

Lessons Learned from the Comprehensive Care for Joint Replacement (CCJR) Bundle Program

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Disclosures

- Own shares in a physician owned hospital
- Depuy Education Panel
- Institutional Education and Research Support
 - OREF Omega Grant
 - The Hoag Foundation
 - Depuy Synthes

Private Bundles: The Nuances of Contracting and Managing Total Joint Arthroplasty Episodes

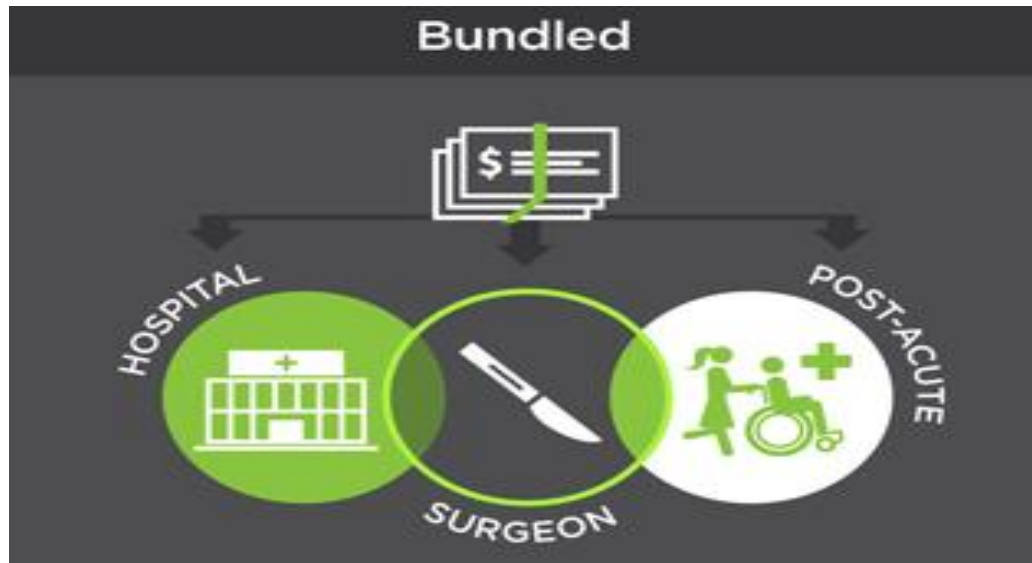
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The An



- Who are the stakeholders
- Who is the patient?
- What's the benefit/risk
- When does the episode start/end
- What is the Warrantee?

Who Controls the Money?

- Surgeon

- Hospital

- Convenience

Control = RISK

CJR Program

APM started 2016

CJR program has been extended for 3 years.

- Program extended to December 31, 2023
- Hospital is responsible for managing the bundle and Risk (act as the convener)

COVID-19 Impact on CJR PY5

- CJR model will now end March 31, 2021 rather than ending on December 31, 2020
- Downside gain/risk remains at 20%

CJR Extension Proposal and Changes

CMS has proposed changes to the CJR model. The proposed rules have not been finalized by CMS. Key changes would include:

Extend CJR Model for an additional 3 performance years PY6 (2021) – PY8 (2023)

Change definition of a CJR episode to include outpatient THA/TKA

Target Price Changes - Calculation to move from 3 years of claims data to most recent 1 year of data; removal of anchor factors and weights; incorporation of additional risk adjustment factors

Change high episode spending cap calculation methodology from 2 standard deviations above regional mean to 99% percentile of arrayed actual costs for each episode for each region

Eliminate the 50% cap on gainsharing, distribution, and downstream distribution payments

Extend the 3 day SNF waiver to include beneficiaries who initiate a CJR episode in the outpatient setting

What are the Foundations of ANY Bundled Payment Programs

1. **Aligning and Coordinating providers/facilities
(both Hospital and Physicians need to have skin in the game)**
2. Actual Cost of Care
3. Measuring and Maintaining Quality
4. Managing and Minimizing Cost/Risk

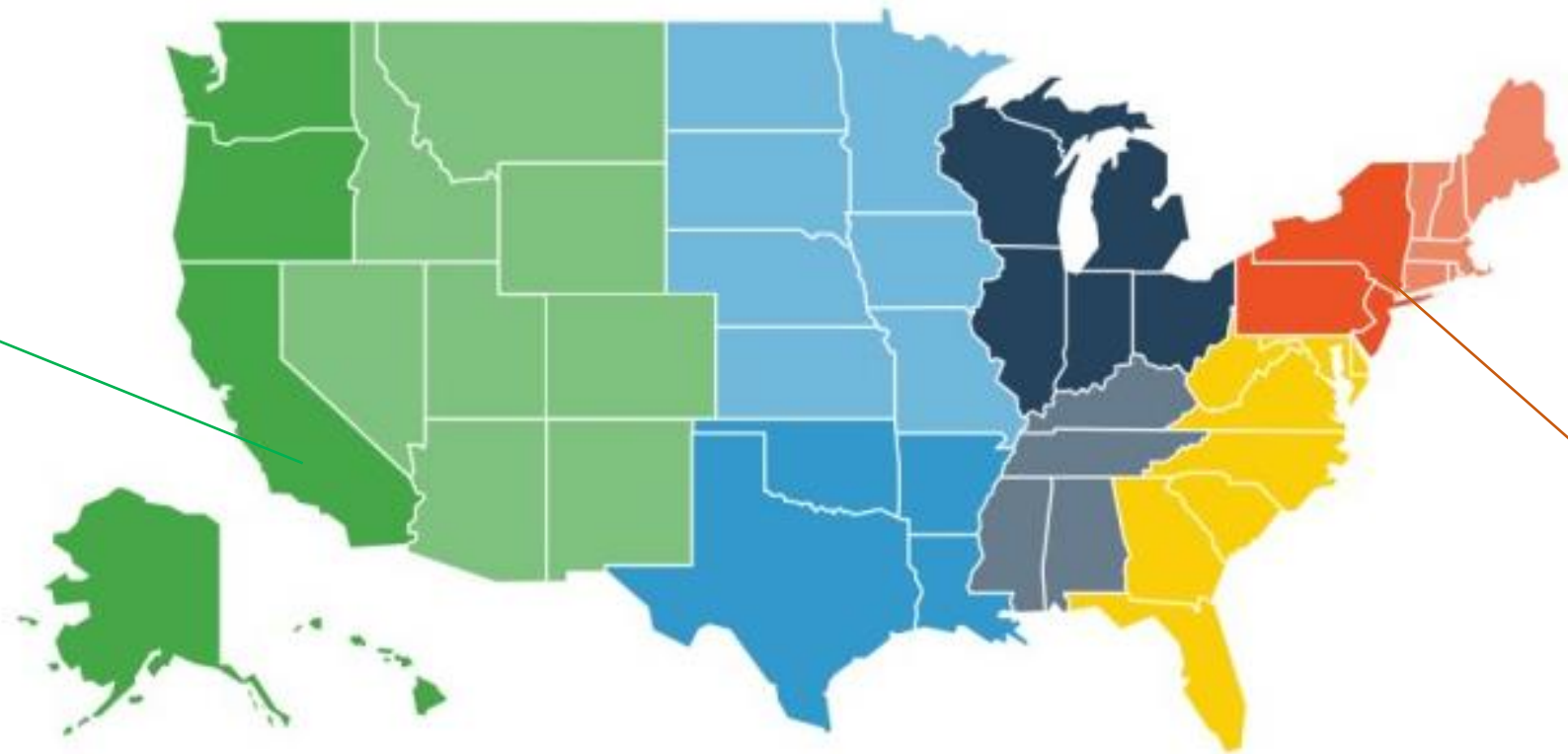


DRG	PY1	PY2		PY3		PY4		PY5		TOTAL TARGET PRICE SINCE PY1
	04/01/16-09/30/16 TARGET PRICE	10/01/16 - 12/31/16 TARGET PRICE	01/01/17 - 09/30/17 TARGET PRICE	10/01/17 - 12/31/17 TARGET PRICE	01/01/18 - 09/30/18 TARGET PRICE	10/01/18 - 12/31/18 TARGET PRICE	01/01/19 - 12/31/19 TARGET PRICE	10/01/19-12/31/19 TARGET PRICE	01/01/20-09/30/20 TARGET PRICE	
PRICING METHOD	Hospital: 2/3 Region: 1/3	Hospital: 2/3 Region: 1/3	Hospital: 2/3 Region: 1/3	Hospital: 1/3 Region: 2/3	Hospital: 1/3 Region: 2/3	Hospital: 0/3 Region: 3/3	Hospital: 0/3 Region: 3/3	Hospital: 0/3 Region: 3/3	Hospital: 0/3 Region: 3/3	
469 ELECTIVE	\$44,384	\$43,948	\$43,735	\$42,207	\$42,210	\$41,577	\$41,622	\$38,675	\$38,746	-\$5,638
469 FX	\$63,123	\$62,524	\$62,192	\$60,165	\$60,169	\$59,267	\$59,331	\$60,406	\$60,516	-\$2,607
470 ELECTIVE	\$25,579	\$25,347	\$25,227	\$23,867	\$23,868	\$23,510	\$23,536	\$23,592	\$23,635	-\$1,944
470 FX	\$47,198	\$46,752	\$46,506	\$45,094	\$45,097	\$44,421	\$44,469	\$44,840	\$44,922	-\$2,276

Note: Target price is raw dollars. Price set to local wage \$.

