MAJOR JOINT REPLACEMENT BY THE NUMBERS

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SINGLETRACK ANALYTICS

OVERVIEW

- The Metrics
- How Doctors Use the Numbers
- The Financial and Operational Numbers
- The Role of Analytics

HOW CJR DIFFERS FROM BPCI

BPCI

- Base period 2009-12; constant
- Target from base period only
- Fractures/non-fractures – same targets
- No quality metrics in payment calculation
- Others – outlier, capital, etc.

CJR

- Base period 2012-14; updated
- Target from base/region blend
- Fractures/non-fractures – different targets
- Quality metrics in payment calculation

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THE NUMBERS

- Episode count
- Cost (to Medicare) per episode
- Percentage of patients sent home (no institutional care)
- Readmission rate
- Hip fracture percentage

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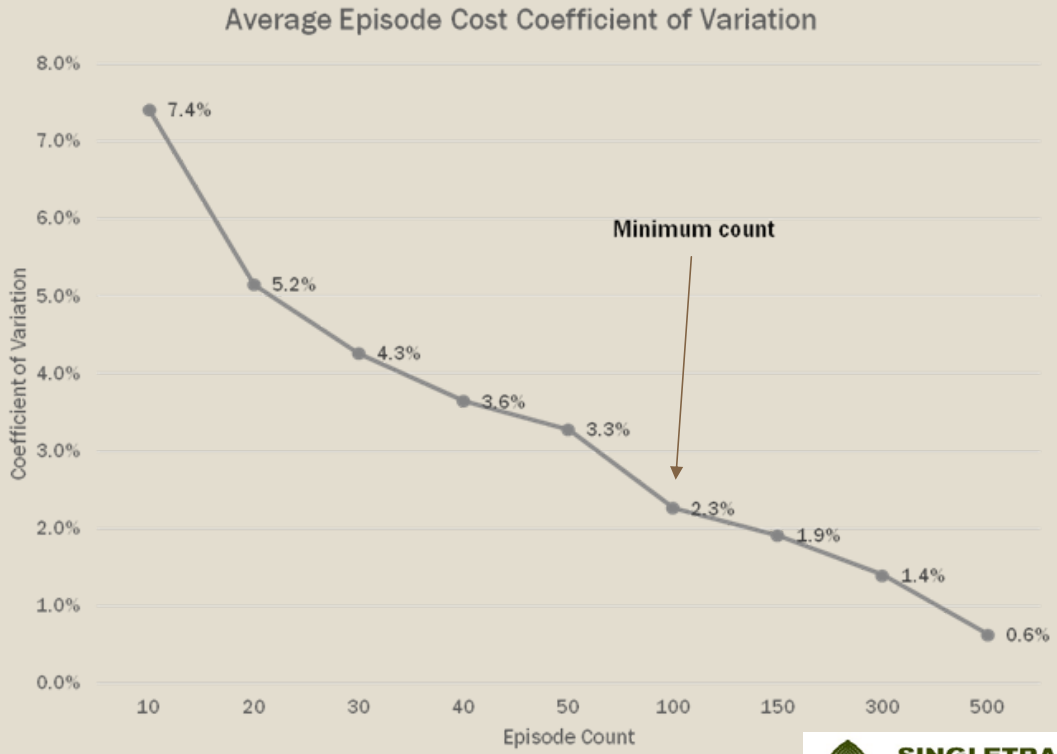
EPISODE COUNT

Why it matters

- High count reduces cost variation
- Create measurable clinical metrics
- Create critical mass
  - Care management
  - Gainsharing



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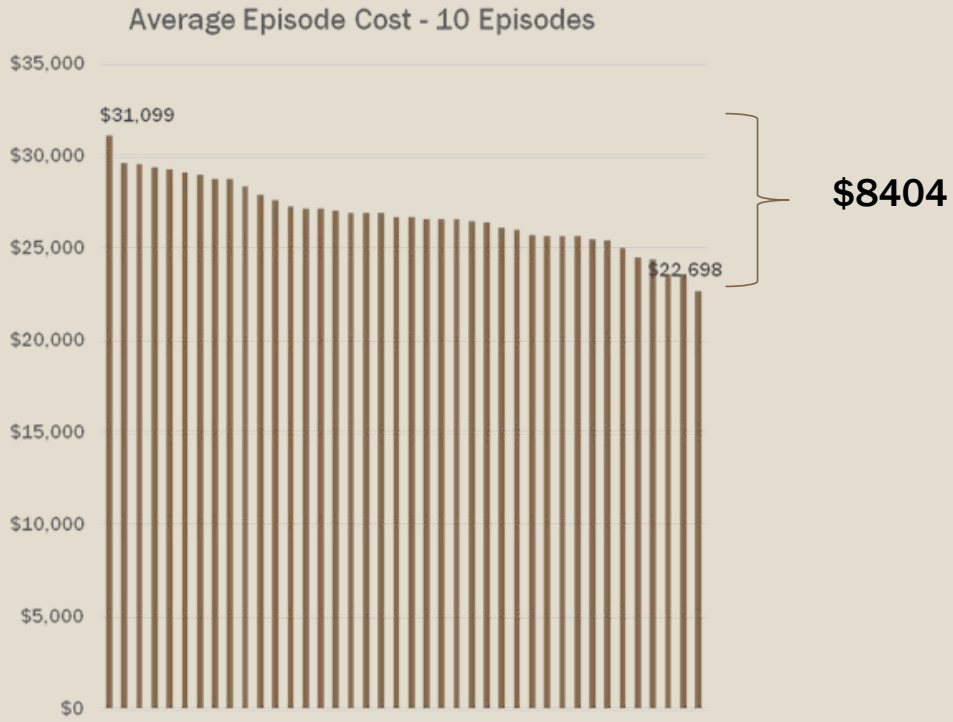
SMALL POPULATION CREATES WIDE COST VARIATIONS



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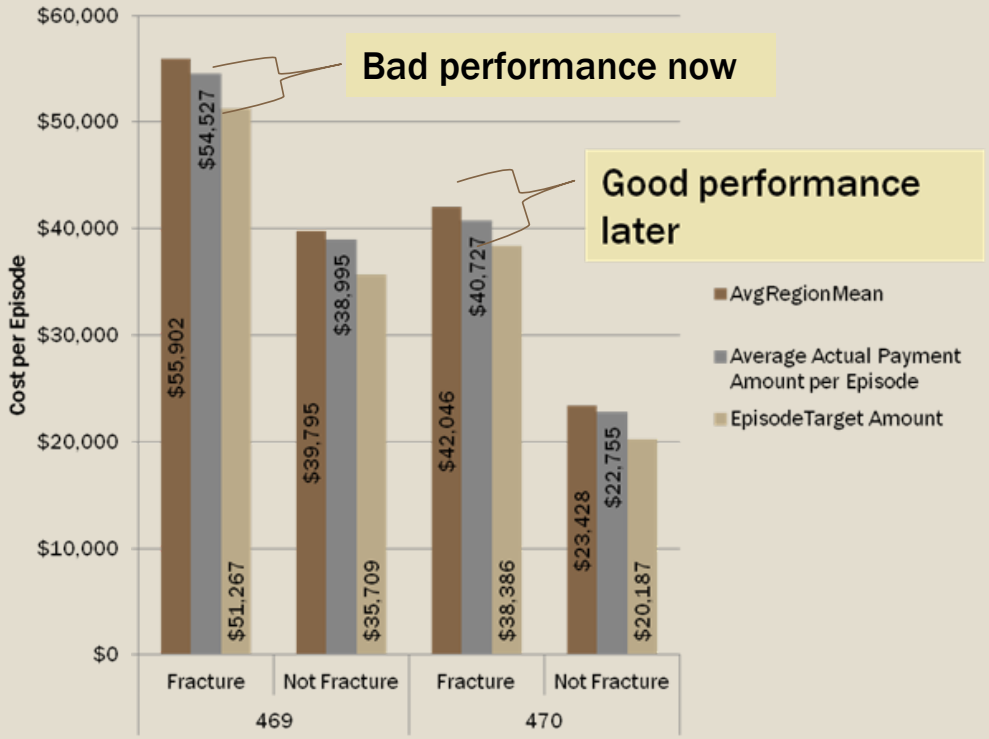
COST PER EPISODE (TO MEDICARE)

Baseline cost sets target price

Current cost compares to target

Regional cost affects target (CJR)



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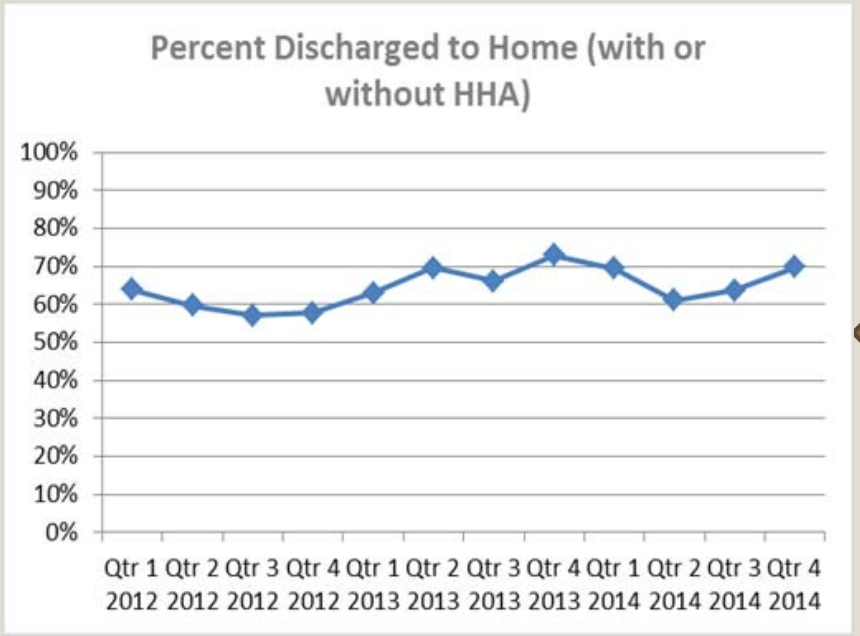
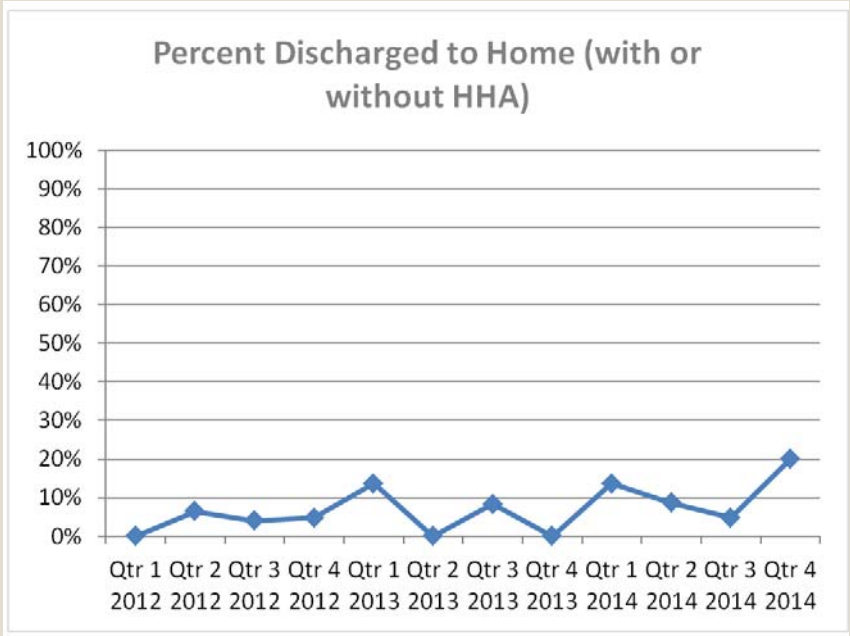
PERCENT DISCHARGED HOME



