



## IMPACT OF THE COMPREHENSIVE CARE FOR JOINT REPLACEMENT MODEL

### Mandating Model Participation

The Center for Medicare and Medicaid Innovation's charge is to test innovative health care payment and care delivery models for Medicare, Medicaid, or Children's Health Insurance Program (CHIP) beneficiaries, primarily through voluntary participation.

The CJR model was the first instance in which CMMI authority was utilized to mandate participation in a Medicare payment demonstration. CMMI initially required participation for hospitals in 67 selected geographic regions; this was later modified to allow for voluntary participation in CJR for hospitals in half of the selected regions.

The rationale for mandating hospital participation in the CJR model was twofold:

- **Episode frequency:** Lower extremity joint replacements are one of the most common inpatient surgeries for Medicare beneficiaries. Medicare payments for hip and knee replacements account for over \$7 billion annually in hospital payments, in addition to payments for physician and post-acute care (PAC) services.
- **Variation:** CMS noted significant regional variation in spending (unassociated with commensurate quality performance) for LEJR episodes of care, as well as substantial variation in PAC referral patterns and intensity of PAC services.

Centers for Medicare & Medicaid Services (2015). [Medicare Program; Comprehensive Care for Joint Replacement Payment Model for Acute Care Hospitals Furnishing Lower Extremity Joint Replacement Services.](#)

In 2016, the Center for Medicare and Medicaid Innovation (CMMI) established the Comprehensive Care for Joint Replacement (CJR) Model as a mandatory alternative payment model to improve care for Medicare beneficiaries receiving hip or knee replacements. The CJR Model tests whether holding hospitals financially accountable for care provided to Medicare beneficiaries during and after a hospital stay for surgery will encourage better care coordination among participating hospitals and physicians and post-acute care (PAC) providers resulting in enhanced quality of care at lower costs.

The model is structured as an episode-based bundled payment for participating hospitals. The episode is triggered by an initial inpatient hospitalization for lower extremity joint replacement (LEJR) surgery and extending 90 days after discharge to cover the complete period of recovery. Performance is assessed based on whether the participating hospital meets a quality-adjusted target price for the total episode.

**In the first two years of the CJR Model, hip and knee replacement episode payments decreased by 3.7 percent, with estimated net savings to Medicare of \$17.4 million and gross savings of \$146.3 million.**

Participating hospitals are eligible to earn a reconciliation payment – or required to pay a portion of the excess episode spending – depending on the difference between the quality-adjusted target price and the actual episode spending and quality performance.

## CJR Model Design Produces Results

CMS sets the episode target prices prior to each performance year based on historical hospital-specific and regional episode payments for most Medicare Part A and Part B covered items and services during the LEJR episode. A three percent discount is also applied to the historical payment amount, which may be lowered based on the hospital's actual composite quality performance. Putting hospitals at financial risk for cost and quality performance on LEJR episodes of care has resulted in significant improvements in care and reductions in Medicare spending.

- **Statistically significant reduction in spending in the first two model years:** An independent multi-year [evaluation](#) conducted by the Lewin Group on behalf of CMS found that the CJR Model resulted in a statistically significant reduction in spending in both high cost and low cost regions during the first performance year while maintaining quality. The average total spending for CJR episodes decreased by \$1,127 (3.9 percent,  $p < 0.01$ ) in regions with historically high episode spending and \$577 (2.3 percent,  $p < 0.05$ ) in regions with historically low episode spending compared to control regions in the first model performance year. The second annual [evaluation](#) found reductions in average episode payments persisted into the second performance year.
- **Per episode spending decreased at the regional level:** A 2019 private [study](#) conducted difference-in-difference analyses using Medicare claims data from the first two years of the CJR program to evaluate LEJR episodes in the geographic regions selected for mandatory participation in CJR compared to control areas that were not selected for participation. There was a statistically significant reduction in per-episode spending (-\$812 or a -3.1 percent differential decrease) in areas with CJR participation compared to control areas.
- **More appropriate post-acute care referrals:** The evaluations found that reductions in episode spending were largely driven by changes in post-acute care utilization. More Medicare beneficiaries were discharged directly to home, with fewer patients discharged to higher-acuity PAC such as inpatient rehabilitation facilities.
- **Care redesign activities and improvements in discharge planning:** As part of independent model evaluation, the Lewin Group surveyed CJR hospital participants and found that 61 percent of hospital respondents felt that physician engagement in care redesign activities had improved in response to the CJR Model. The hospital representatives credited a focus on patient education and on reducing institutional PAC utilization, with 89 percent of hospitals reporting implementing same day post-surgery ambulation and physical therapy, and 81 percent reporting scheduling follow up appointments with LEJR prior to discharge.

## Model Extension

The CJR Model is a five-year demonstration that is scheduled to end December 31, 2020. Given the favorable evaluations, CMS issued a 2020 [proposed rule](#) that would extend the model an additional three years and make other adjustments to the model design, most notably, the addition of outpatient LEJR procedures. If finalized, the model extension will allow for CMS to evaluate these changes and determine whether the model should be further expanded in scope or duration.



Established in 2014, the Health Care Transformation Task Force brings together patients, payers, providers, and purchaser representatives to act as a private sector driver, coordinator, and facilitator of delivery system transformation. In addition to serving as a resource and shared learnings convener for its members, the Task Force is also a leading national voice on value-based payment and care delivery transformation.