For performance year 4 & 5 the pricing methodology will be based 100% on regional pricing.
PY5 Baseline has changed to 2016-2018 claims data

California is located in region with 3rd lowest target price in nation. (Difference of about \$2,280 for DRG 470)



HSS and Rothman are located in region with highest target price in nation.

PY5 Regional Pricing for Elective Cases (01/2020-09/2020)

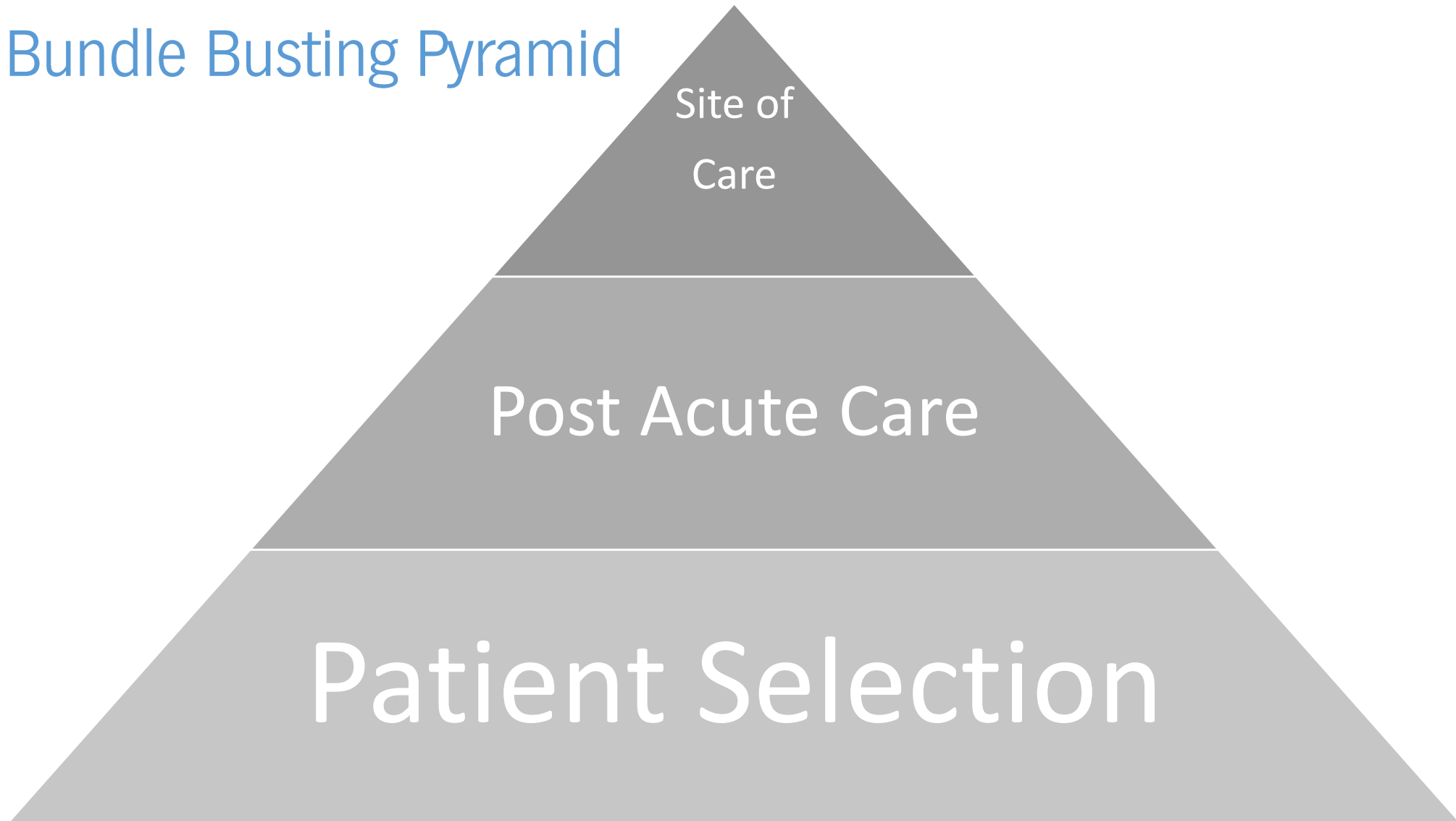
Pacific 470 - \$19,927 469 - \$32,667	West North Central 470 - \$19,916 469 - \$32,650	East North Central 470 - \$20,916 469 - \$34,289	Middle-Atlantic 470 - \$22,207 469 - \$36,405	New England 470 - \$21,485 469 - \$35,221
Mountain 470 - \$19,843 469 - \$32,530	West South Central 470 - \$22,557 469 - \$36,979	East South Central 470 - \$21,278 469 - \$34,882	South Atlantic 470 - \$20,957 469 - \$34,356	

Estimated National price for elective 470 cases = \$21,010.

Proposal to move to national pricing for CJR extension.

Region Price Source: <https://innovation.cms.gov/Files/worksheets/cjr-regtargetprices.xlsx> - Amounts are in standardized dollars.

