



Comprehensive Care for Joint Replacement (CJR) model 5th Annual Evaluation Report



Report Highlights

A wide range of hospitals in diverse markets were able to achieve the aims of the model. Episode-based quality-adjusted target pricing is a demonstrated strategy for

- ✓ Encouraging care delivery transformation
- ✓ Reducing payments for lower extremity joint replacement
- ✓ Maintaining or improving quality

The Coronavirus Disease 2019 (COVID-19) pandemic impacted the performance of the model in several ways and led to significant Medicare losses in the fifth performance year.



What we are covering today



How the CJR model has **transformed care delivery** for patients undergoing lower extremity joint replacement

How the CJR model has impacted **quality of care** for patients

How the CJR model has impacted the **cost of care**

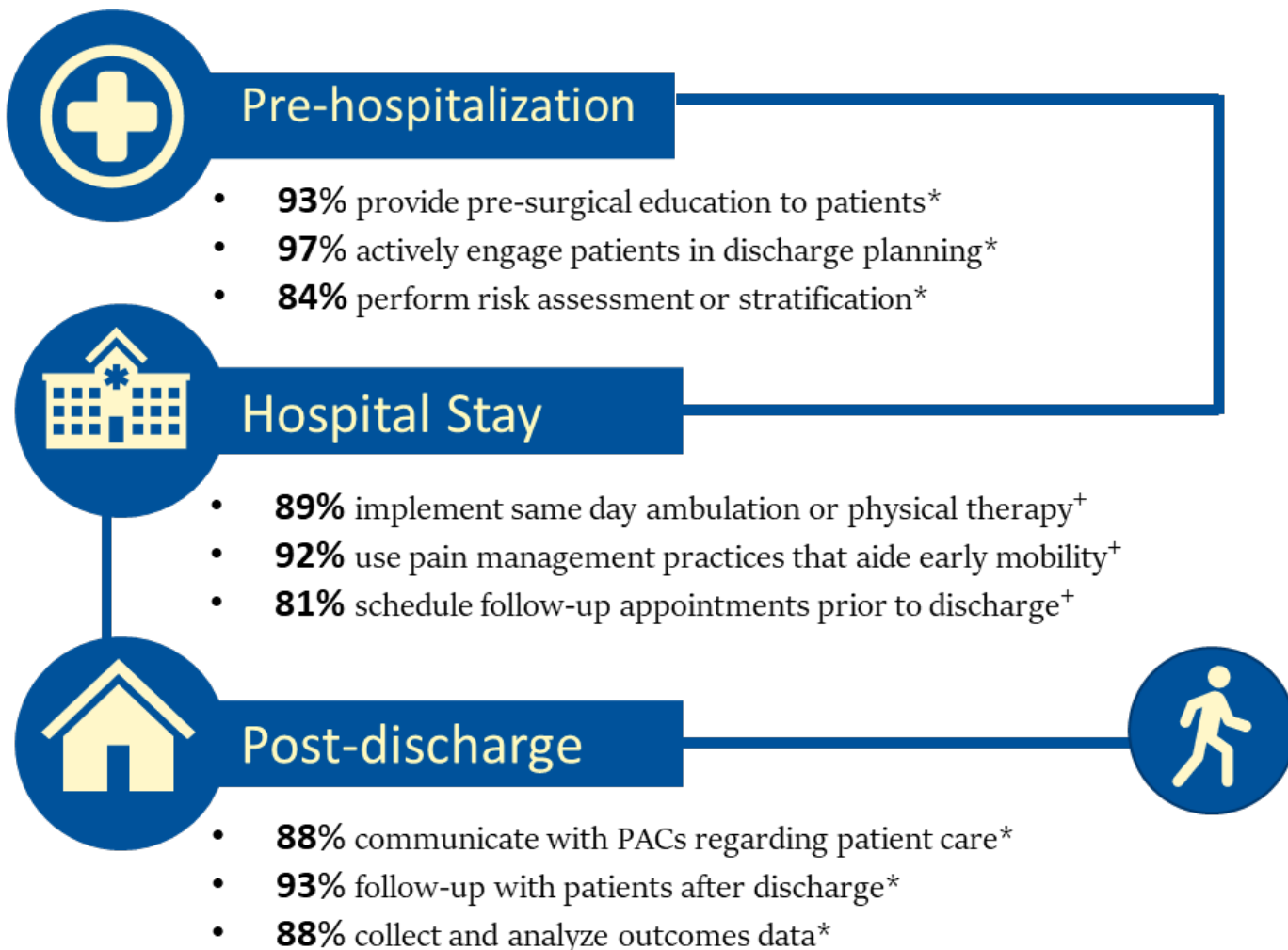
The **reach** of the CJR model and how it has impacted **equity**

Highlights:

Care Delivery Transformation

- ✓ Hospitals implemented or enhanced numerous activities across the care continuum.
- ✓ The most common activities focused on improving patient care and care coordination pre- and post-discharge.
- ✓ Condition-specific factors were more frequently identified as a determining factor for discharge destination than social determinants of health.

