The Comprehensive Care for Joint Replacement Model—Potential Implications for Equity

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Medicare's first mandatory bundled payment system—the Comprehensive Care for Joint Replacement (CJR) model—received substantial attention for its early success. The CJR model holds hospitals responsible for quality-adjusted spending for hip and knee joint replacement during each patient's hospitalization and 90 days after hospital discharge. During its first 2 years of implementation, the CJR model reduced joint replacement patients' hospital discharges to an institutional postacute care facility and lowered total expenditures without worsening their postsurgical outcomes. However, the CJR model did not have similar success in improving the equity of joint replacement care. Under the CJR model, safety-net hospitals lowered expenditures as much as non-safety-net hospitals did, but safety-net hospitals were more likely to be financially penalized.

Using 2016 to 2019 data from multiple data sources including Medicare claims and hospital surveys, Shashikumar and colleagues assessed whether safety-net and hospitals with larger proportions of Black and Hispanic patients were more likely to receive financial penalties under the CJR model. Consistent with previous studies, they found that these hospitals were more likely to be financially penalized under the CJR model than other hospitals. However, what is crucial in their findings is that they reported that this gap in CJR financial penalties across hospitals widened over time, particularly for safety-net hospitals. They found that the proportion of penalized safety-net hospitals increased from 39% in 2017 to 70% in 2018 and 88% in 2019, and for all hospitals, the corresponding proportions were 23% in 2017, 45% in 2018, and 53% in 2019. Because safety-net hospitals generally need more resources to serve the most vulnerable patient groups, it is concerning that the CJR model penalized increasing percentages of safety-net hospitals, more so than other hospitals. The CJR model may have contributed to widened disparities in joint replacement care.

One potentially important factor not discussed in the study by Shashikumar and colleagues is that the case mix of CJR's target joint replacement patients may have changed considerably in 2018. In 2018, Medicare changed regulations to allow knee replacement surgeries in a hospital outpatient department. The average case mix of hospitalized patients for CJR-participating hospitals may have increased because outpatient joint replacement procedures tend to attract healthier patients. The volume of hospitalized patients could have also decreased. This regulatory change could have differentially affected safety-net hospitals and hospitals caring for larger proportions of Black and Hispanic patients. If these hospitals served more medically and socially complex patients, most of their patients likely continued to receive joint replacement surgery in an inpatient setting rather than an outpatient setting, whereas other hospitals may have shifted many of their joint replacements to an outpatient setting.

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One surprising finding in this study is that large and medium-sized hospitals were more likely to be financially penalized by the CJR model in 2019 than smaller hospitals. Hospitals with a higher volume of Medicare joint replacements are expected to be more incentivized to reduce spending because the size of CJR financial rewards and penalties is proportional to the number of joint replacements. Also, hospitals with higher volumes may be able to reduce spending more easily due to economies of scale. However, the study's findings were contrary to this expectation and merit further evaluation.

The CJR model made substantial changes in its payment models in 2021. It started to adjust for patients' dual-enrollment status in Medicaid and Medicare as well as their age and number of chronic conditions, which may help safety-net hospitals meet multihospital shared spending targets. The CJR model also included both inpatient and outpatient joint replacements in evaluating each hospital's spending and quality of care. More studies are warranted to assess how these changes affected the CJR performance of safety-net hospitals and hospitals caring for larger proportions of Black and Hispanic patients.

**REFERENCES**