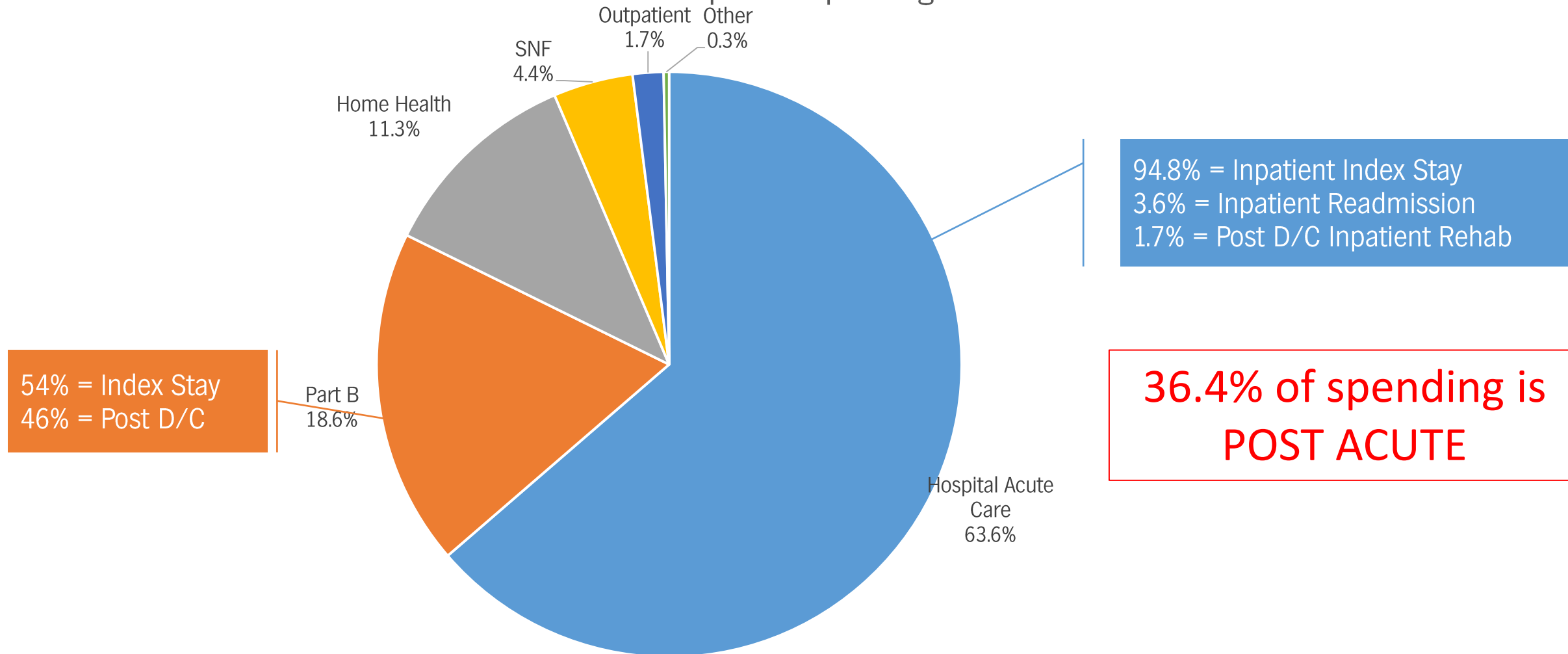
The Bundle Busting Pyramid

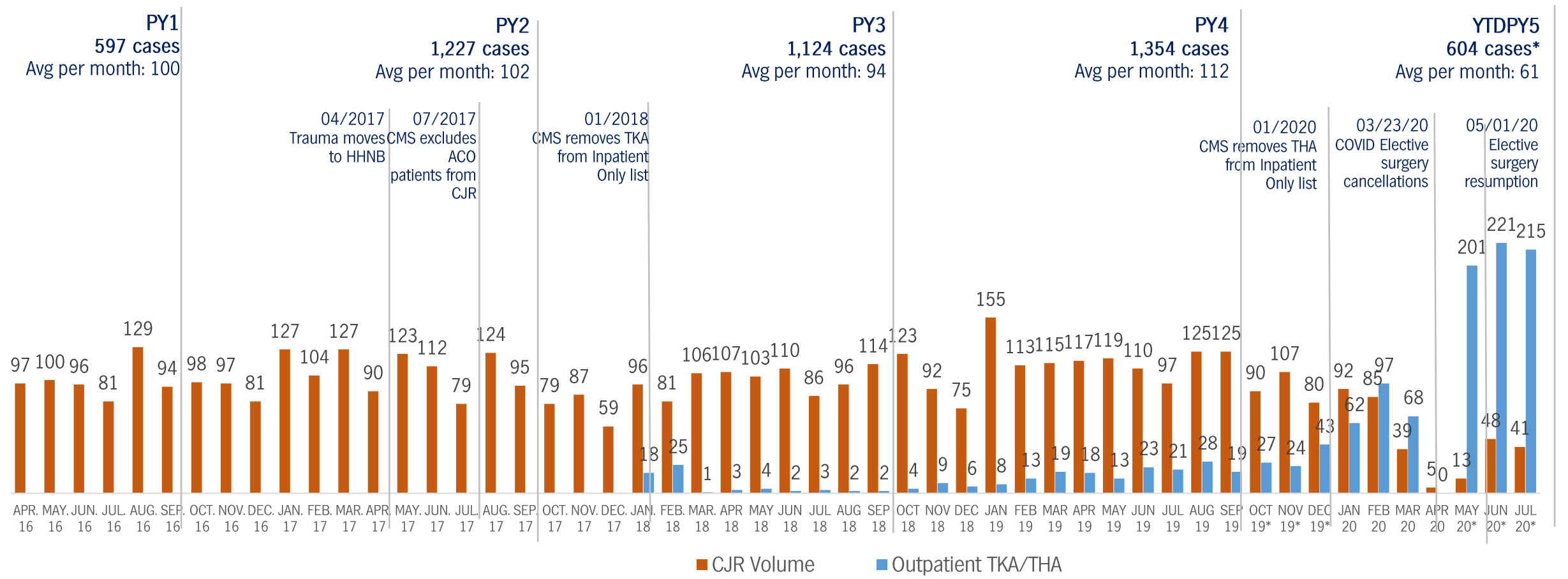


PY5 Total Episode Spending

Episode = Day of admission to 90 days post discharge

% Breakdown of Total Episode Spending



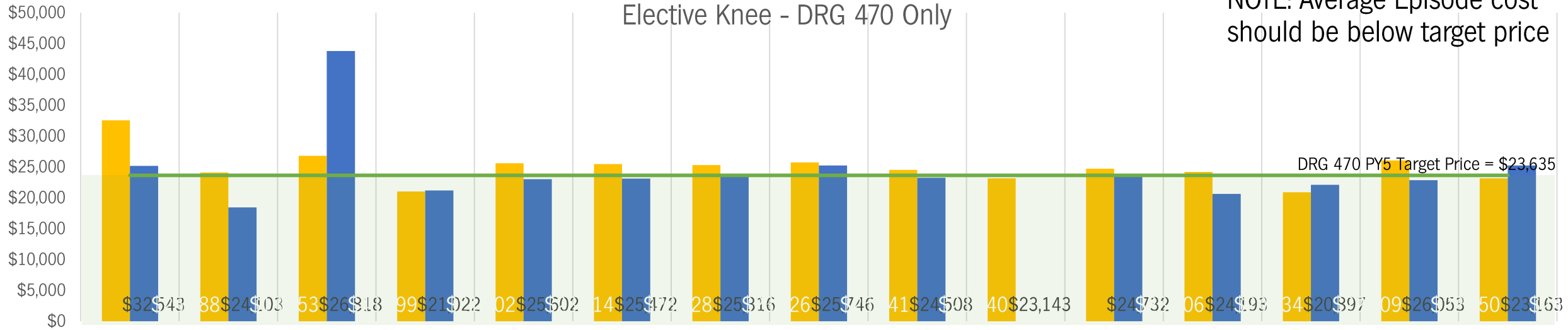


- Decrease in volume compared to PY4
- In PY5, all elective cases were cancelled at HOI between 03/23/2020-05/01/2020. Phased reopening started 5/1/20.

*Volume based on anchor stay start date
 *Oct-Dec. 2019 data is preliminary. PY4 Volumes are final after 12/31/19.

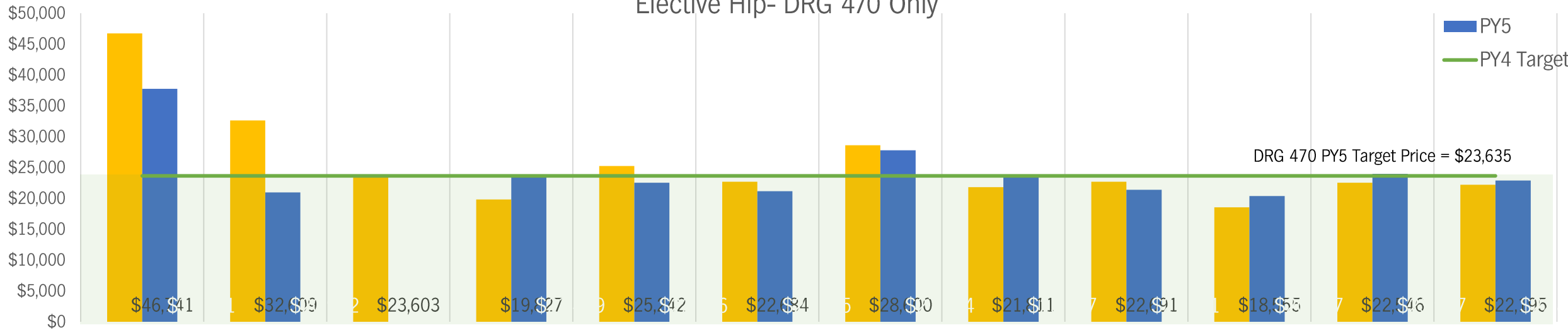
Average Episode Cost Elective Knee - DRG 470 Only

NOTE: Average Episode cost should be below target price

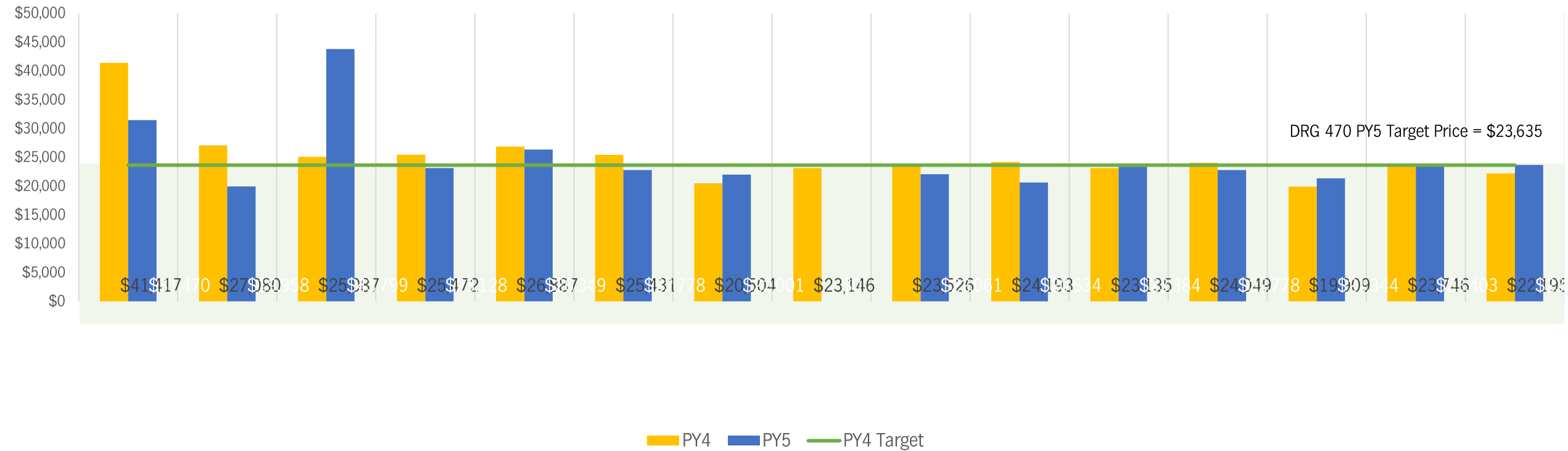


Elective Hip- DRG 470 Only

■ PY4
■ PY5
— PY4 Target



Avg. Uncapped Episode Cost by Performance Year DRG 470 Elective



- HOI Aggregate Uncapped Episode cost has declined each year since PY1 – from \$25,148 in PY1 to \$23,131 in PY5
- 8 surgeons were, on average, below the target price