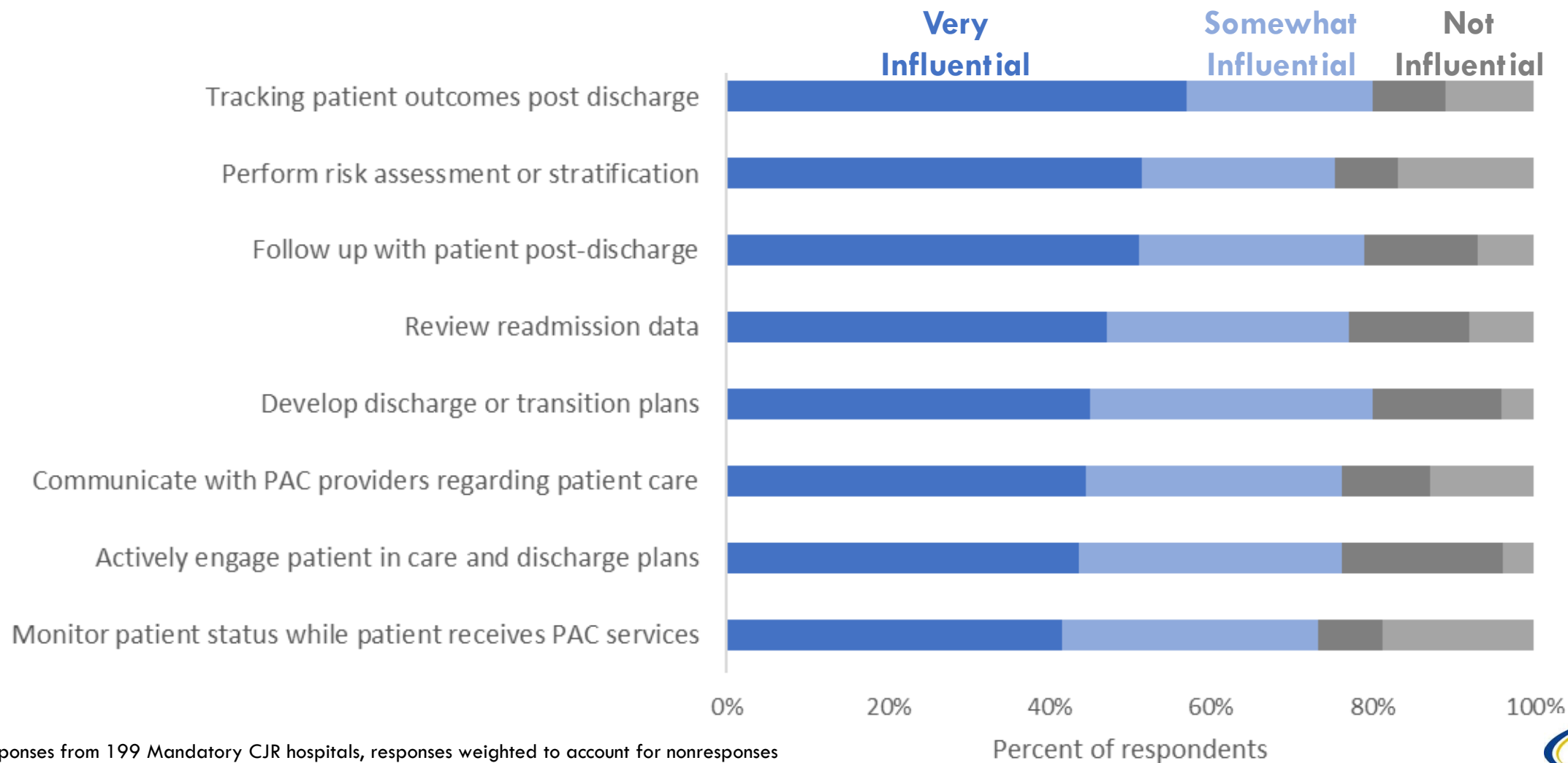
Hospitals used a multifaceted approach across the entire episode of care to reduce institutional post-acute care and discharge patients directly home.



* Findings from Year 4 Care Coordinator survey + Findings from Year 2 Hospital Administrator survey

The CJR model was most influential for activities related to post-discharge

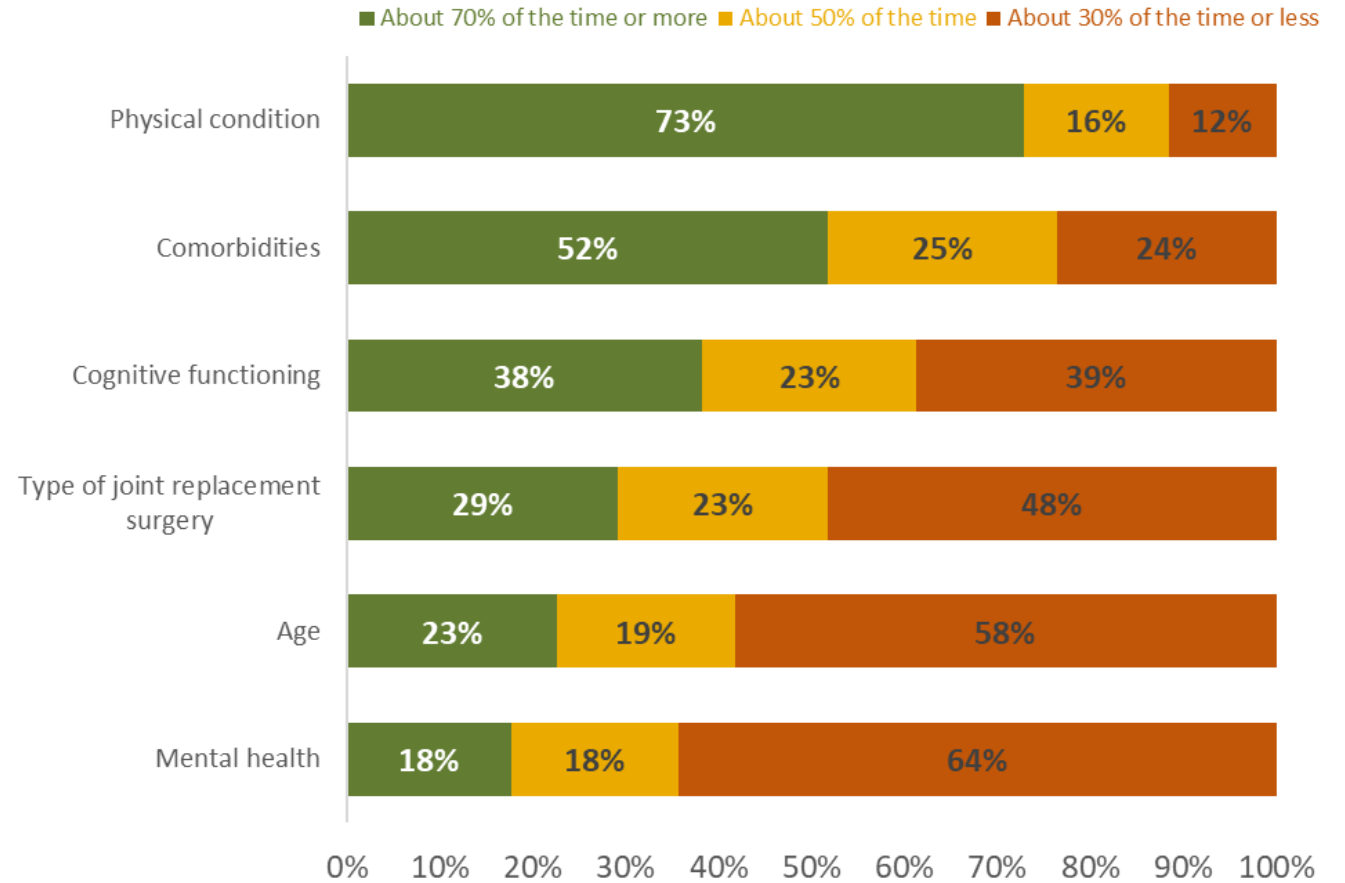
How influential was the CJR model in your hospital's decision to implement or enhance the following activities for hip and knee replacement surgery patients?



