

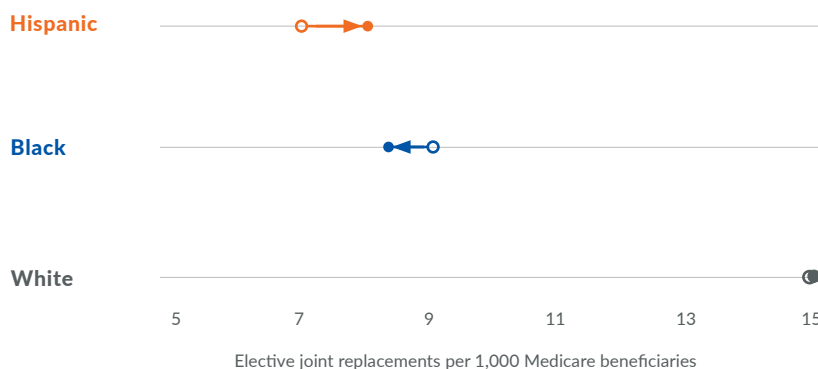
Medicare's Comprehensive Joint Replacement bundle linked with wider access disparity for Black beneficiaries

Hospitals in the program provide fewer elective joint replacements for Blacks, though more for Hispanics

Hip and knee replacements are effective treatment options that can improve the quality of life for people with conditions like severe arthritis. However, large racial and ethnic disparities exist in their use, with Black and Hispanic Americans 40-50% less likely to receive the surgeries than white Americans.

We analyzed changes in rates of Black, Hispanic, and white Medicare beneficiaries receiving elective joint replacements in hospitals that were part of and not part of Medicare's mandatory, randomized **Comprehensive Joint Replacement (CJR) model** to assess the program's impact. Data from 65 CJR and 101 "control" regions showed that outcomes differed by race and ethnicity (Figure 1).

Figure 1. Under CJR, receipt of elective joint replacement changed in opposite directions for Black and Hispanic enrollees, while white enrollees continued to receive surgery at about twice the rate of each.



Kim, H, Meath, THA, Quinones, AR, et al. Association of Medicare's Mandatory Bundled Payment Program with the Receipt of Elective Hip and Knee Replacement across White, Black, and Hispanic Beneficiaries. *JAMA Network Open*. 2021;4(3):e211772.

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KEY FINDINGS

- Under CJR, elective hip/ knee replacements increased slightly for Hispanic patients, decreased for Black patients, and held steady for white patients.
- This pattern did not persist when all joint replacements (including emergent surgeries, such as following hip fracture) were included.
- As CMS refines and develops future bundled payment models, access to procedures is an important health-equity metric.



1.7x

Greater likelihood that white Medicare enrollees will get elective joint replacements relative to Black enrollees, prior to CJR

Analysis: outcomes diverge for Black, Hispanic enrollees

Our analysis found Medicare's bundled payment program was associated with a relative decrease in the receipt of joint replacements for Black enrollees. After the policy intervention, Blacks received joint replacement surgeries at a rate of 8.5 replacements per 1,000 Medicare enrollees, compared to 15 joint replacement surgeries per 1,000 enrollees for whites. We estimate that this disparity increased by 0.64 surgeries per 1,000 enrollees as a result of the bundled payment program.

In contrast, the disparity narrowed by one surgery per 1,000 enrollees among Hispanics. Despite this narrowing, Hispanics still experienced a significant disparity, receiving joint replacement surgeries at a rate of 7.4 per 1,000 enrollees, compared to 15 per 1,000 among whites.

Value-based payments and racial/ethnic disparities

Medicare introduced CJR in 2016 to improve cost and quality of hip and knee replacements, randomly assigning metropolitan statistical areas (MSAs) to participate. Hospitals in CJR MSAs are accountable for meeting quality-adjusted cost targets for the initial surgical stay and all care in the 90 days following. Hospitals staying

under the target are eligible for bonuses; those that exceeded the target are subject to penalties.

CJR currently does not adjust for patients' social and medical complexity. Given that Blacks and Hispanics are disproportionately more likely to experience adverse complexity, an important question has been whether the program will inadvertently reduce access for Medicare beneficiaries of color, should hospitals in CJR preferentially select for less complex patients.

Implications

Reduced joint replacement rates for Black Medicare enrollees align with concerns that hospitals in CJR may select less medically and socially complex patients, possibly increasing racial and ethnic disparities.

But, the story is complex. Rates of joint replacements for Hispanics increased under CJR. Reasons for this difference are unclear. In addition, previous research shows improved outcomes under CJR for Black patients who do receive joint replacements.

Access to surgery by race and ethnicity is an important metric for CMS to monitor as it continues to refine CJR and other value-based payment initiatives.

Please see full article for references.

CENTER FOR HEALTH SYSTEMS EFFECTIVENESS

Cite as: Medicare's Comprehensive Joint Replacement bundle linked with decrease in surgeries for Black patients. Center for Health Systems Effectiveness, Oregon Health & Science University; 2021.

Original article: Kim, H, Meath, THA, Quinones, AR, et al. Association of Medicare's Mandatory Bundled Payment Program with the Receipt of Elective Hip and Knee Replacement across White, Black, and Hispanic beneficiaries. JAMA Network Open. 2021;4(3):e211772. doi:10.1001/jamanetworkopen.2021.1772

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