The 5 Clinical Pillars of Value for Total Joint Arthroplasty in a Bundled Payment Paradigm

Kelvin Kim, BA, Richard Iorio, MD *

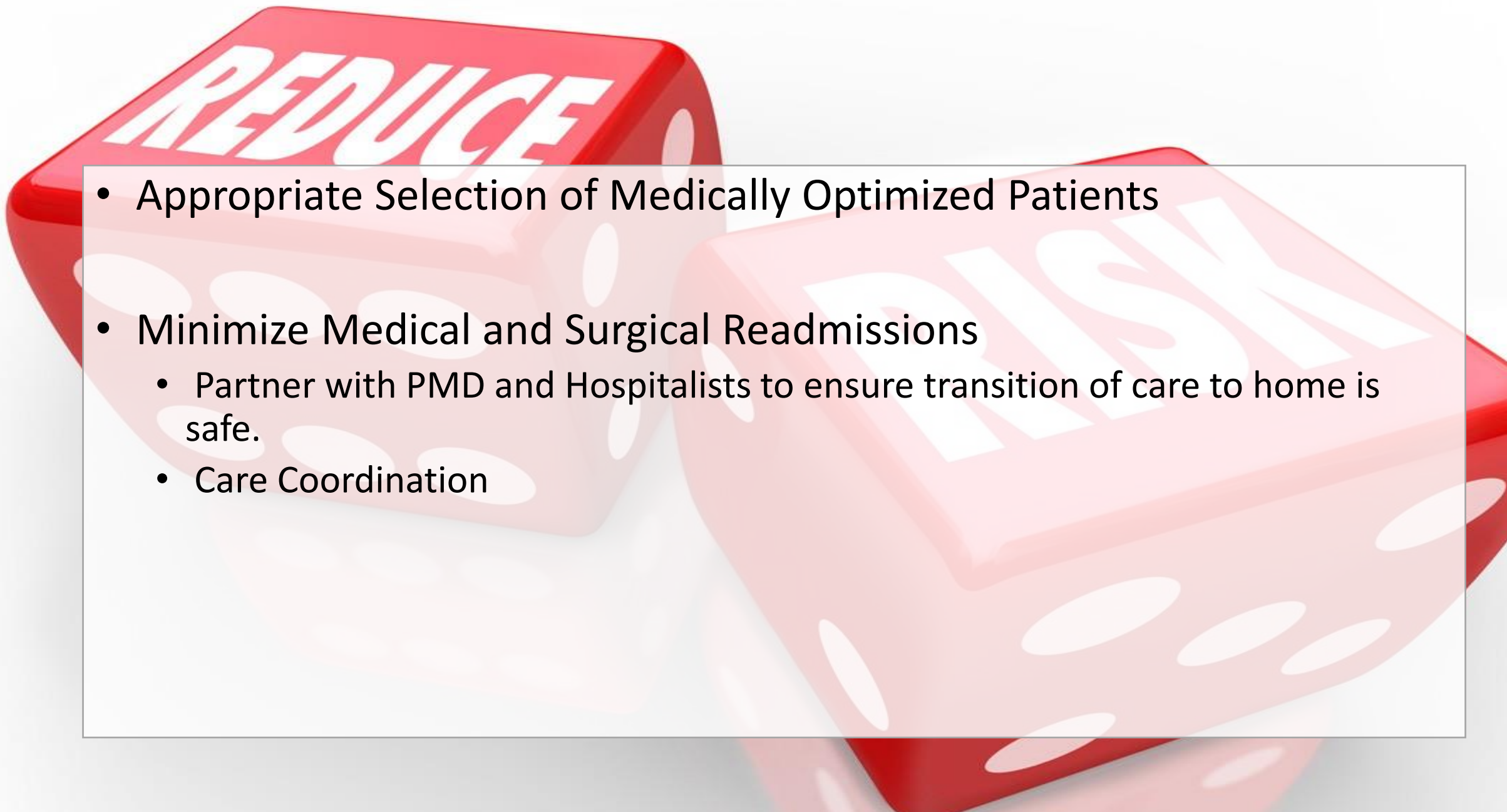
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1. Optimizing Patient Selection
2. Care Coordination and Education, setting expectation
3. Multimodal Pain management
4. Optimizing blood management and VTE protocols
5. Minimizing Post acute facility utilization

Table 5
Mean Postacute Episode-
...ita Costs.

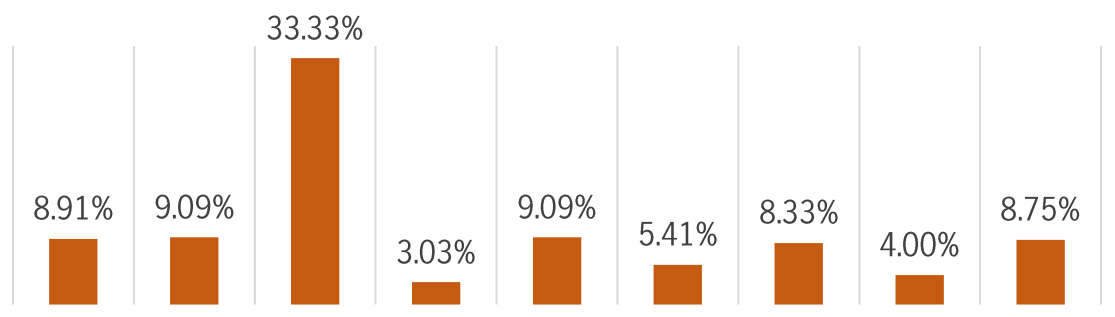
Postacute Care	Hip Arthroplasty		Total Knee Arthroplasty	
	Mean \$ Per Episode	\$ Per Capita	Mean \$ Per Episode	\$ Per Capita
All patients		\$1075	\$5583 (\$1753-\$6517)	\$1019
Uncomplicated course		\$0	\$4564 (\$1610-\$5815)	\$0
ED or urgent care		\$57	\$5950 (\$3577-\$6727)	\$36
With complication		\$48	\$4859 (\$3562-\$5747)	\$5
Without complication		\$14	\$6166 (\$2837-\$6596)	\$18
All readmissions			\$18,747 (\$7768-\$24,427)	\$524
Inpatient status			\$20,129 (\$8852-\$26,714)	\$494
Medical complication			\$16,563 (\$8004-\$17,961)	\$223
Joint-related complication			\$27,024 (\$10,761-\$42,307)	\$288
Reoperation	\$35,435		\$31,425 (\$22,930-\$44,289)	\$284
Observation status	\$4562 (\$1610-\$5815)		\$4562 (\$4434-\$9319)	\$18
Medical complication	\$6063 (\$3948-\$8178)		\$6063 (\$311-\$5796)	\$2
Joint-related complication	\$0		\$0	\$0
Return for MUA	\$0		\$0	\$81
Postacute complications	\$17,010 (\$3186-\$20,425)		\$17,010 (\$3186-\$20,425)	\$515
Joint-related complication	\$22,737 (\$7752-\$30,009)		\$22,737 (\$7752-\$30,009)	\$270
Periprosthetic fracture	\$39,684 (\$13,253-\$55,023)		\$39,684 (\$13,253-\$55,023)	\$21
Deep infection	\$35,046 (\$27,822-\$42,269)	\$53	\$35,046 (\$27,822-\$42,269)	\$86
Dislocation	\$28,889 (\$8167-\$30,009)	\$165	\$28,889 (\$8167-\$30,009)	\$26
Medical complication	\$12,487 (\$2238-\$13,360)	\$200	\$12,487 (\$2238-\$13,360)	\$297
Myocardial infarction	\$77,516	\$149	\$77,516	\$56
Pulmonary embolism	\$11,240 (\$9825-\$12,777)	\$14	\$11,240 (\$9825-\$12,777)	\$66
Stroke/TIA	\$12,649	\$10	\$12,649	\$10
Deep vein thrombosis	\$12,649	\$13	\$12,649	\$49
GI bleed	\$0	\$0	\$14,226 (\$9573-\$18,889)	\$18
Nonbleeding GI complaint	\$10,384 (\$5553-\$13,486)	\$25	\$10,384 (\$5553-\$13,486)	\$46

Surgical Complications are far more expensive than Medical ones!