Hospital A



Hospital B

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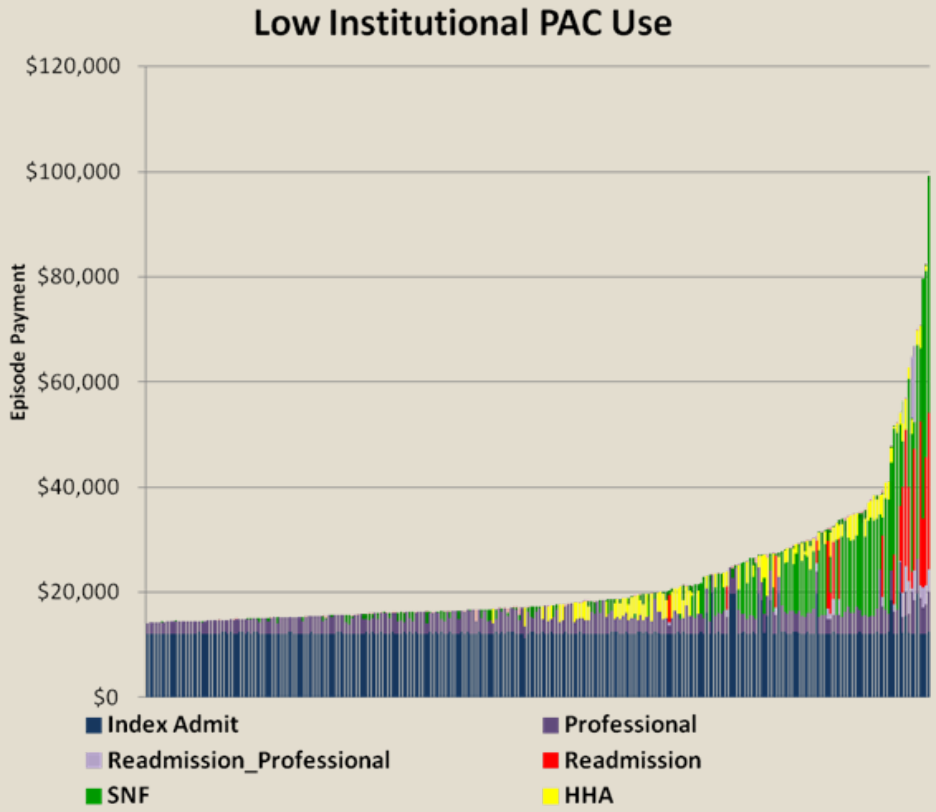
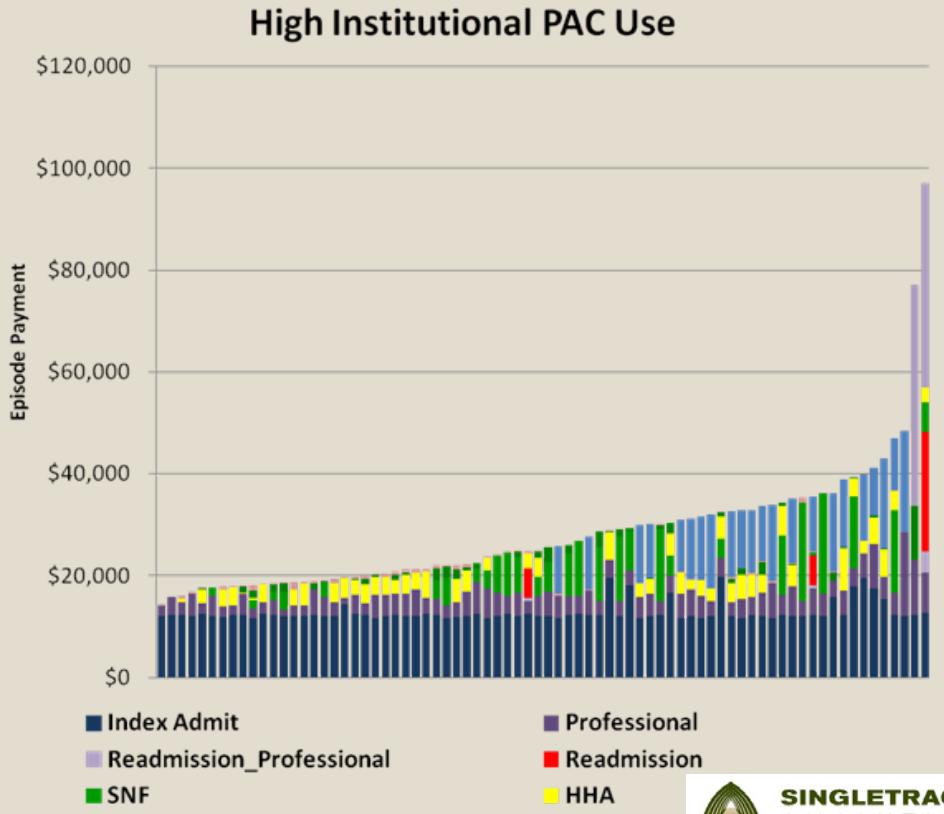
DIFFERENCES IN POST-DISCHARGE PATTERNS





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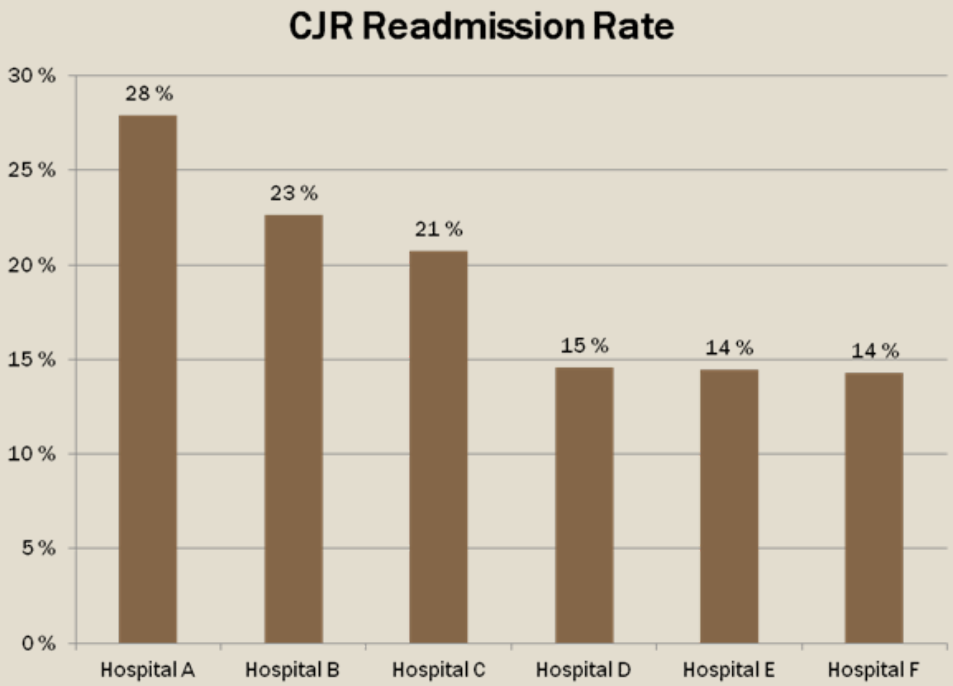
READMISSIONS AREN'T A PROBLEM – UNLESS THEY ARE!



Also consider DRG and fracture mix

Average

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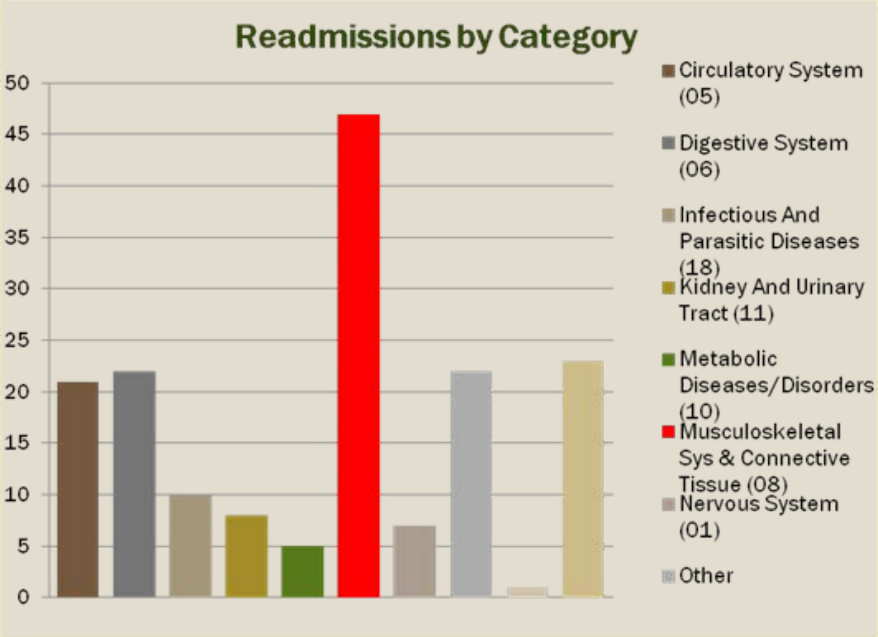
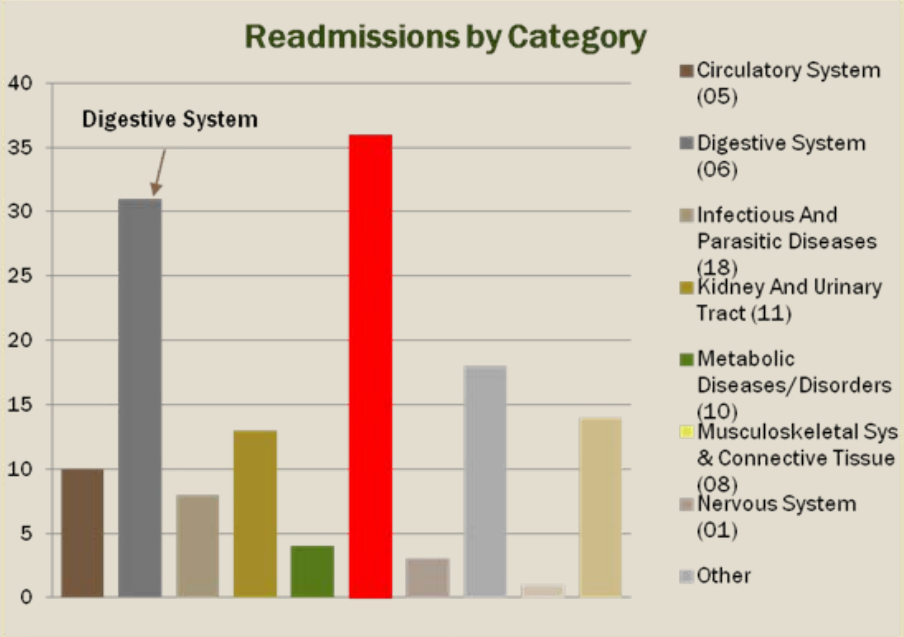
READMISSION RATE AND DRGS