Survey responses from 199 Mandatory CJR hospitals, responses weighted to account for nonresponses
Dark gray = Doing this activity but CJR not influential, light gray = Not doing this activity or don't know

Condition-specific factors were more frequently identified as a determining factor for discharge destination than social determinants of health

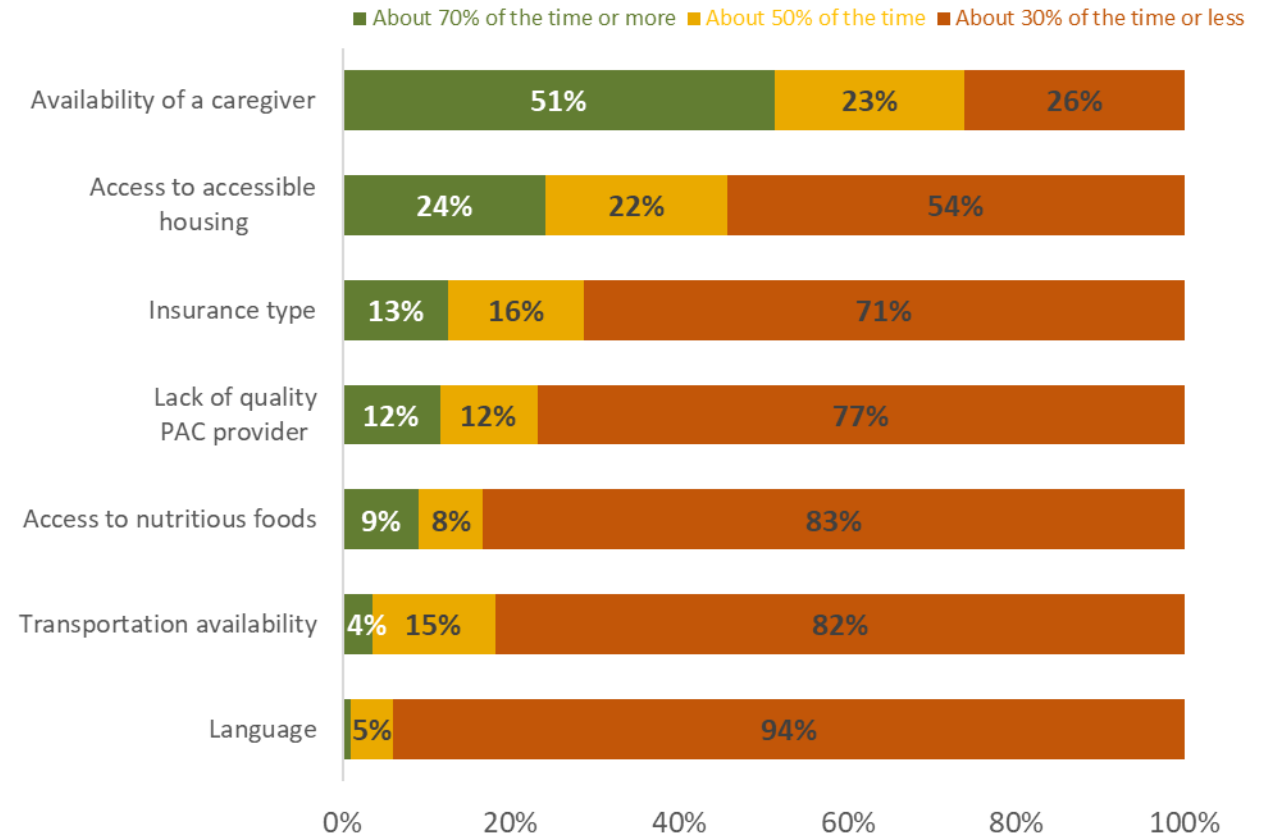
How often were the following characteristics a determining factor in the discharge destination decision?



Survey responses from 199 Mandatory CJR hospitals, responses weighted to account for nonresponses

Condition-specific factors were more frequently identified as a determining factor for discharge destination than social determinants of health

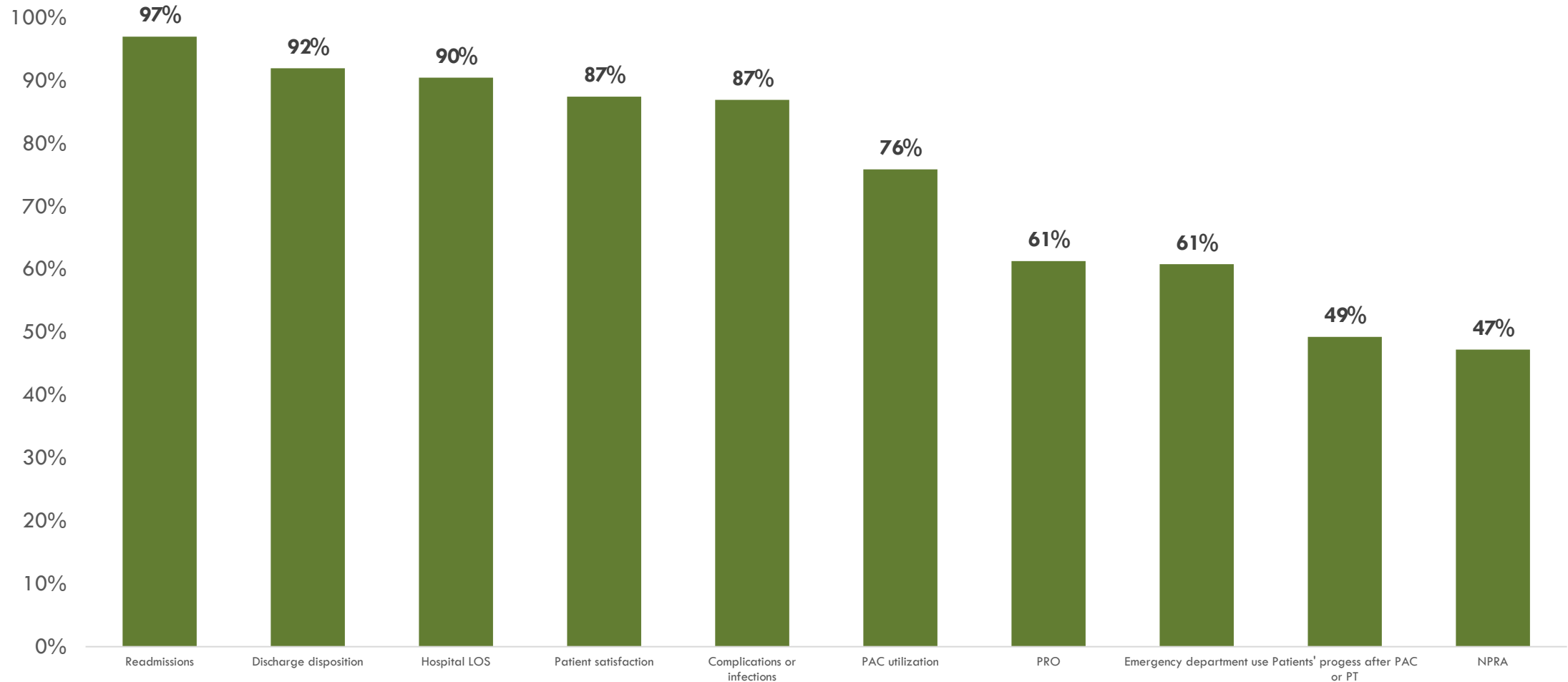
How often were the following characteristics a determining factor in the discharge destination decision?