- 
- The background features two large, 3D red dice. The top-left die is oriented with the word 'REDUCE' in white, bold, sans-serif capital letters on its top face. The bottom-right die is oriented with the word 'RISK' in white, bold, sans-serif capital letters on its top face. Both dice have a textured surface with small white oval indentations. A white rectangular box with a thin black border is overlaid on the dice, containing a bulleted list of text.
- Appropriate Selection of Medically Optimized Patients
 - Minimize Medical and Surgical Readmissions
 - Partner with PMD and Hospitalists to ensure transition of care to home is safe.
 - Care Coordination

PY5 Drilldown

PY5 0-90 Day Readmission Rate by Surgeon
10/01/19 – 06/30/2020*



4.4% 0-90 day readmission rate

68% patients readmitted to a facility in our health system

\$48k average episode cost of patient with a readmission; patient w/out readmission have episode cost of ≈\$21,700

SURGICAL READMITS

36% of readmissions are for **surgical reason**
most common reasons = fracture, infection, hematoma

20 average # days between D/C & readmission

100% patients we initially D/C home

11% patients were readmitted outside of hospital system.)

MEDICAL READMITS

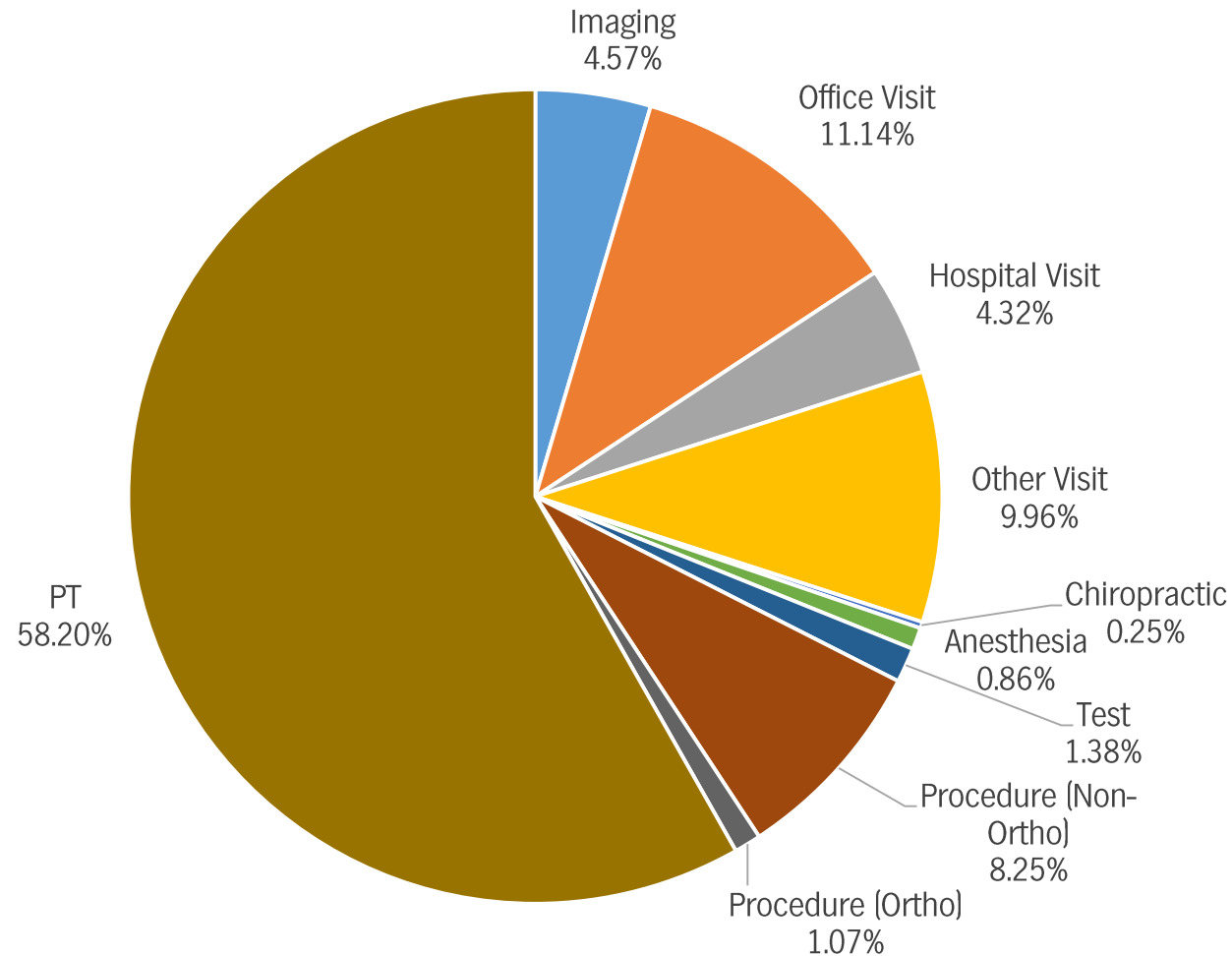
64% of readmissions are for **medical reason**
most common reasons = GI/GU x13, sepsis x12, cardiac x9

26 average # days between D/C & readmission

50% patients we initially D/C home; 6 pts. D/C to SNF, 1 Transfer,

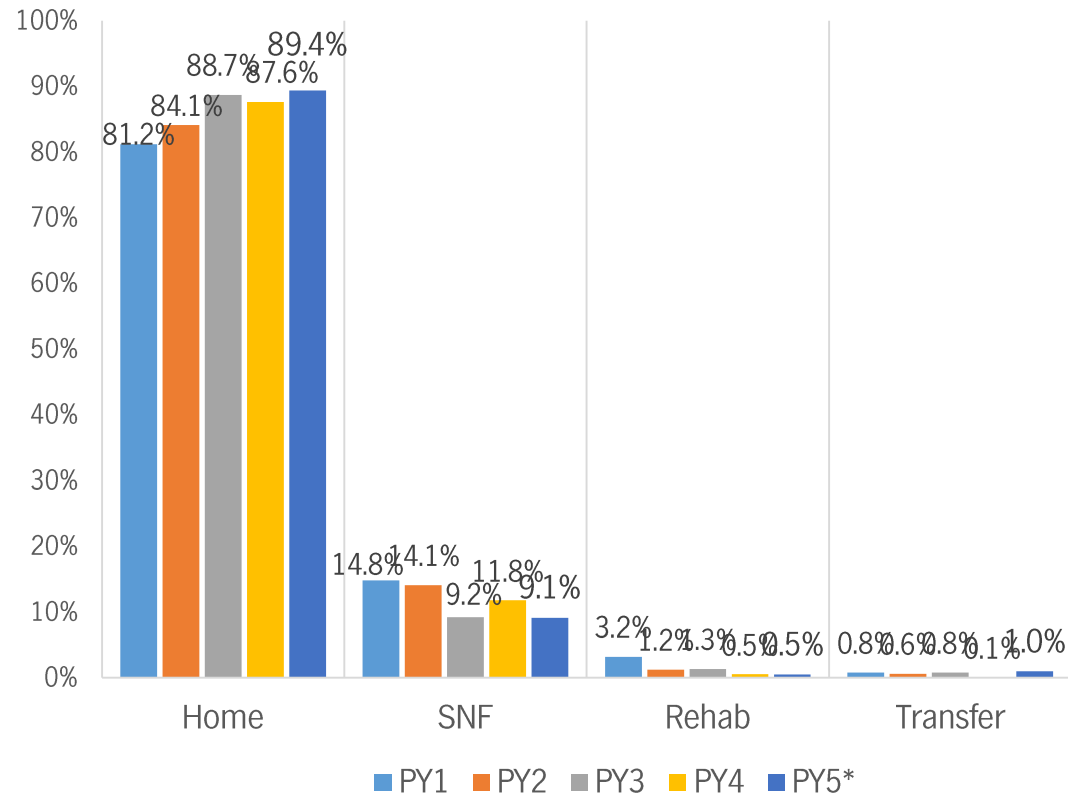
44% patients were readmitted outside HOI/HHNB/HHI (19 pts.)