Normal Readmission Pattern



Problem Readmission Pattern



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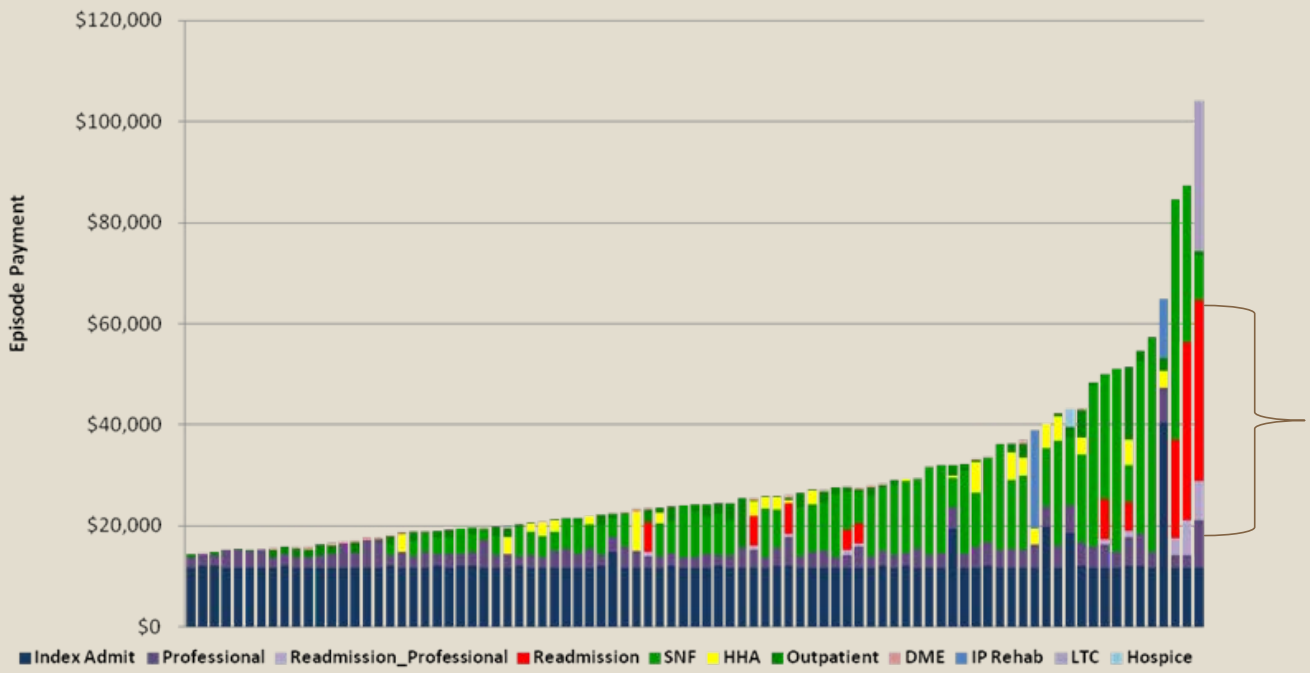
LOW READMISSION RATE MAY STILL INDICATE OPPORTUNITY



Few high-cost readmissions

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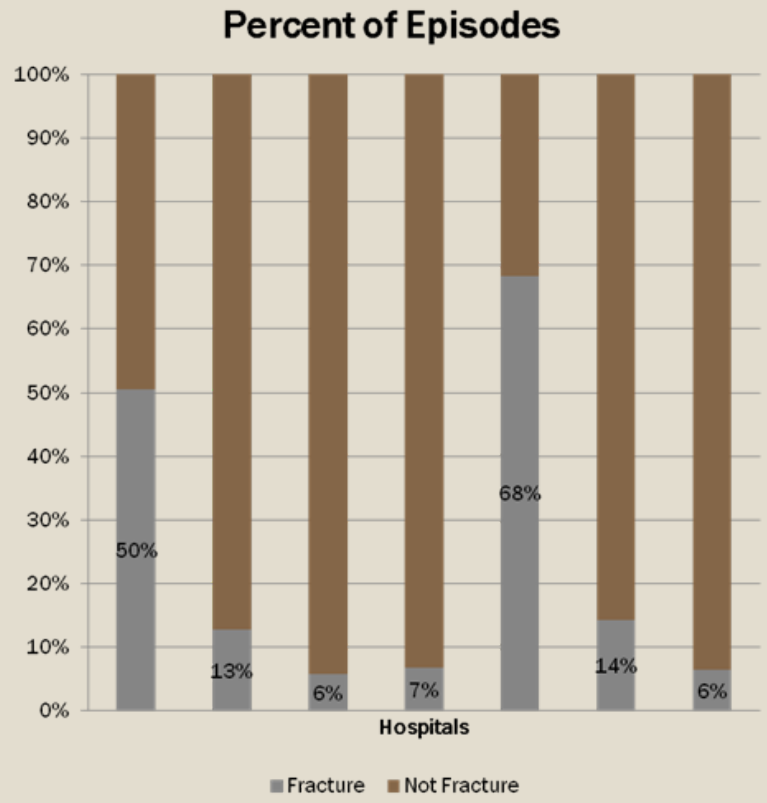
HIP FRACTURE PERCENTAGE



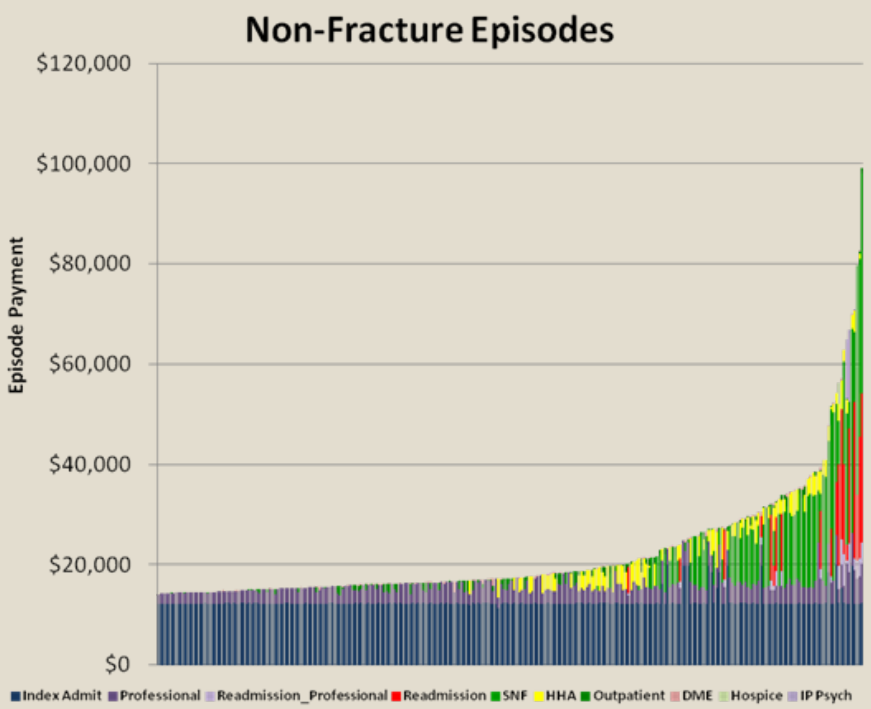
BPCI

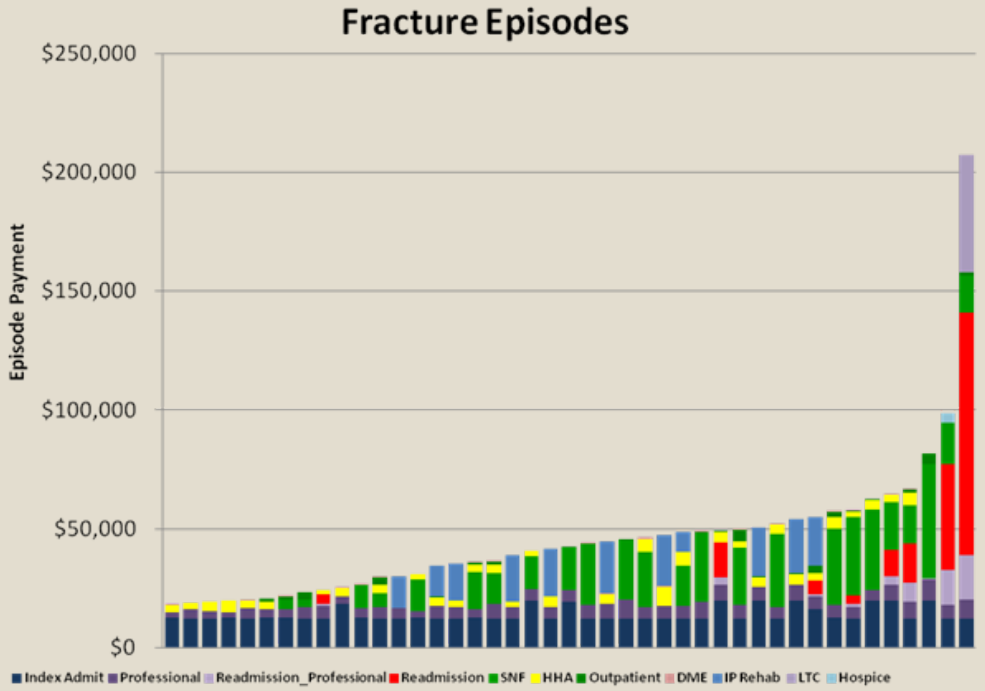
- No difference in target
- Target is fracture rate in 2009-12 baseline
- Increase in fracture rate = NOT OK

CJR

- Target is different
- Target is blended from regional data
- Change in fracture rate is OK

