CJR may reduce health care utilization, Medicare spending for joint replacement

September 4, 2018

An interim analysis of the first year of the Comprehensive Care for Joint Replacement bundled payment model for lower-extremity joint replacement published in JAMA showed a significantly lower percentage of discharges to institutional post-acute care among metropolitan statistical areas covered by the bundled payment model compared with those that were not. However, results also showed no significant differences in total Medicare spending per episode between the groups.

Reduction in discharge to post-acute care

Amy Finkelstein, PhD, and colleagues evaluated the relationship between inclusion of metropolitan statistical areas in the Comprehensive Care for Joint Replacement (CJR) model and outcomes among 67 metropolitan statistical areas randomly assigned to the CJR bundled payment model for lower-extremity joint replacement and 121 areas in a control group not included in the CJR model from April to December 2016.

The share of lower-extremity joint replacement admissions discharged to institutional post-acute care was considered the primary outcome. For secondary outcomes, researchers included the number of days in institutional post-acute care, discharges to other locations, Medicare spending during the episode, net Medicare spending during the episode, lower-extremity joint replacement patient volume and patient case mix, and quality-of-care measures.

During the study period, researchers found 131,285 lower-extremity joint replacement procedures among 130,343 patients were performed among the 196 metropolitan statistical areas and 1,633 hospitals included.

“The CJR bundled payment model reduced the share of patients discharged to institutional post-acute care settings, such as skilled nursing, long-term care or inpatient rehabilitation facilities after their hip or knee replacements by 2.9 percentage
points, relative to the control group average of 33.7%,” Finkelstein told Healio.com/Orthopedics.

**Medicare spending**

Finkelstein also noted a decline in spending in institutional post-acute care by $307 per episode. This was an 8% decrease compared with the control group average of $3,871, she said. Compared with the average total Medicare spending per episode of $22,872 in the control group, according to Finkelstein, the CJR group showed a 2%, or $453, decrease in total Medicare spending per episode. She said this result was significant at the 10% level.

“One once bonuses to hospitals participating in the CJR bundled payment model were factored in, there was no statistically significant difference in total Medicare spending,” Finkelstein said.

She added that the CJR bundled payment model did not have any effect on health care quality during the episode, the volume of patients treated or the case mix of patients treated.

“As incentives and penalties faced by the hospitals increase in subsequent years, continued evaluation can shed further light on how a mandatory CJR bundled payment model affects participating hospitals’ utilization, spending and quality of care over time,” Finkelstein said. “However, in December 2017, CMS modified the CJR bundled payment model to be voluntary for 33 of the [metropolitan statistical areas]. Starting in the program’s third year, the mandatory participation randomized controlled trial can only be conducted in half of the original [metropolitan statistical areas].” – by Casey Tingle

**Disclosures:** Finkelstein reports no relevant financial disclosures. Please see the study for all other authors’ relevant financial disclosures.