PY4 Part B Spending – Post Discharge



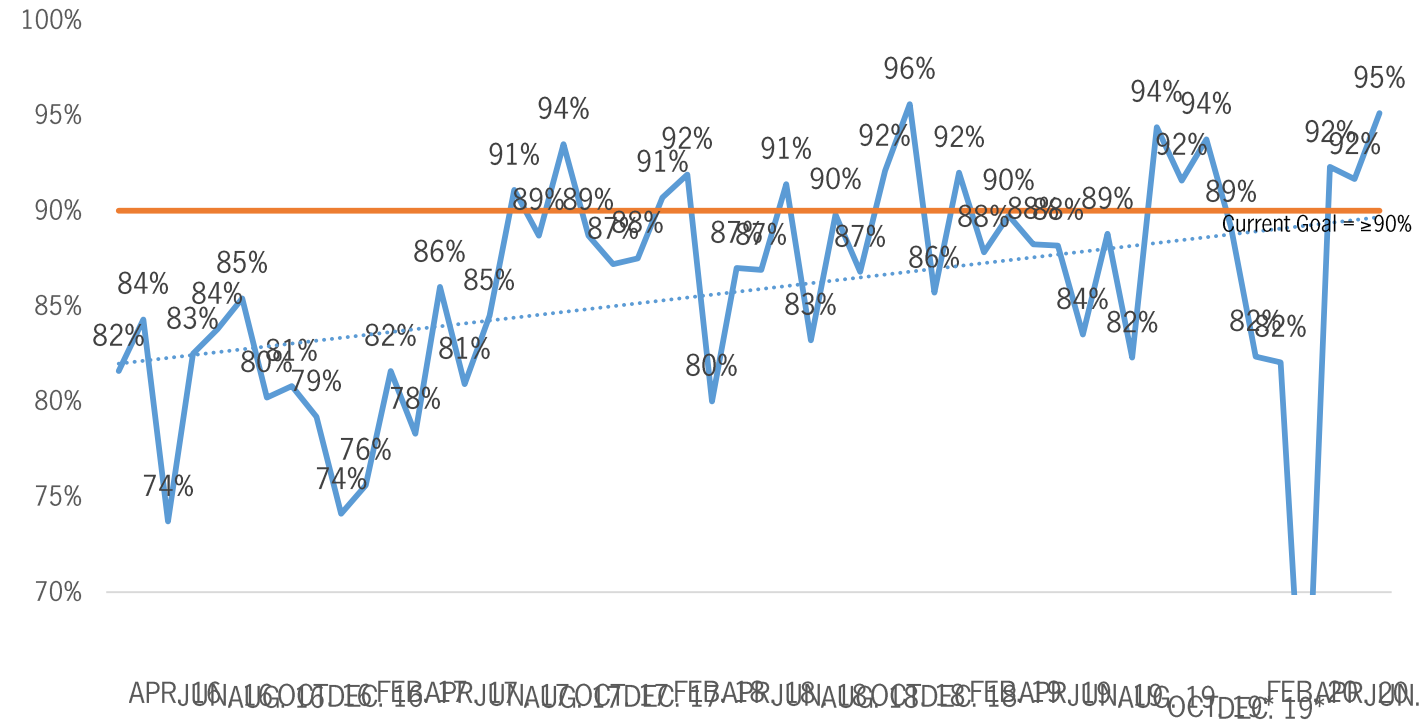
- **Physical Therapy** is the single highest post-D/C Part B expenditure (nearly 60%)
 - TKAs have significantly higher spending on PT than THAs; 71% of PT spending is on TKA cases.
 - 86% of TKA patients have PT visits compared to 54% for THA
 - TKA have about 16 PT visits compared to 12 visits for THA (overall avg = 15 visits)
 - Average cost per visit is approximately \$45; cost per patient per episode is about \$675

Discharge % by Location and Year



*PY5 is preliminary data

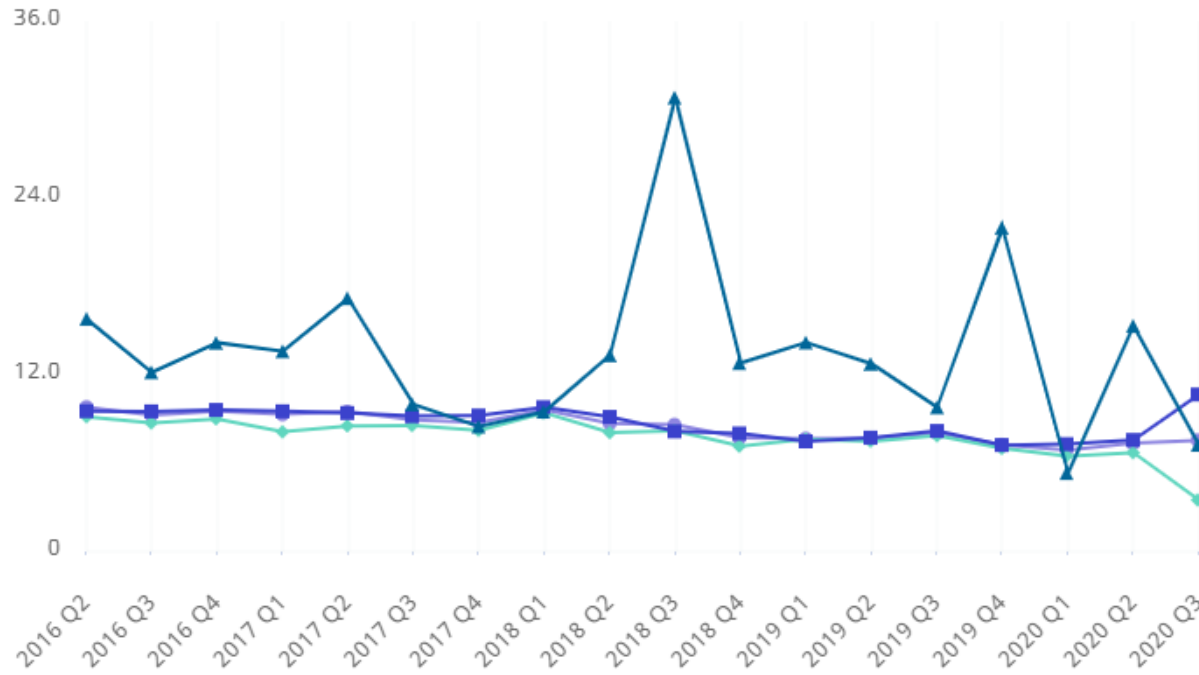
Discharge to Home %



*Oct-Dec 2019 data is preliminary

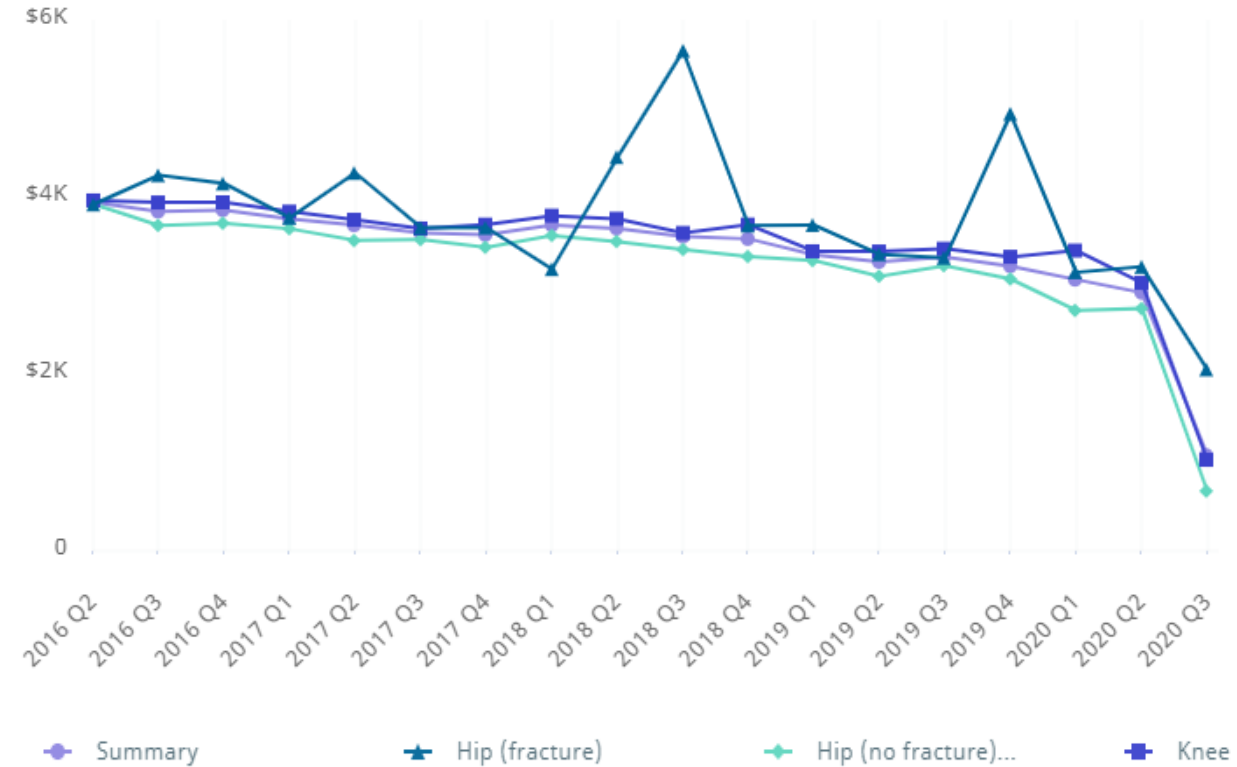
- Decrease in discharge to home rate between PY3 and PY4; last quarter of PY4 had large decline.
- PY5 had decline in patients going to rehab but saw a slight increase in D/C to SNF