OPPORTUNITIES IN FRACTURE EPISODES





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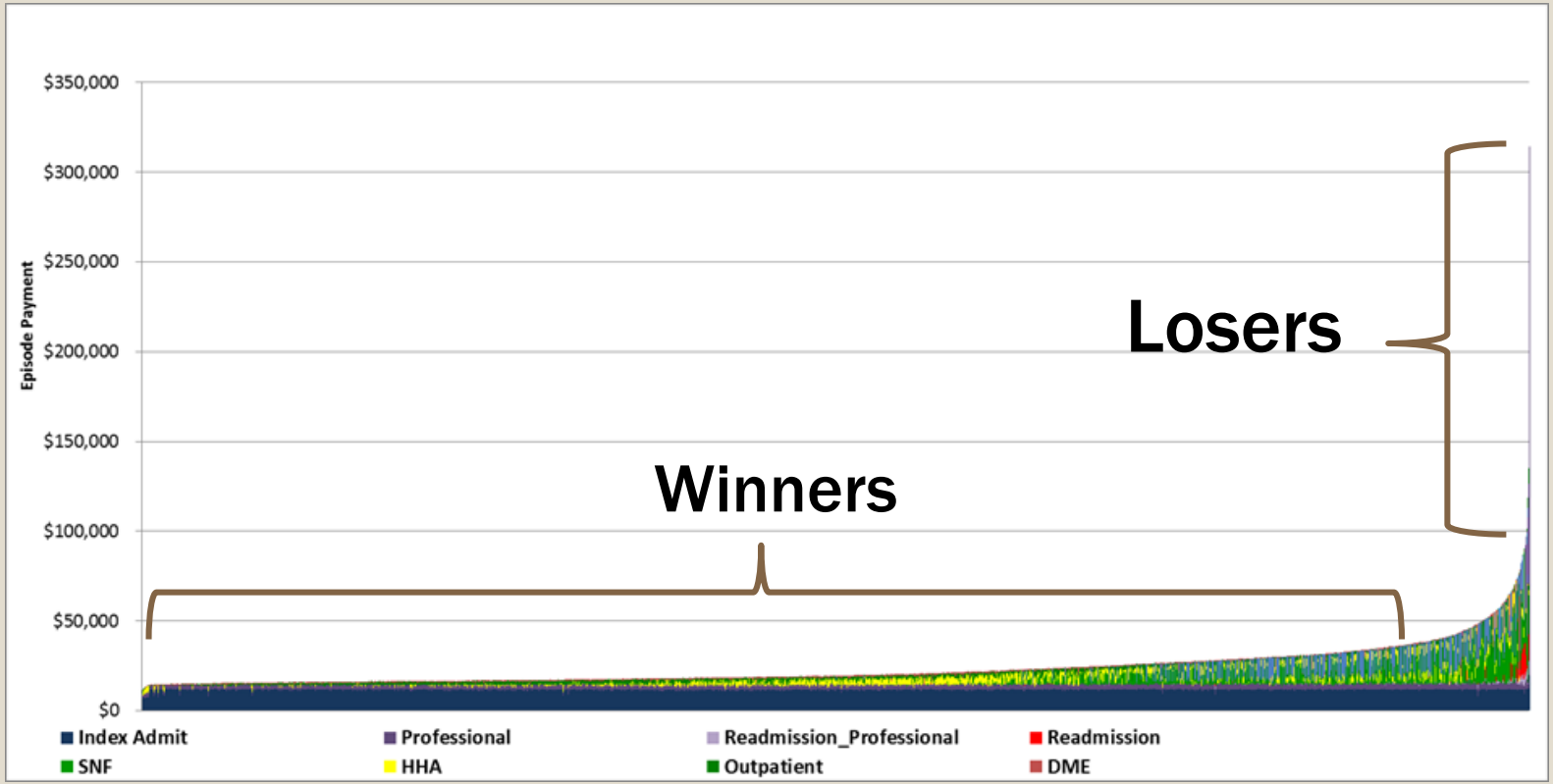
HOW TO MAKE MONEY IN MJR



SINGLETRACK ANALYTICS

UCSF Medical Center

UCSF Benioff Children's Hospital

Medicare Bundled Payment for Total Joints: Clinical Trends

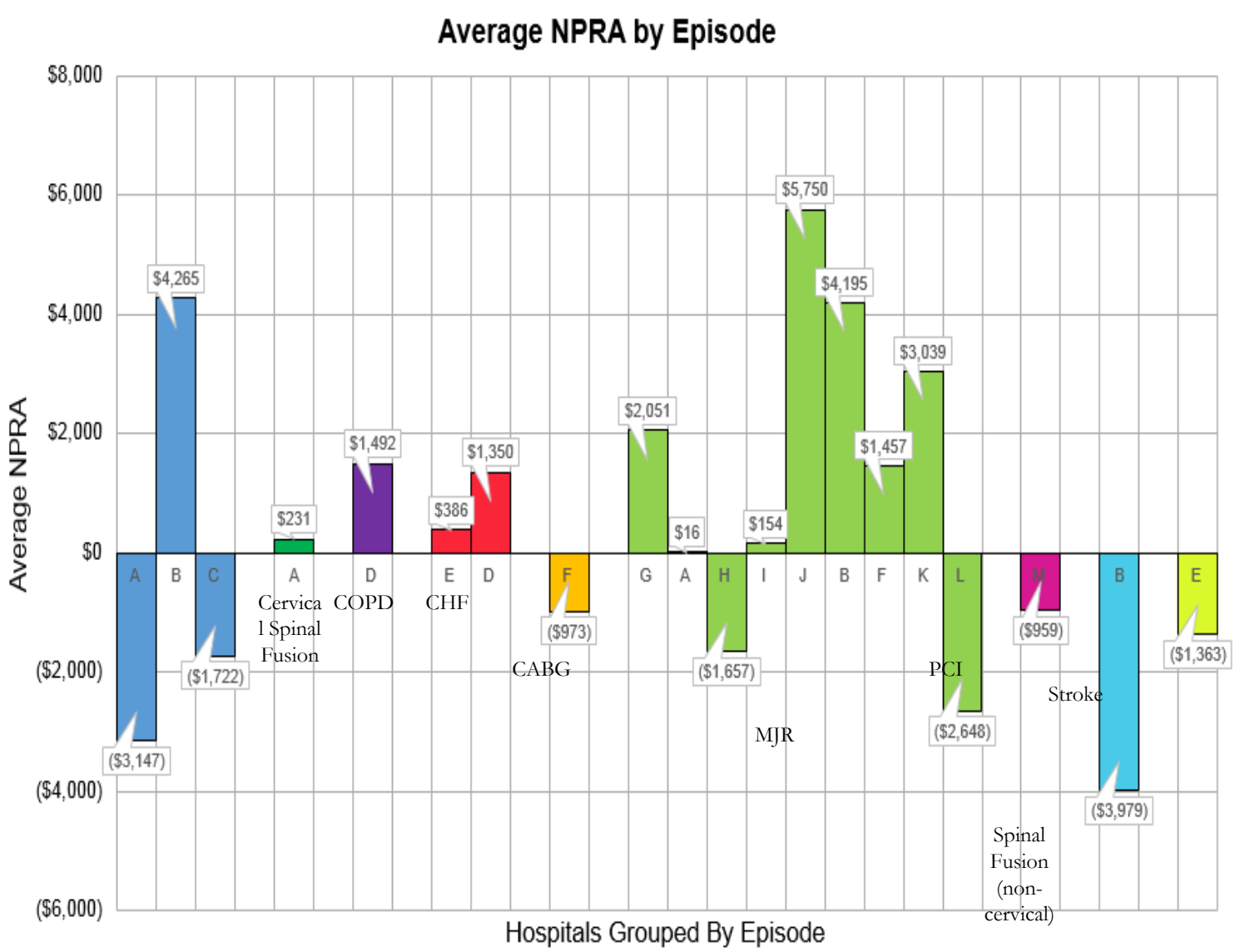
Coleen Kivlahan MD, MSPH

Executive Director Primary Care, Professor of Family Medicine

UCSF Health

Roadmap

- Causes of variation in financial success in BPCI MJR
- Findings from Medicare Historical Claims Data
- Current Interventions
- Successes, Challenges, and Next Steps



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dren's Hospital

Avalere describes the opportunity

- Overall average Medicare payment for an episode of care for TKA and THA at $25,565.
- Of that amount, $13,193 is tied to the initial hospital stay.
- Hospital readmissions were averaged at $1,155
- The $11,217 remaining is associated with postacute care.


RULES
ARE
RULES.

Rule and environmental reasons for financial neutral or loss results in MJR

- New joint program/new hospital without baseline data. State data used for target price and hospital price exceeded target.
- Physician precedence in their community took all hospital episodes.
- Limited opportunity given low # episodes in IP rehab in baseline
- A small average savings per episode in 470 was reduced by large losses per episode in 469
- Mergers and acquisitions changed precedence for episodes
- Low volume

Clinical and population reasons for financial neutral or loss results in MJR

- High variation across quarters (SNF, IP rehab, and readmits)
- Catastrophic readmit cases and higher than expected readmission rate
- Higher selection of IP rehab over SNF; High SNF LOS
- Exchanged IP rehab for SNF use without reducing overall PAC utilization
- Lack of experience and infrastructure for analyzing Medicare claims data
- Lack of experience with longitudinal patient outreach and engagement

Clinical and population reasons for financial neutral or loss results in MJR

- Coding challenges: experienced losses in 470 cases (example: 60% of 470 episodes using SNF/IP rehab, with a very low rate of cases coded 469)
- Fracture rate high or poorly managed: (example: 50% of 469 are fractures, they account for almost all readmissions, and most of SNF and IP rehab admissions. Fracture cases make up 16% of UCSF's joint replacement volume and account for about 40% of 90-day readmissions.) Readmission rate is 2-3x higher among fracture cases.
- Very low variation in 470 cases.
- PAC opportunity not systematically addressed. Low cost, highly efficient hospitals in baseline period, yet their efficiency applies only to inpatient period.
- Lack of commitment to standardization across the continuum of care:

Reasons for Success

- Early identification of multidisciplinary teams of surgeons, anesthesiologists, nurses, administrators, physical therapists, care managers, home care providers, etc
- Commitment to optimize purchasing agreements (implants etc)
- Serious effort to enhance patient education in pre and post op periods; and increase in return rates to operating hospital
- IT and financial alignment between hospitals and physicians
- Standardization of all key processes: prehab, implant devices, clinical protocols for patient selection, nausea, pain, VTE, discharge planning

Reasons for Success

- Align team incentives with performance goals (e.g. physical therapists now have incentive payments tied to performance on bundled payment metrics)
- Continuous network management
- Narrow PAC network partners, close monitoring of % of episodes using SNF/IP rehab (successful settings are sending 8-10% of patients to skilled nursing or rehab, compared with nearly 30-60%+ in baseline).
- Increased use of home care.
- Overcame the “we own the PAC provider” phenomenon.