Survey responses from 199 Mandatory CJR hospitals, responses weighted to account for nonresponses

Approximately 80% of hospitals identified specific goals for their care coordination program

Which outcomes are monitored to measure the success of your hospital's care coordination strategy? (select all)



Survey responses from 199 Mandatory CJR hospitals, responses weighted to account for nonresponses

The CJR model reduced the elective complication rate but did not impact other claims-based measure of quality

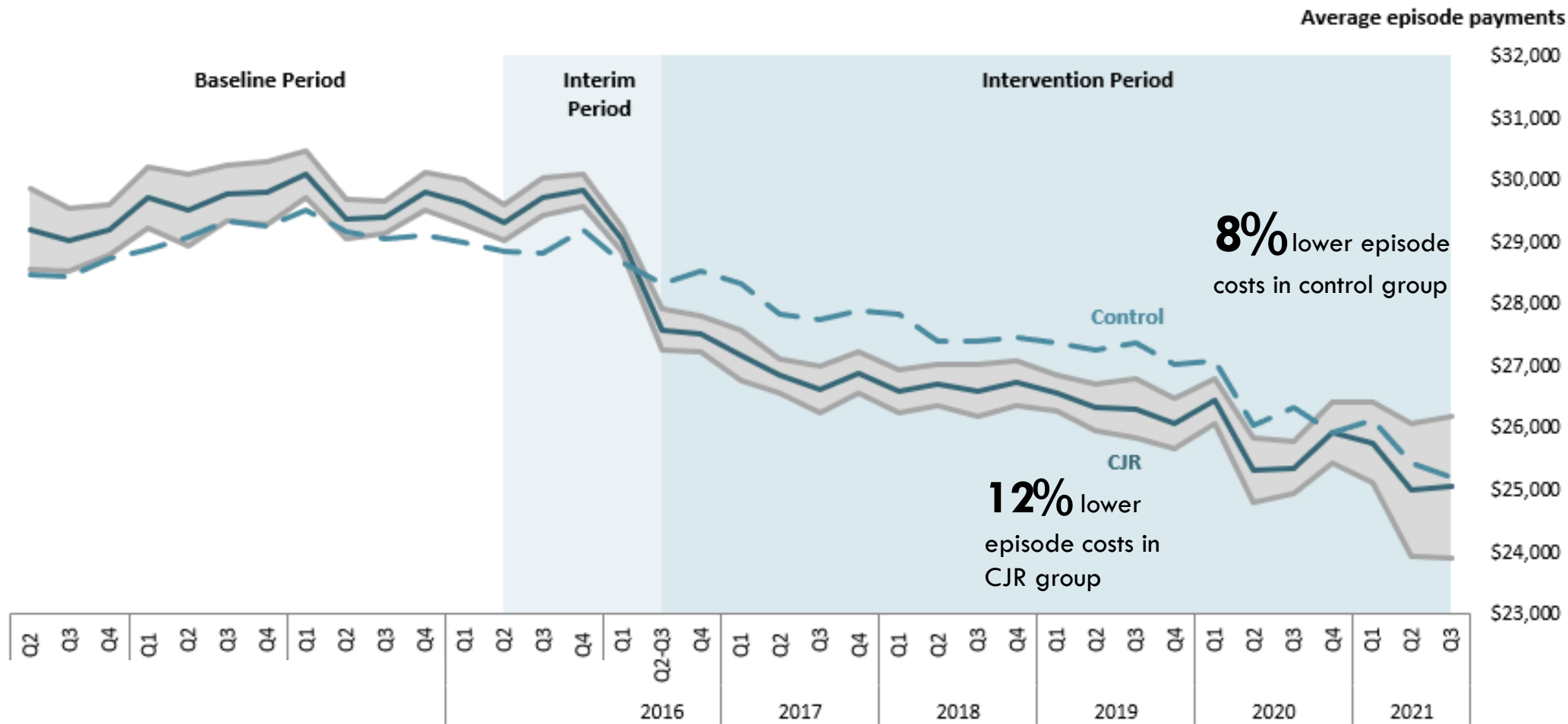
	Cumulative Impact PY1-PY5
Unplanned Readmission Rate	No Impact
ED Use	No Impact
Mortality	No Impact
Elective Complication Rate	7.4%

Highlights:

