission interventions occur across the episode

Pre-discharge

- Patient education
- Discharge planning
- Medication reconciliation
- Schedule follow-up appointment before discharge

Post-discharge

- Timely PCP communication
- Follow-up telephone call
- Timely follow-up visit
- Patient hotline
- Home visit

Readmission interventions require coordination with multiple stakeholders

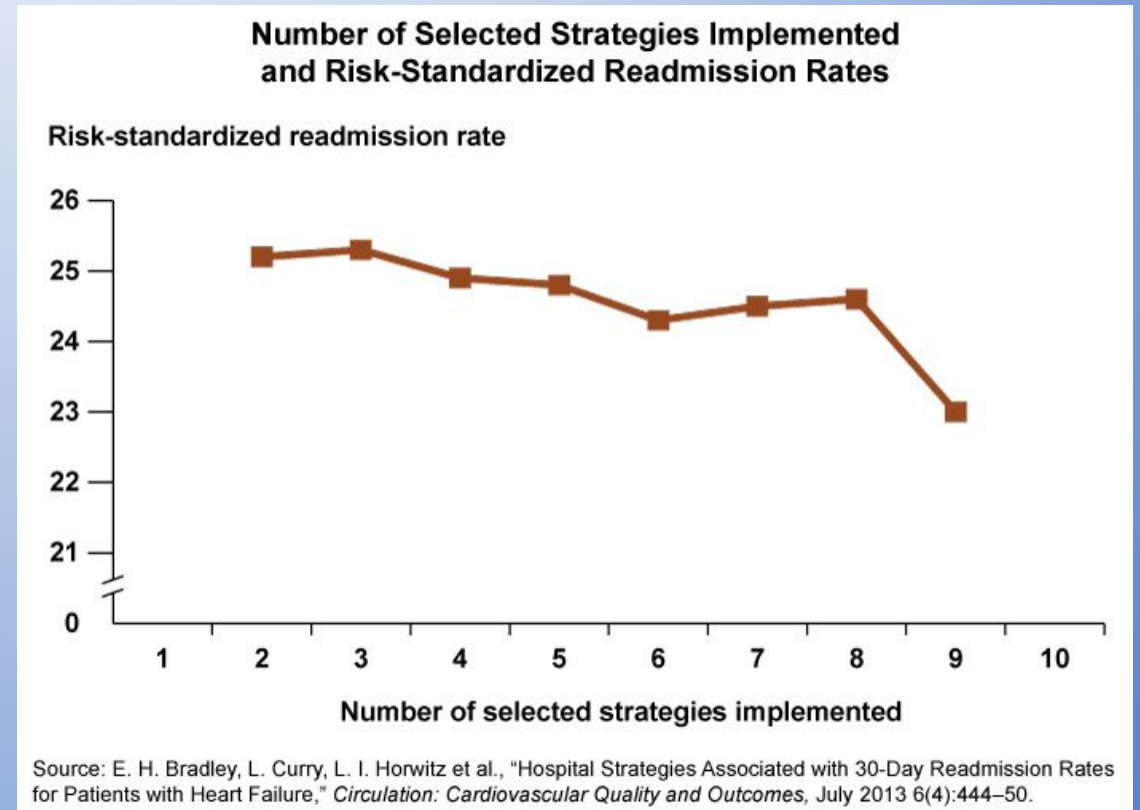
Patient
Caregiver

Physician groups
Neighboring hospitals
Neighboring healthcare
facilities

Reducing readmissions requires multiple interventions and ongoing vigilance

6 strategies associated with lower readmission rates in heart failure:

1. Having nurses take responsibility for medication reconciliation;
2. Arranging follow-up appointments prior to discharge;
3. Having a process in place to send all discharge papers or electronic summaries directly to the patient's primary physician; and
4. Assigning staff to follow up on test results that return after the patient is discharged.
5. Partnering with community physicians
6. Partnering with other local hospitals



Reducing post-acute care use and readmissions have different characteristics

	Post-acute care	Readmissions
Time period of intervention	Short	Entire episode
Concepts to discuss with patient	Few	Many
Stakeholders to coordinate	Few	Many
Variation in episode characteristics	Uncommon	Common
New staff required	None or few	Some to many
Effect of intervention	Large	Small

Take-Away Points

Major Joint Replacement Episodes

- Major strategies:
 - Protocol for PAC setting
 - Effective PAC network
- Implemented globally
- Implemented by admin/finance staff
- Success rate – high
- Cost – relatively low

MRJ Episodes

Cardiology Episodes

- Major strategies
 - Readmission reduction
 - Patient-specific PAC selection
- Implemented for individual patients
- Implemented by physicians and other clinicians
- Success rate – marginal/variable
- Cost - high



Cardiology episodes

Take-Away Points

Major Joint Replacement Episodes

- Low variation
- High PAC utilization
- Low Readmissions
- Few high-cost episodes
- Consistent care protocols
- Lower-cost management

MRJ Episodes

Cardiac Episodes

- AMI-high variation
- PIC/CABG-very low variation
- High readmissions
- Occasional high-cost episodes
- Highly-varying patient needs
- Costly care management



Cardiology episodes

Questions?

Jonathan W. Pearce, CPA, MBA, FHFMA

Principal

Singletrack Analytics, LLC

jon@singletrackanalytics.com



Lindsay Jubelt, MD, MSc

Senior Medical Director of Population Health

Mount Sinai Health System

lindsay.jubelt@mountsinai.org