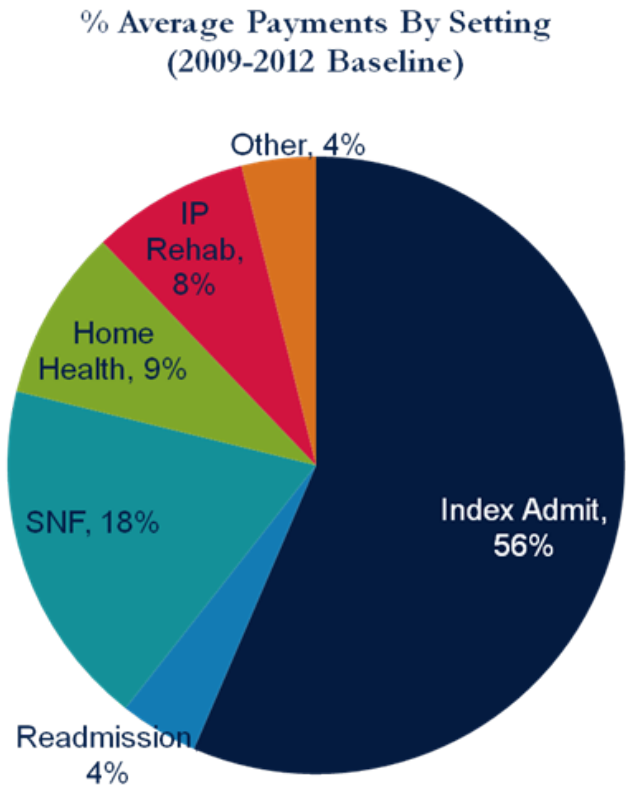
CJR Success Factors

- **Lead from the top.** This effort must be led by a top hospital executive.
- **Understand that you are a payer.** The net impact is the same as if a hospital wrote a check to every provider who touched their patient, both during and after the procedure.
- **Do the things that a payer does.** Payers manage risk, understand sources of risk and prevent unnecessary or harmful care.
- **Payers build networks.** Partner with providers who deliver the best outcomes.
- **Create new models of patient engagement.** We have very little knowledge or management of what happens to the patient after discharge.
- **Manage post-acute care** PAC cost is growing by > 15%/year with a 300% variation in SNF utilization.

https://www.edifecs.com/e/7-strategic-steps-for-success-under-the-comprensive-care-joint-replacement-program

Average Episode Payments By Setting

- UCSF's average baseline cost per 90 day episode was $34,669
- Risk was up to $1.7 million in potential losses or gains
- Low readmit rate but 26% going to PAC settings



90-Day Episode Costs and Readmits by First Post Acute Care Setting

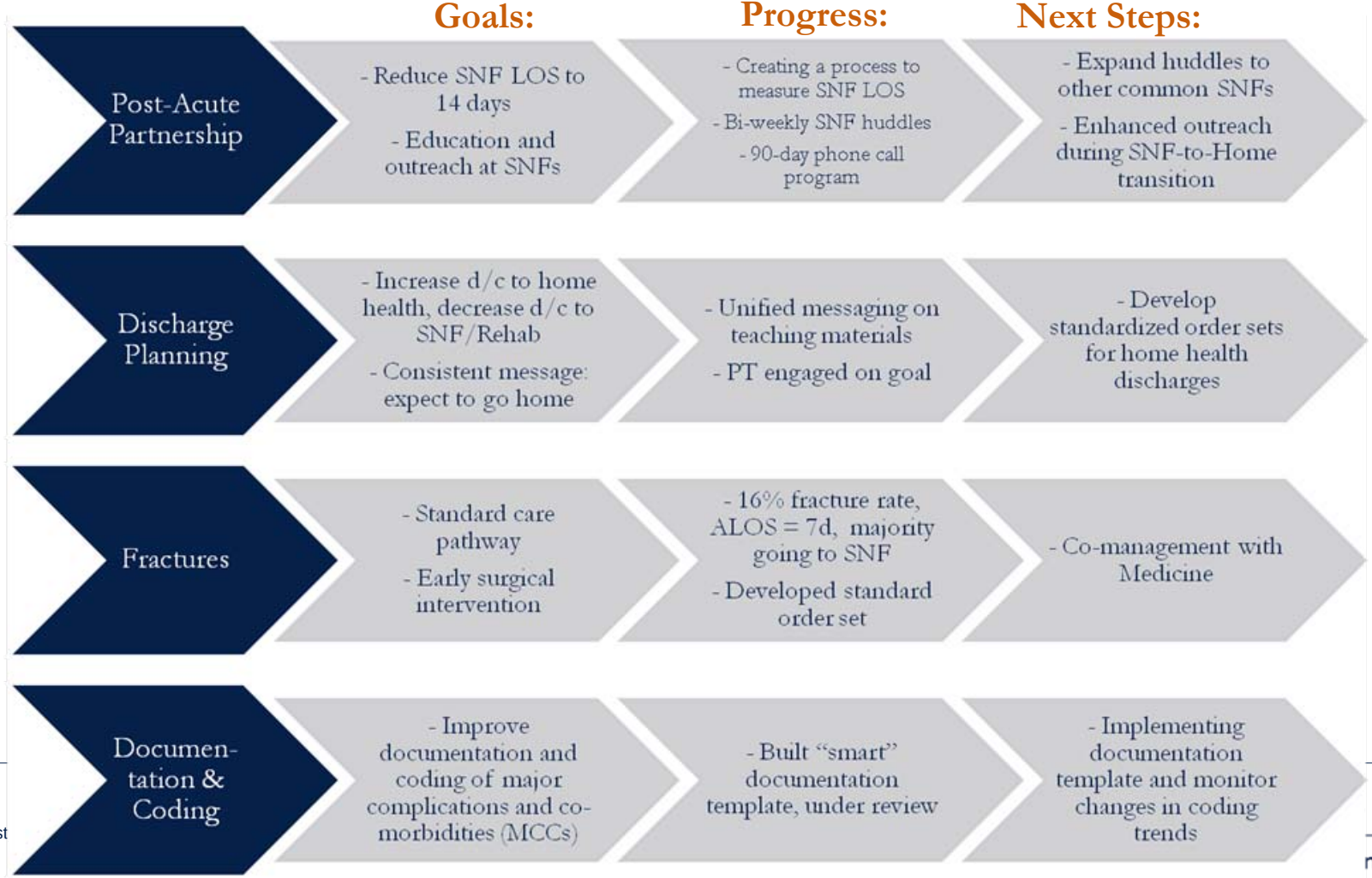
2014 – Medicare Claims Data

First Post Discharge Setting	Episode Count	Average Net Payment Per Episode	Readmission Rate
⊞ HHA	118	$25,607	4 %
⊞ IP_Rehab	39	$52,591	8 %
⊞ LTC	4	$93,142	
⊞ Self-Care	20	$26,344	15 %
⊞ SNF	59	$49,875	12 %
⊞ Transfer	1	$72,714	100 %
Grand Total	241	$37,293	8 %

- Patients who go home with home health services had the lowest 90-day episode costs and lowest readmission rate
- Episode costs were highest among patients going to SNF and Acute Rehab
- Readmission rates highest among patients discharged to SNF and home without services

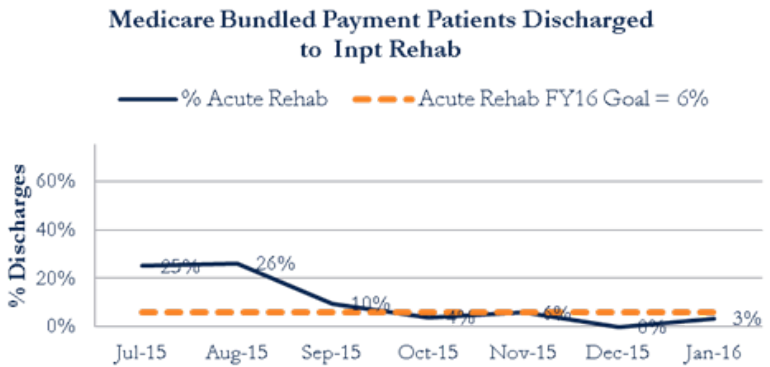
Source: Medicare Claims Data, January – December 2014