Cost of Care

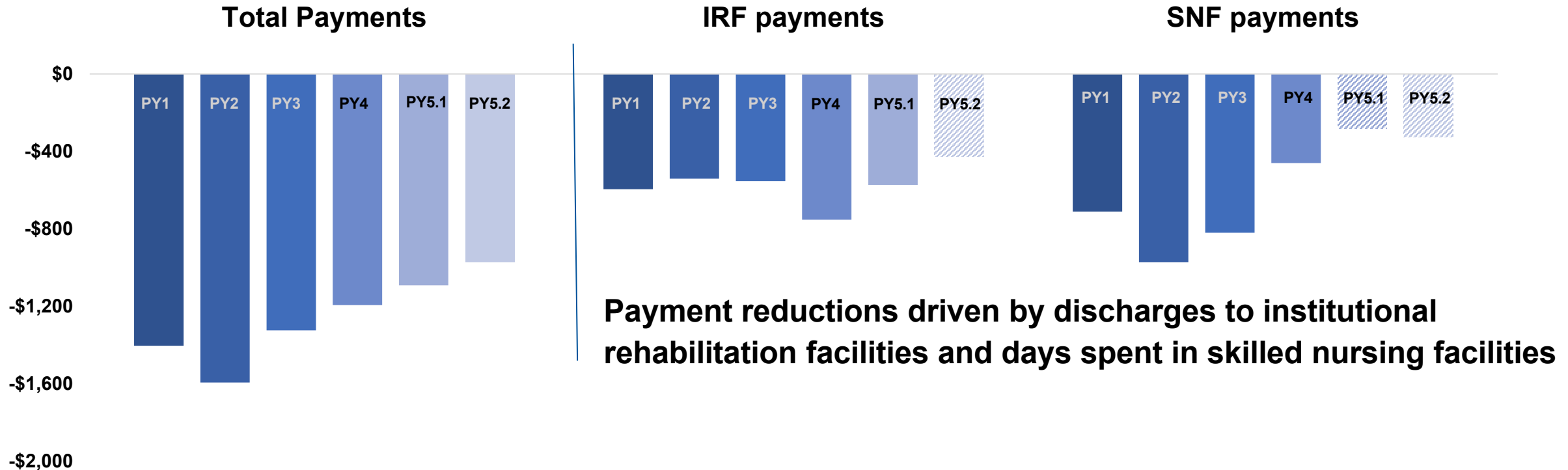
- ✓ The CJR model reduced average episode payments for mandatory CJR hospitals in every performance year.
- ✓ The reduction in payments decreased over time due to policy changes that allowed outpatient LEJRs and the public health emergency.
- ✓ The savings trend observed in the first four performance years reversed in performance year 5.
- ✓ The significant losses in performance year 5 were large enough to offset savings from prior performance years.

Episode payments for joint replacements declining across the board, larger reductions from CJR model hospitals



The CJR model significantly reduced average episode payments due to reductions in payments for post-acute care

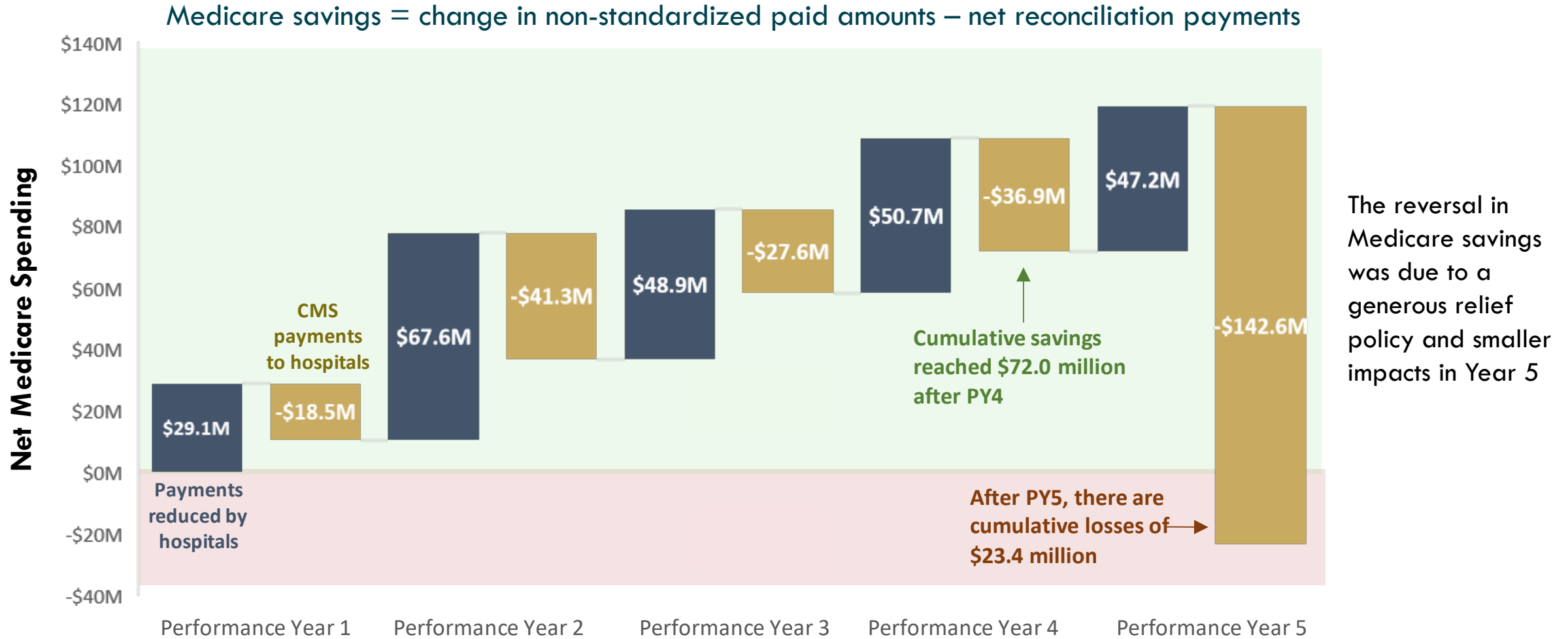
Average Episode Payment Impact



Payment reductions driven by discharges to institutional rehabilitation facilities and days spent in skilled nursing facilities

PY = Performance Year. Hashing indicates that the estimated savings is not statistically significant at the 10% level

The CJR model mandatory hospitals were on track to save Medicare money until the COVID Public Health Emergency



Note: Performance year 5 included episodes ending between Jan. 2020 and Sep. 2021. For episodes starting between Jan. 31, 2020 and Mar. 31, 2021, CMS capped episode payments at the quality-adjusted price for the purposes of calculating reconciliation during the pandemic.

Highlights:

Reach and Equity

- ✓ The CJR model was not designed to address equity, and we saw few impacts on payment and quality outcomes.
- ✓ There were similar patterns in the reduction of institutional post-acute care across all groups.
- ✓ Quality was maintained or improved across all groups.
- ✓ There are indications that the gap in the rates of lower extremity joint replacement is widening for patients who are Black.