HHA Visits



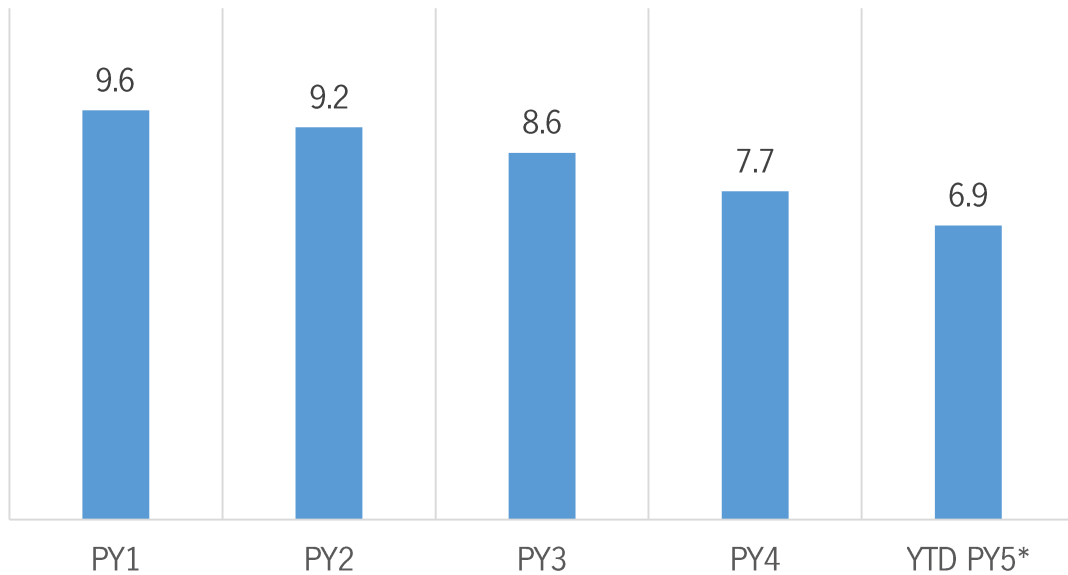
- Overall average # of home health visits per patient has decreased from 9.6 visits in PY1 to 7.1 visits in PY5
- Knee patients (6.5) on average have slightly more home health visits than hip patients (7.5)
- There has been nearly 3,500 home health visits during PY5; some patients may have had multiple visits (TKA = 57% of visits, THA = 40%)
- Overall, 95% of patients in PY5 have received home health services during episode; this has remained stable since PY1 (\$0 claims excluded)

HHA Only \$

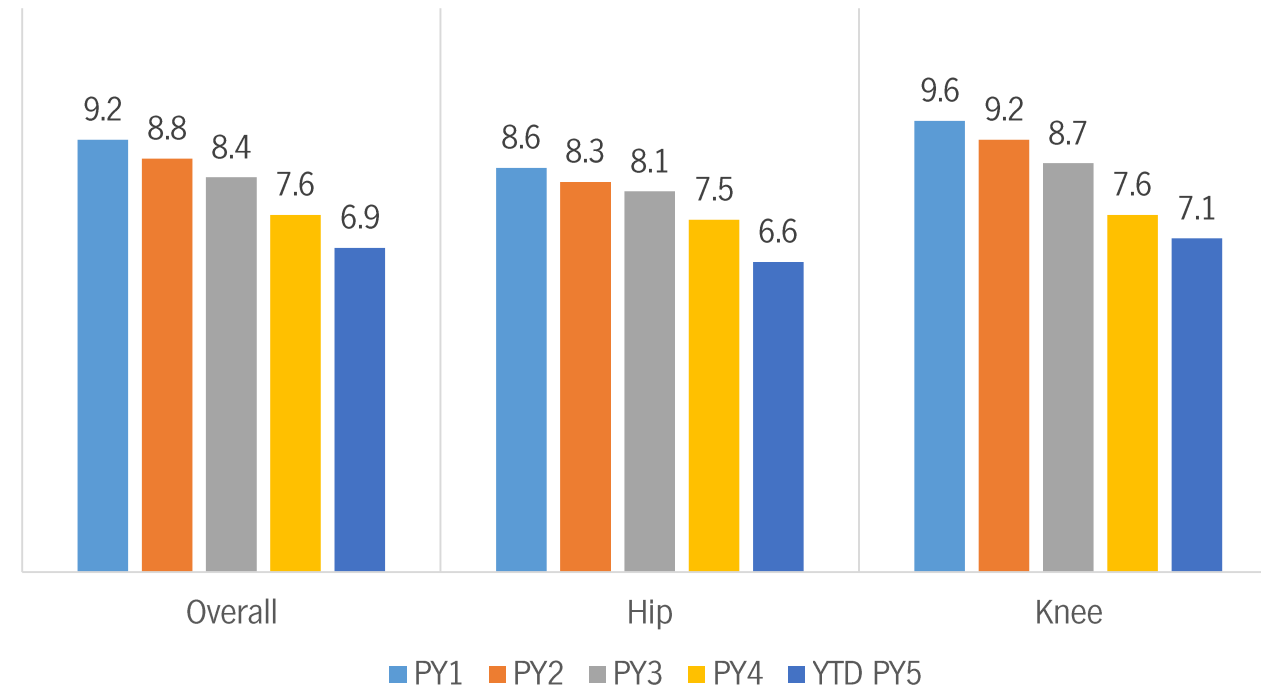


- Average cost of home health has declined to \$2,847 per episode in PY5; continued decrease since PY1
- Knee patients on average have a higher cost; this is attributed to having more visits
- Home health accounts for 12% of total episode spending

Average HH Visits by PY
(All Episodes)

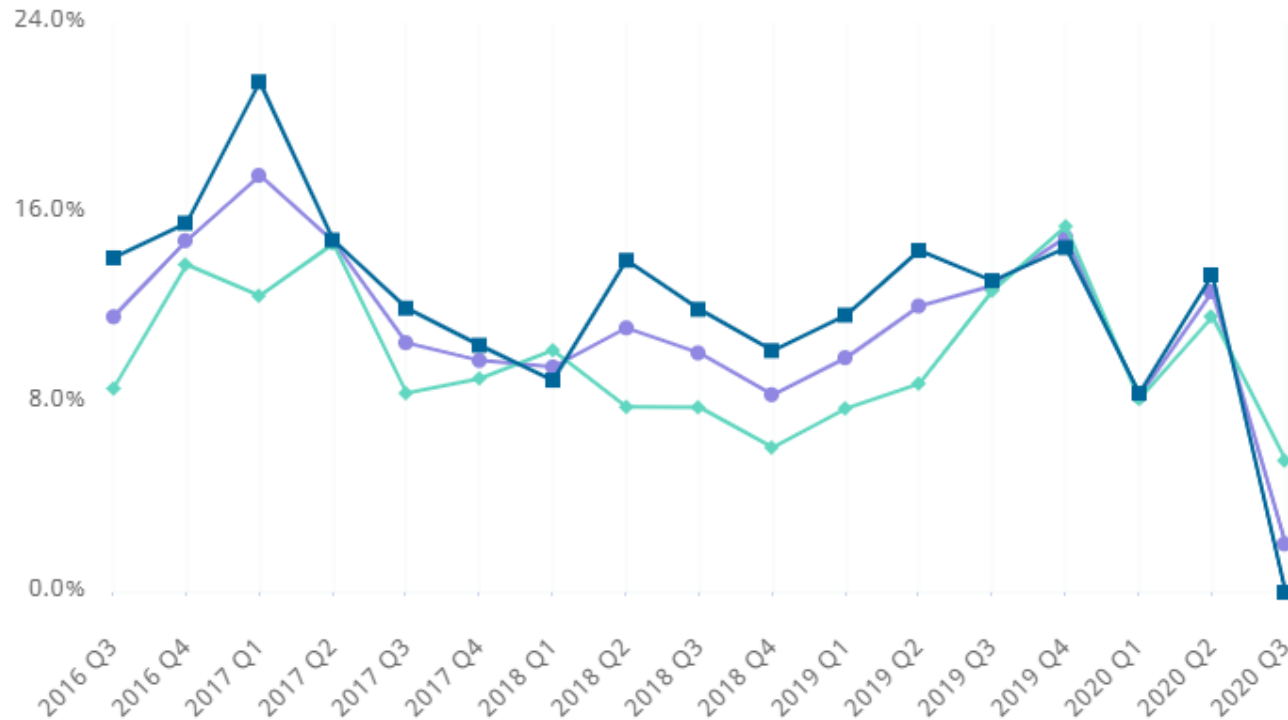


Average HH Visits by PY
(Elective DRG 470 Only)