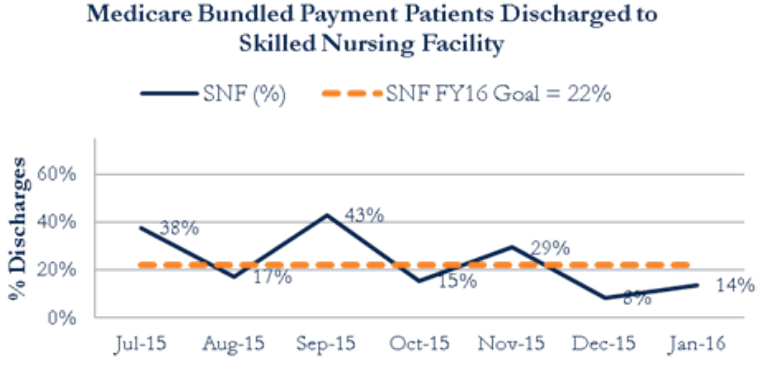
Progress and Next Steps

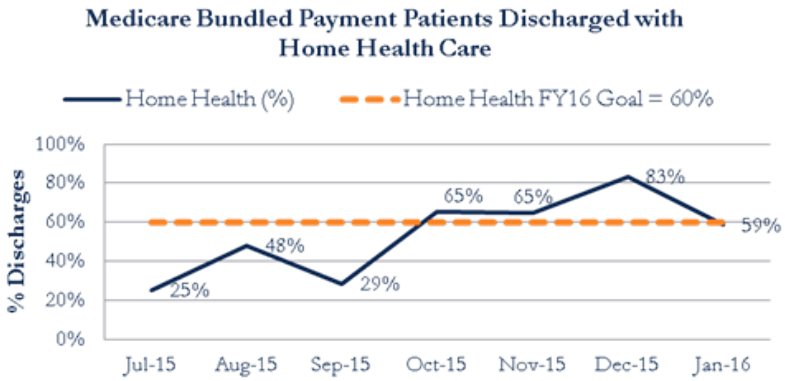


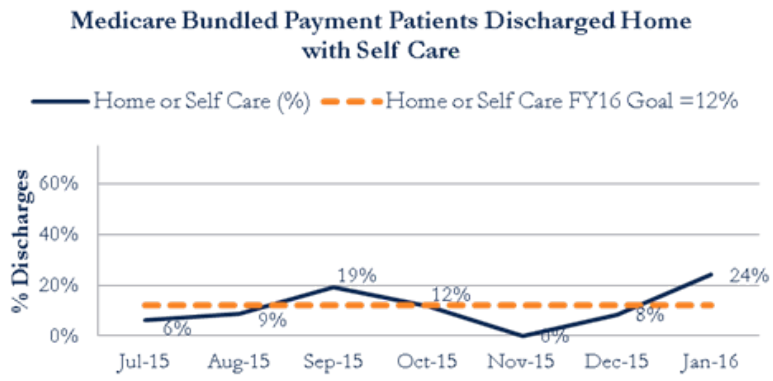
FY2016 Discharges by Post Acute Setting

July 1, 2015 – January 31, 2016

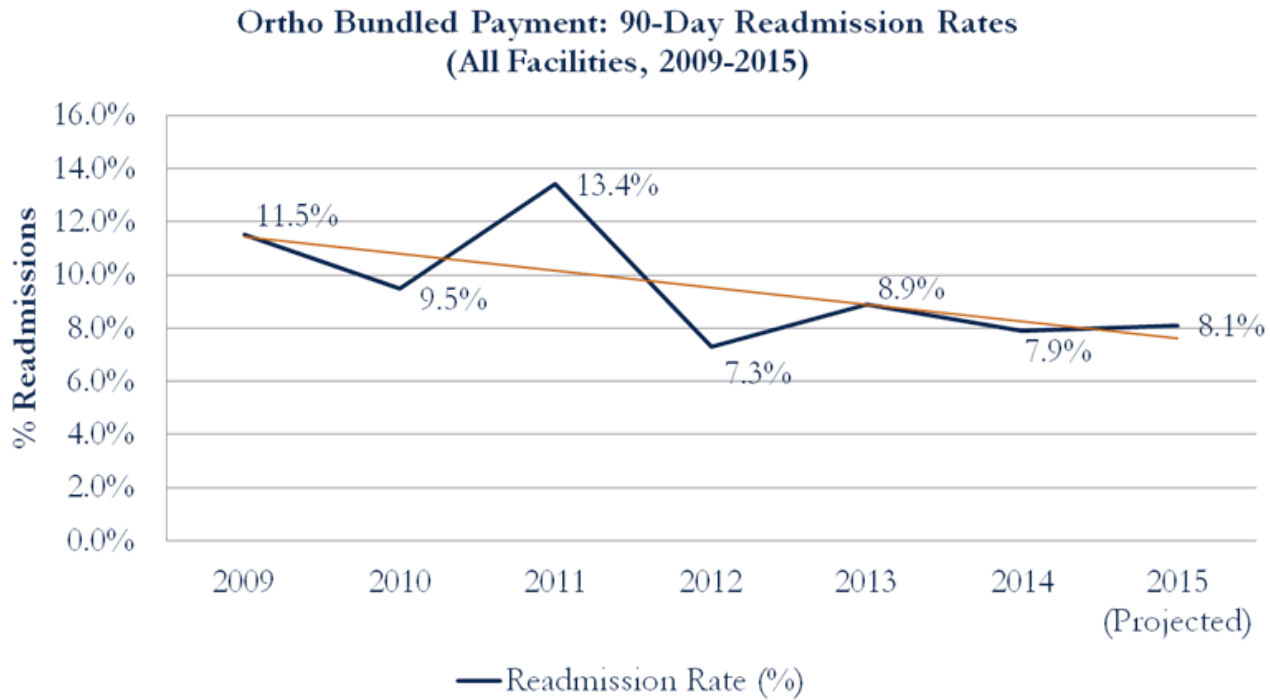








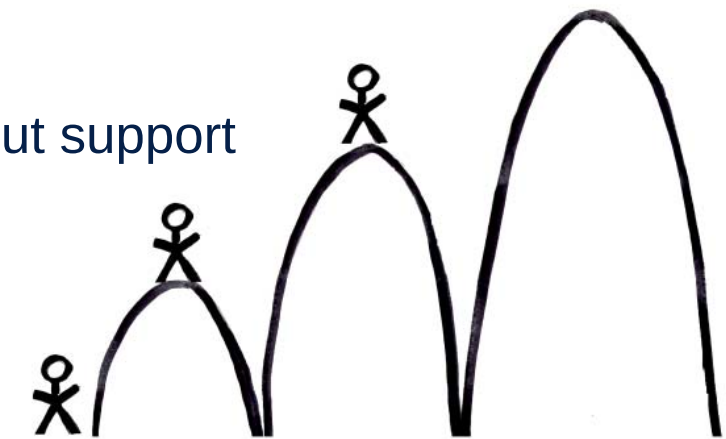
UCSF Medicare Data: 90-Day Readmission Trend (All Facilities)



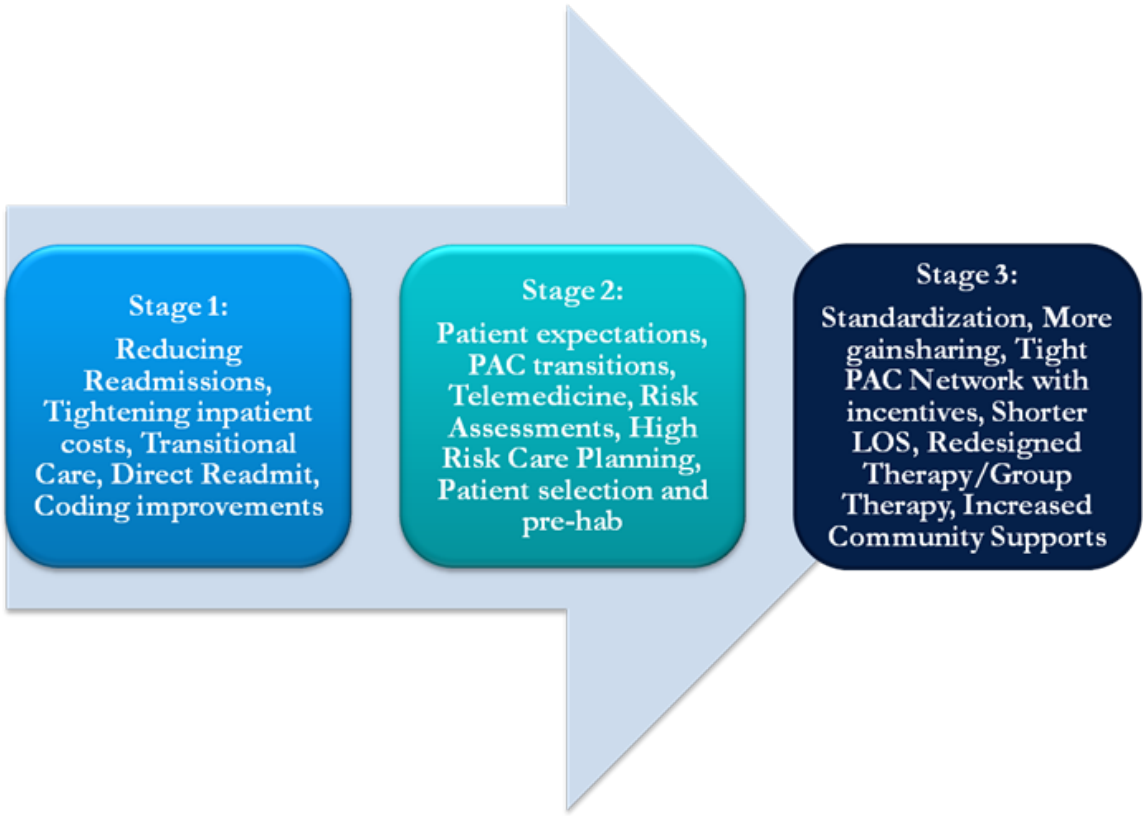
Source: Medicare Claims Data for episodes completed through June 2015. Full 2015 rates are projected above.

The Big Opportunities in Both CJR and BPCI

- Change the % of patients going to PAC facilities
- Change the distribution to favor in-network PAC
- Know your fracture rate and manage care proactively
- Understand the comorbid risk in late readmits beyond 30 days
- Don’t send people home without support



The Evolving Science and Practice…



Questions, Comments….Discussion

UCSF Medical Center

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UCSF Medical Center

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HOSPITAL FOR SPECIAL SURGERY

Major Joint Replacement by the Numbers

A Perspective from the Hospital for Special Surgery

Pantelis Karnoupakis
Director, Bundle Payments – Payor Strategy & Contracting
June 8, 2016

Overview

- Who is HSS?
- HSS By The Numbers
- Key Performance Category: **Discharge to Home**
- Key Performance Category: **SNF LOS**
- Key Performance Category: **Readmissions**
- How Do You Implement Change?
- Challenges & Lessons Learned
- The Future of Payer Contracting: **Commercial Bundles**

Global Leader In Musculoskeletal Care

>150,000 Patients cared for at HSS in 2015

>9,000 Joint replacements performed each year

>30,000 Surgeries performed annually

All **50** states represented by our patient population

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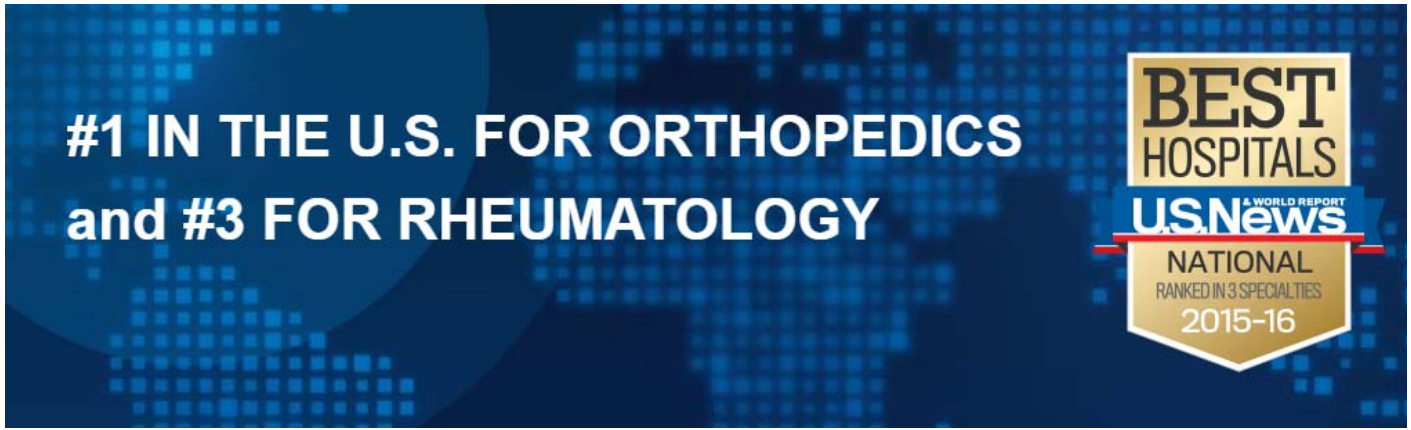
Externally Validated Results