CJR was not designed to address equity, and we saw few impacts on utilization and quality outcomes

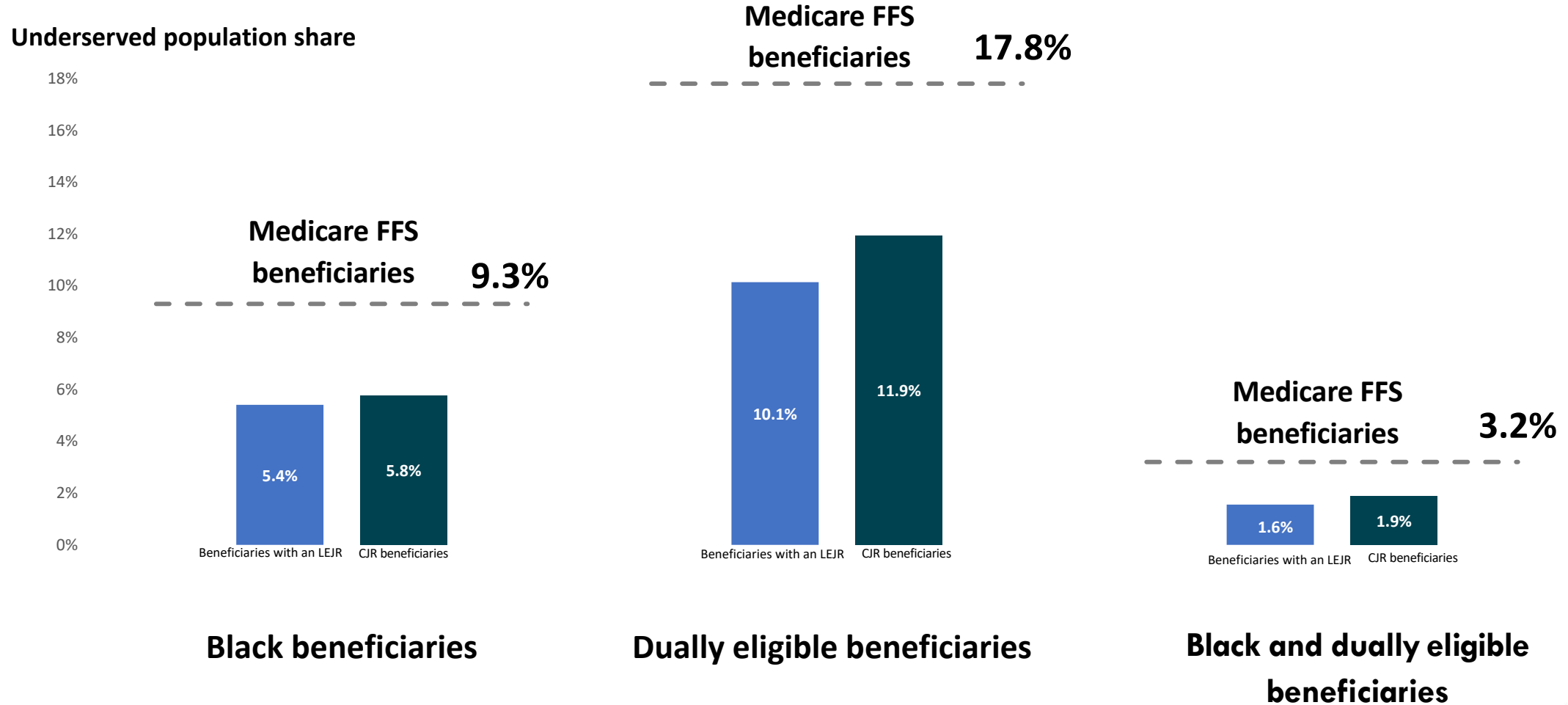
Utilization: Similar patterns in the reduction of institutional post-acute care across all groups

- Fewer discharges to inpatient rehabilitation facility, fewer skilled nursing facility days and greater use of home health

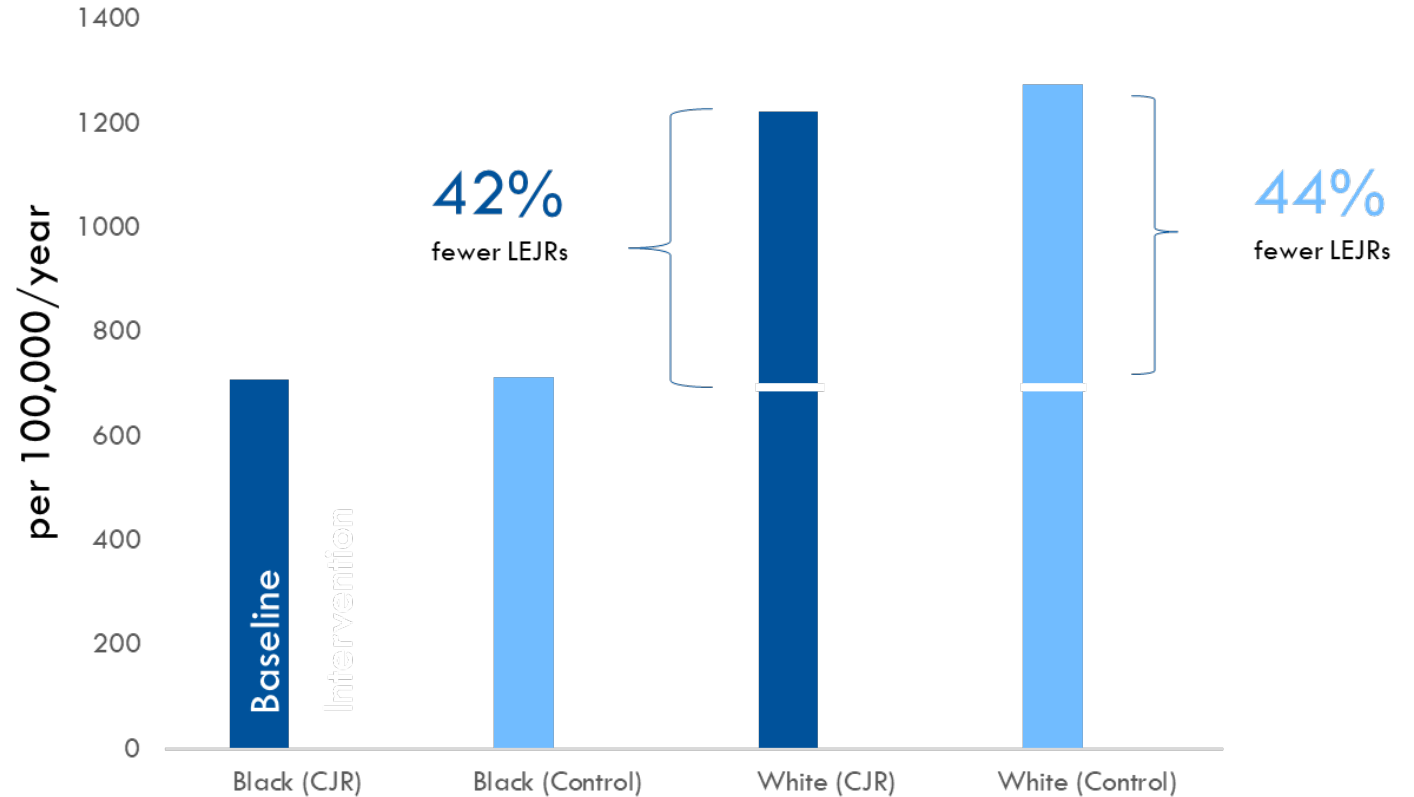
Quality: Maintained or improved across all groups