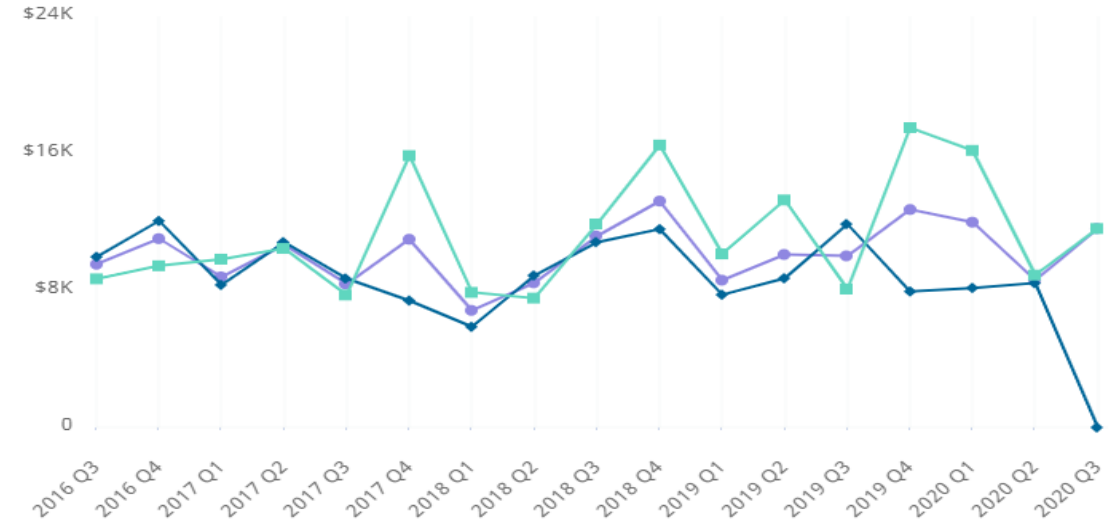


- Since start of CJR program overall average HH visits has declined by more than 2 visits.
- Hips tend to have slightly less HH visits than knees
- Knees have reduced # visits by 2.5 since PY1

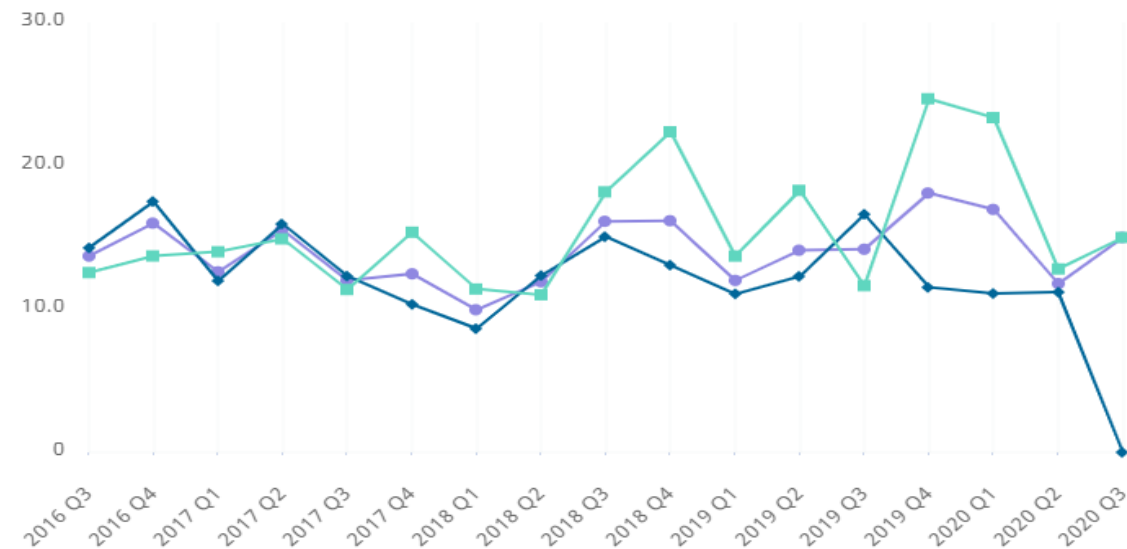
SNF Rate



SNF Only \$



SNF Days



Summary Hip (no fracture) Knee

- In PY5 there has been 55 SNF visits (pts. may have multiple visits)
- Average % of patients with a SNF stay has decreased to 9.6% from 13.1% in PY4
- Avg # days patients stay at SNF in PY5 is 14.4 days, remains relatively flat
- THA LOS continues to increase compared to previous years
- TKA has a lower LOS than THA (11.1 to 18.2 in PY5)
- Avg cost for SNF stay in PY5 was approximately \$10,400 (flat compared to PY4)

Medicare Shift to Outpatient

Proposal eliminates the IPO¹ list by 2024

First on the chopping block: orthopedics phased out beginning CY 2021



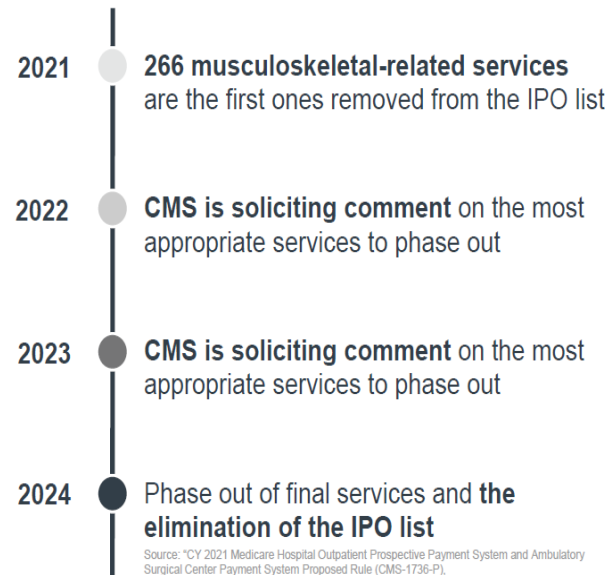
POLICY IN BRIEF

Proposal to phase out IPO list

Culmination of years of comments finally materialized

- IPO list to be eliminated by 2024
- 266 orthopedic services to be eliminated in CY 2021
- CMS is seeking comment on timeline and associated services
- Comments are due October 5, 2020

Elimination of IPO list 3 year timeline



1. Inpatient only list

Medicare Shift to Outpatient

THA proposed for ASC CPL in CY 2021

CMS continues to promote site-neutrality between HOPD, ASC setting

Price differential for THA across sites of care



CY 2020 ASC Final Rule

CMS finalizes adding TKA to ASC-CPL

CMS believes small subset of Medicare beneficiaries are suitable candidates for TKA in ASC based on clinical characteristics; CMS believes Medicare beneficiaries not enrolled in a Medicare Advantage plan should also have the option to undergo TKA in an ASC

CY 2021 OP/ASC Proposed Rule

CMS solicits comments on adding THA to ASC CPL

Commenters split on appropriateness of THA in ASCs; proponents say ASCs are equipped and increasingly performing THA safely on non-Medicare patients; opponents say most ASCs are not well-equipped and most Medicare beneficiaries are not suitable candidates for THA in an ASC

1. Payment rate for MS-DRG 470, Total hip arthroplasty, FY 2020 IPPS, National Service Line Analysis, available at [Advisory Board](#).

2. Payment rate for HCPCS Code 27130 (APC 5115), Total hip arthroplasty, CY 2021 HOPPS Proposed Rule, proposed APC mean geometric cost, NPRM Addendum B, available at: [CMS](#).

3. Payment rate for HCPCS Code 27130, Total hip arthroplasty, CY 2021 ASC Proposed Rule, NPRM ASC Addenda AA, available at: [CMS](#).

Source: CMS, CY 2020 ASC Final Rule; CMS, CY 2021 HOPPS Proposed Rule.

CMS shifting care from hospitals to outpatient settings.

CMS promoting site-neutrality between Hospitals and ASC settings.

Shift to ASC setting.

Summary

- Need alignment of hospital and physicians
- Obsessive evaluation of the data
 - Medically Optimized Patients
 - Evaluate surgeon Quality/Value metrics
 - Minimize Surgical Complications
 - Maximize Discharge home
 - Maintain quality in skilled nursing facilities
- Look for the Shift to the ASC, it may be an opportunity for physicians to control the whole bundle