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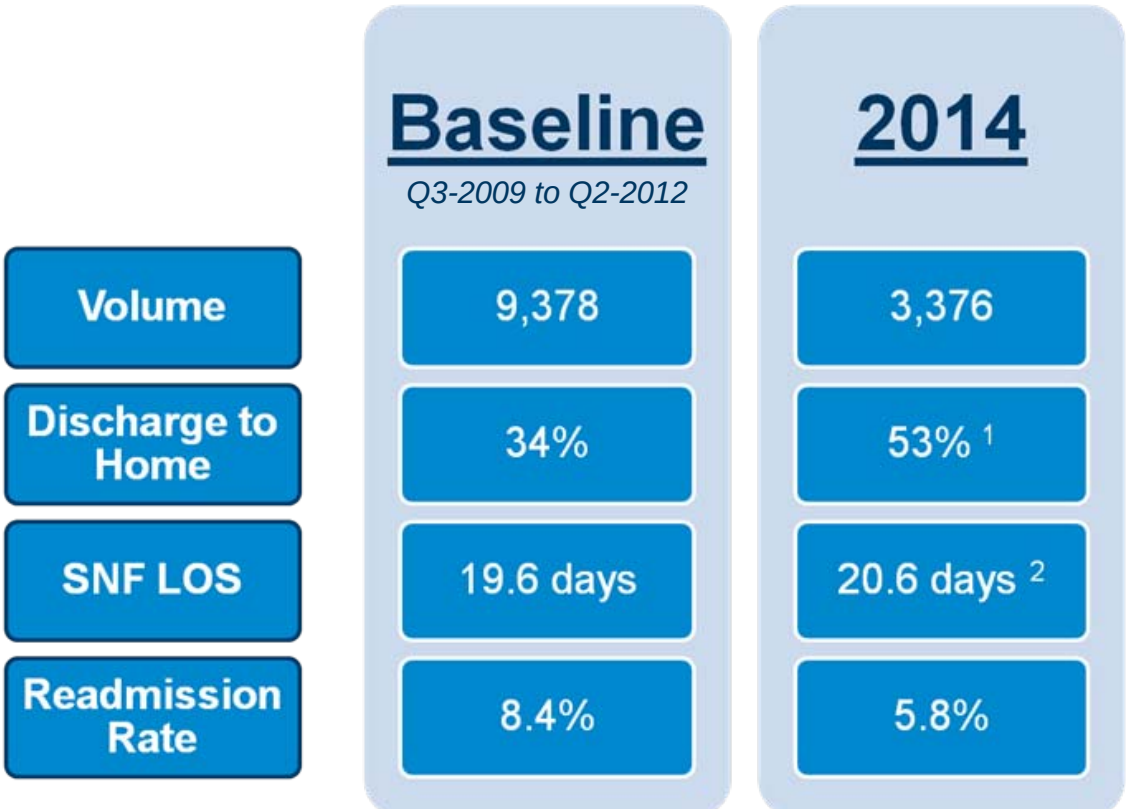
HSS By The Numbers



- In key performance categories, a comparison of HSS between the BPCI baseline period and CY 2014

1. *In Q4-2015 & Q1-2016, discharge to home is **> 60%***
2. *Since the Preferred SNF Partner program went live in early 2016, SNF LOS at our preferred partners is **7.6 days***

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Increase the Number of Patients Going Home

- **Uniform communication at every patient touch point**
- **Expectations of acute LOS and discharge disposition set as early as 8 weeks prior to surgery**
- **Additional Service Provided:**
  - Home Care Intake assessment “Get Home Safe” Program
  - Advanced Home Services
  - Pre-op in-home therapy

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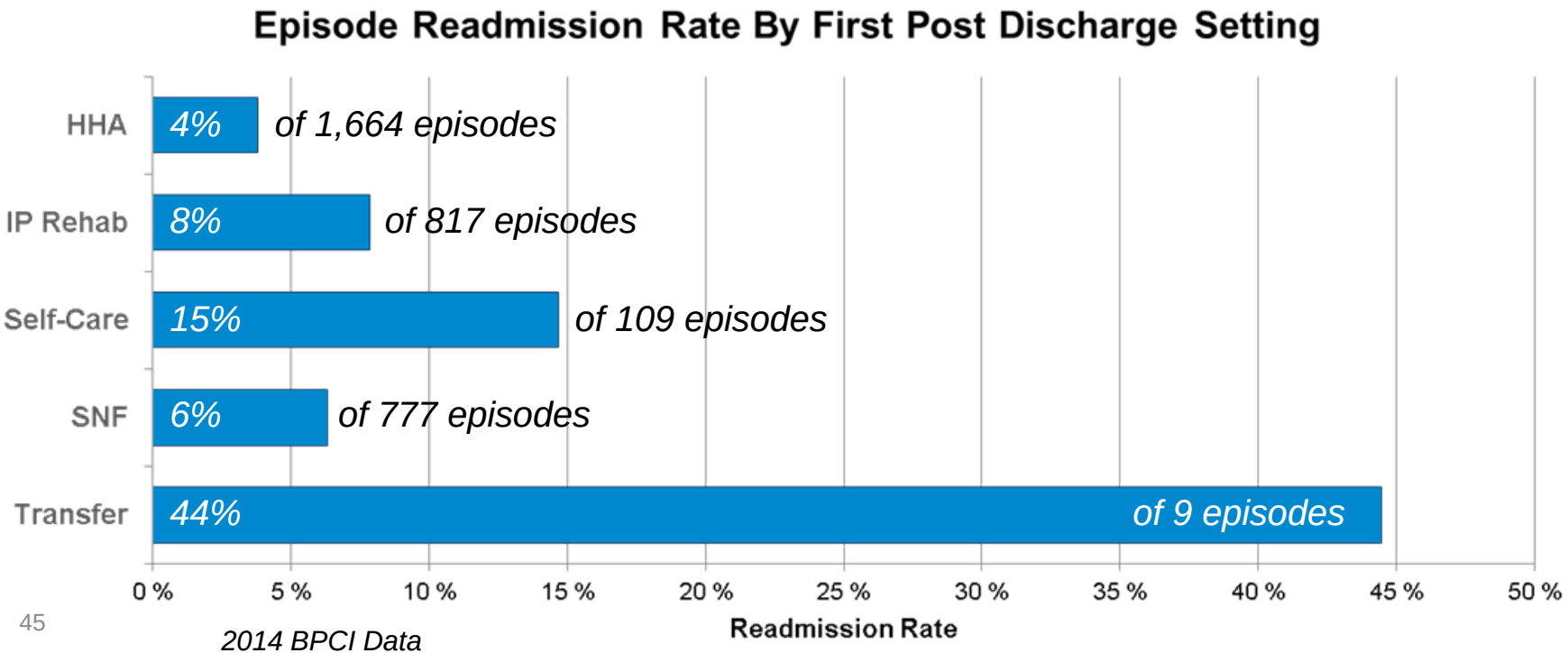
Difference Between Home & Rehab Discharges

- Average 90-day episode cost of acute/sub-acute discharge is almost **$10,000** more than a discharge with nursing services
- Patients discharged home, even when normalizing for severity of illness, have better outcomes



2014 BPCI Data

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Skilled Nursing Facility Length of Stay

- SNF LOS during baseline: **19.6 days**
- Medically appropriate SNF LOS for non-complicated joint replacements: **5-7 days**
- Understand your SNF network
  - Identify Preferred Partners

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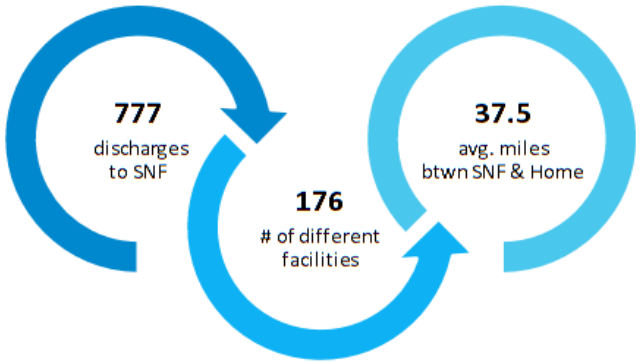
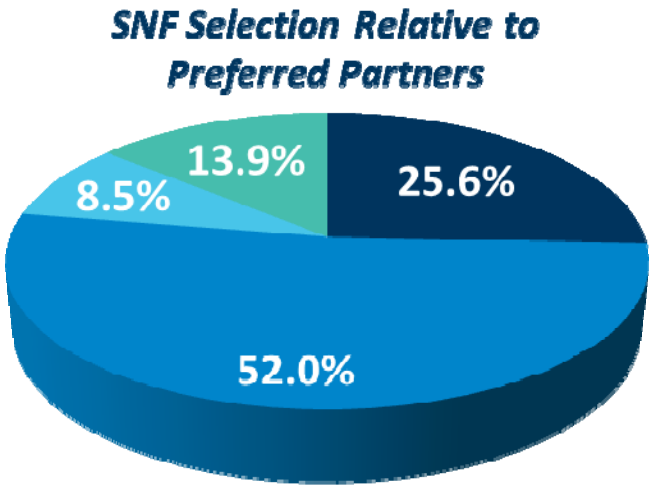
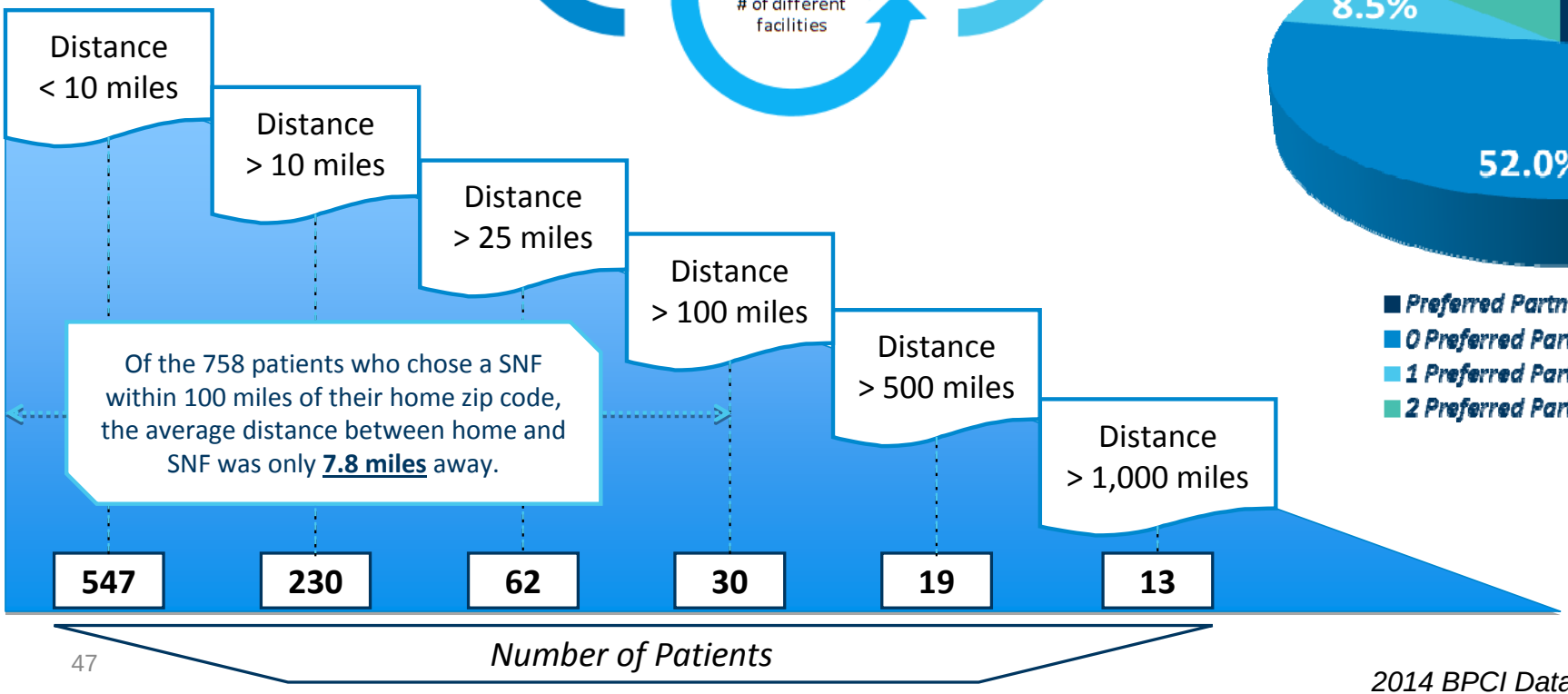
Distance between SNF & Home Zip Codes