- No impact on ED visits or readmissions
- Similar changes in functional status for patients across all groups
- For patients who were Black,
 - Significant relative decrease in mortality and
 - Significantly higher satisfaction with care management, particularly higher ratings health care providers listening to preferences

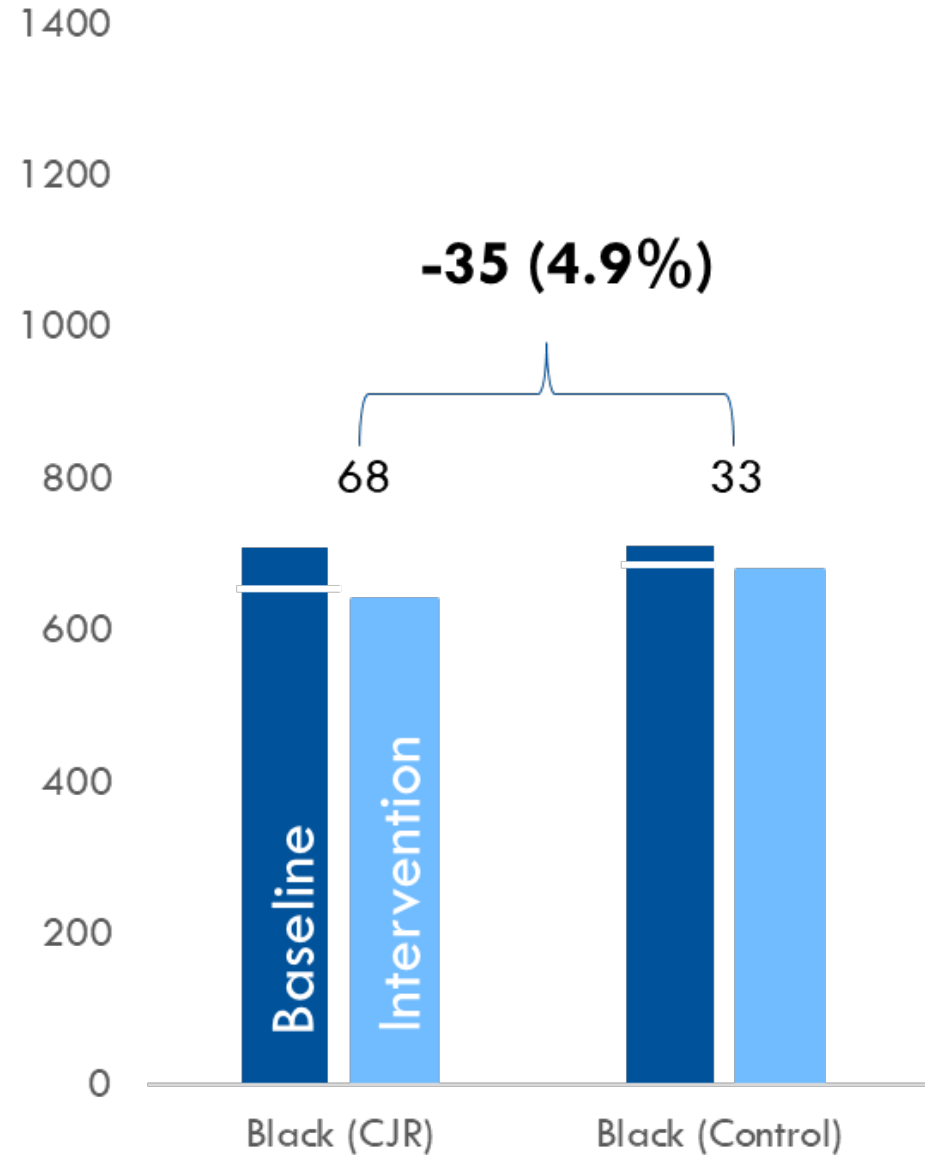
Underserved populations are underrepresented in the CJR model reflecting patterns for Medicare fee-for-service (FFS) beneficiaries with a lower extremity joint replacement



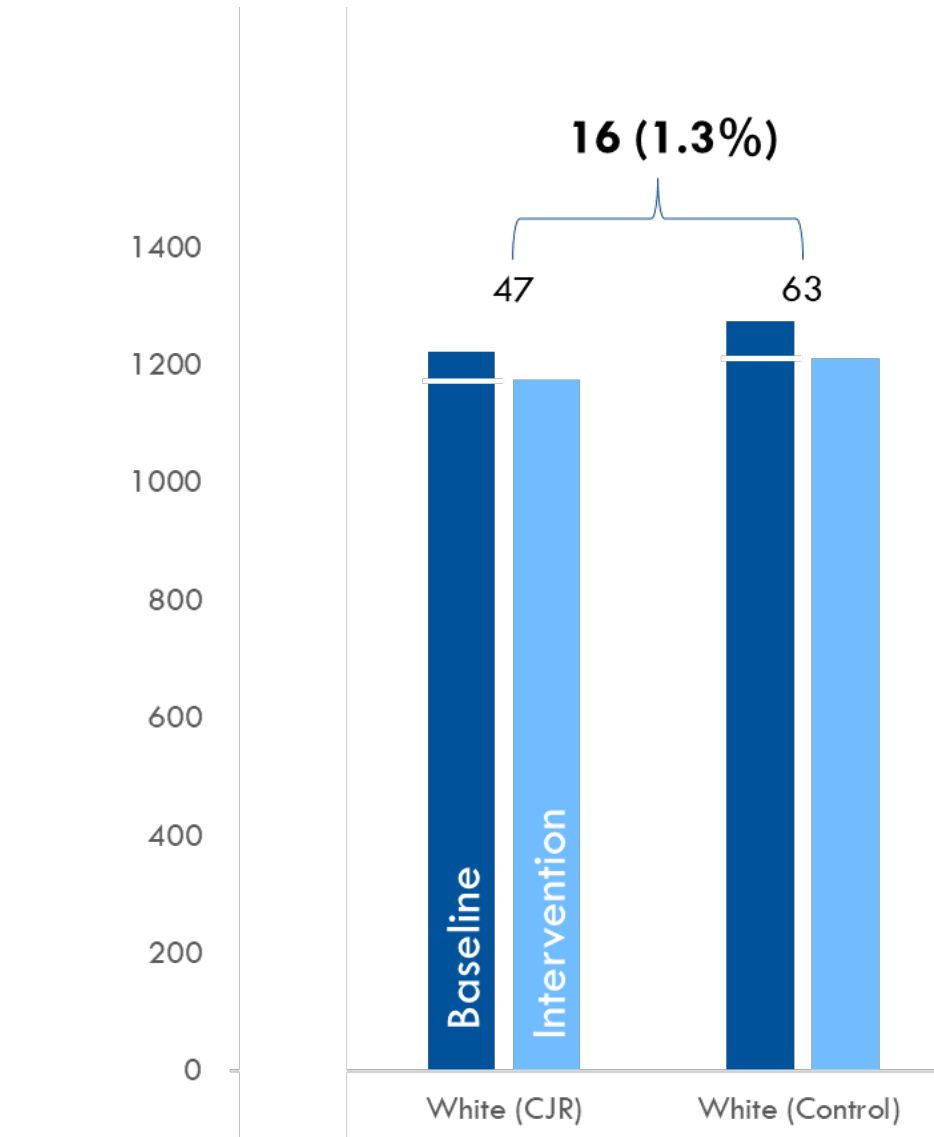
Historical differences in the rate of LEJR for Black Americans compared to White Americans that we see reflected in both the CJR and Control groups at baseline (2014-2016).