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2014 BPCI Data

Readmission Reduction Efforts

- **Comorbidity Diagnosis Analysis**
- **Pre-surgical patient risk stratification**
  - Develop pre-surgical care pathways for at-risk patients
  - “Hard Stop” criteria where surgery isn’t performed
- **Patient Tracking**
  - Track every patient; only truly manage those that need to be managed
- **Clinical Event Notifications**

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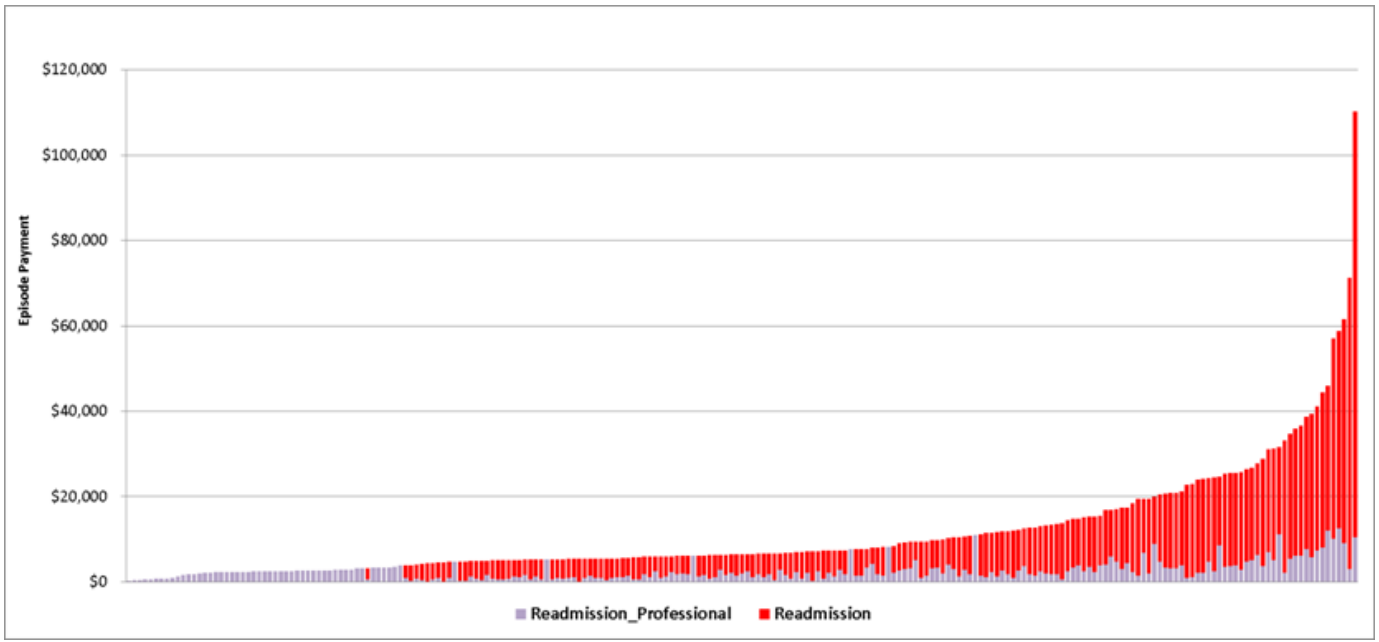
Readmission Observations and Challenges

- A small number of readmissions can have a significant impact on overall program performance
- Approximately only 25% of readmissions come back to HSS



2014 BPCI Data

The Critical Question…

How do you implement such widespread changes across the entire institution?

- Hospital administrative support with strong clinician leadership
- Accountable governance structure
- Physician gainsharing is critical
- Share physician performance metrics through regularly distributed dashboards

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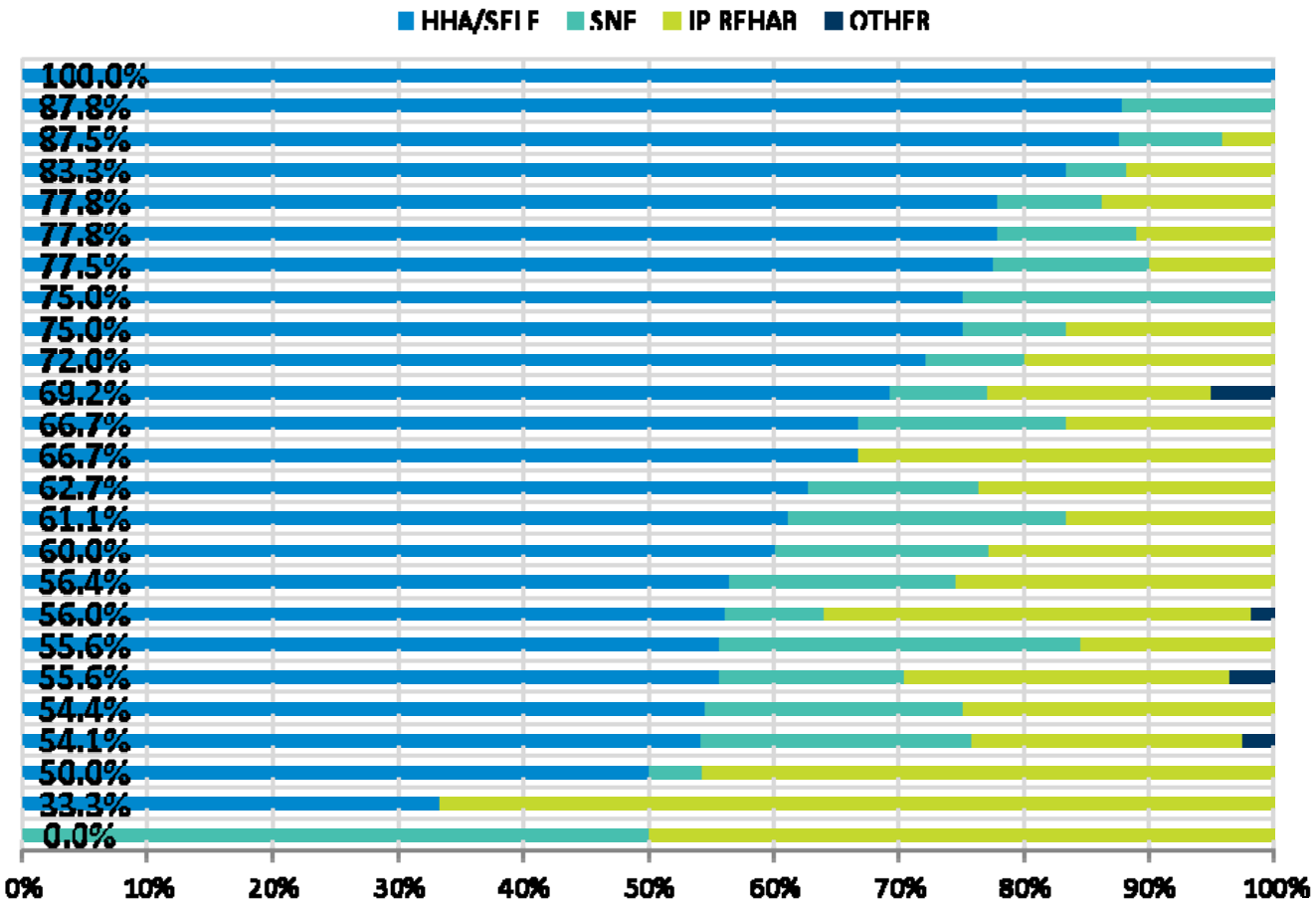
Use Data to Influence Change



- Snapshot of Q4-2014 first post-discharge setting statistics amongst HSS gainsharers

2014 BPCI Data

Challenges & Lessons Learned

Care redesign initiatives must be data-driven	Be ready to use and analyze the vast amount of data provided by CMS
Meaningfully engage physicians	Physician dashboards tracking performance; gainsharing
Use resources wisely	Closely track the highest acuity patients and provide selective pre-op care
Narrow your Post-Acute Care network	Institute daily communication processes with a subset of high quality providers
Better coordination of post-op care	Monitor patient risk and re-direct relevant readmissions back to HSS

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The Future of Payer Contracting

- Where CMS initiates, the private payers follow
- Carry lessons learned under Medicare bundled payment programs over to commercial value-based contracts
- Start small to minimize risk, establish infrastructure, and cultivate efficiency

HOSPITAL FOR SPECIAL SURGERY

THE ANALYTICS GUY*

NOT the guy who maintains your PCs

NOT a spreadsheet guy

NOT a guy who only uses desktop-type tools (Excel, Access)

Knows how to use serious database tools (SQL, Oracle, SAS, R)

Understands healthcare data terminology (with help)

Can think like your users

* In the generic, non-gender specific sense

SINGLETRACK ANALYTICS

THE ROLE OF THE ANALYST

SINGLETRACK ANALYTICS

THE ROLE OF ANALYTICS

Analysts

- Know what's there
- Don't know why it's there
- Can't do anything about it

Physicians

- Think they know what's there
- Usually understand why it's there
- Can make things happen within their domain

Finance/Operations

- Don't know what's there
- Can make things happen throughout care continuum

ANALYSIS PARALYSIS

The desire to predict 2017 performance down to the dollar using 2014 data, estimating:

- Effects of care management
- Readmissions
- Random patient conditions
- Medicare payment rates
- Election outcomes
- Future legislation
- Healthcare utilization trends

SINGLETRACK ANALYTICS

DON’T TRY TO ANALYZE IT ALL

SINGLETRACK ANALYTICS

QUESTIONS?

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