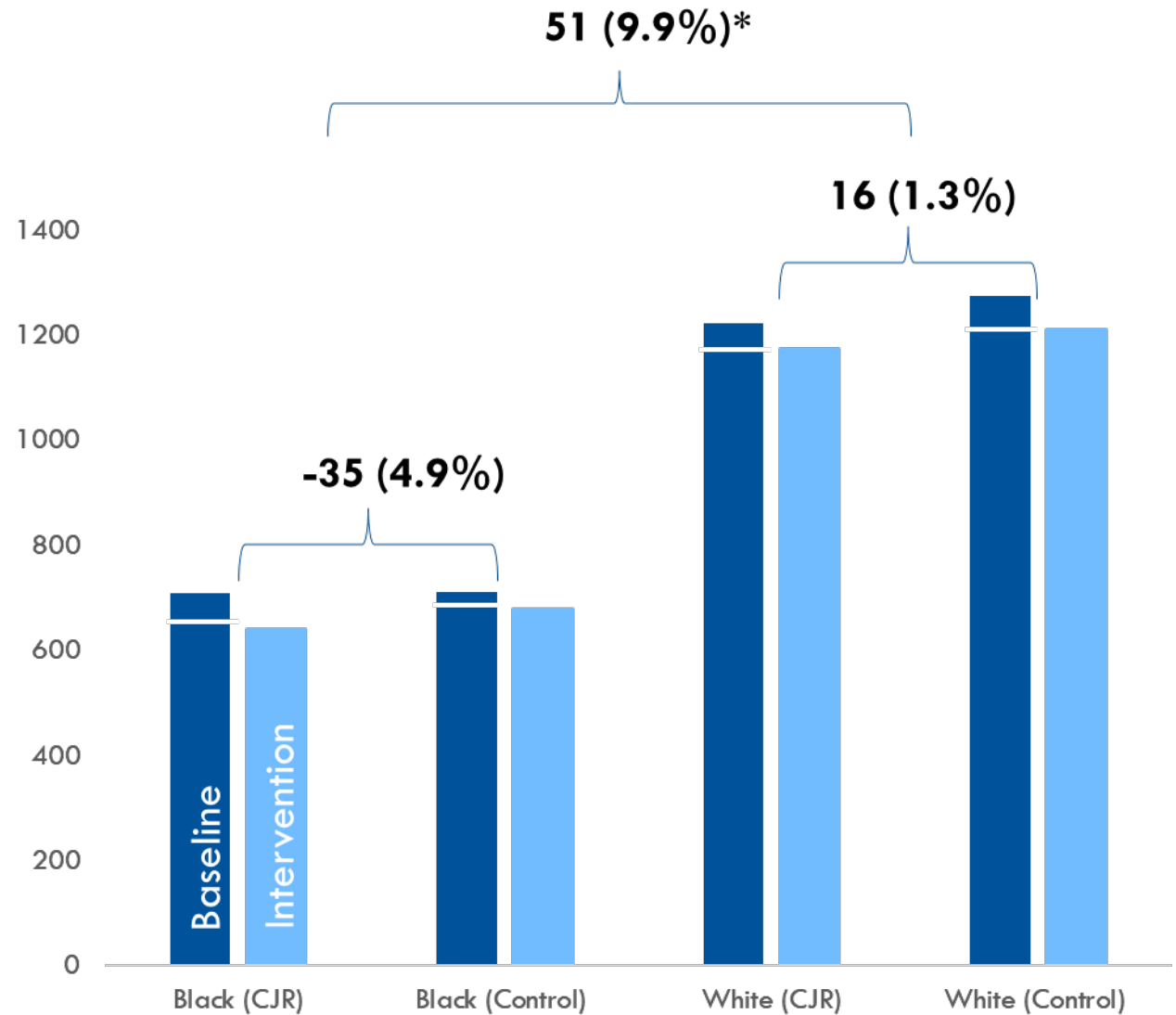
The relative decrease in LEJR rate of 35 LEJRs per 100,000 beneficiaries per year, a decrease of 4.9% of the baseline rate, relative to Black control beneficiaries was not statically significant.



The relative decrease in LEJR rate of 16 LEJRs per 100,000 beneficiaries per year, a decrease of 1.3% of the baseline rate, relative to White control beneficiaries was not statically significant.



While not individually statistically significant, these changes combined led to a statistically significant widening of the baseline LEJR rate between Black and White CJR beneficiaries



*Estimates are significant at the 10% significance level

Wrap Up

- ✓ The CJR model remains a promising approach for reducing LEJR episode payments and generating savings to Medicare, although changes in the health care landscape affected its performance.
- ✓ The shift to outpatient has been a steady progression with now well over 60% of knees and 40% of hips being performed as outpatient.
- ✓ The CJR model impact is narrowing due to less PAC use overall.