



Pension & Health Benefits Committee

California Public Employees' Retirement System

Agenda Item 7

June 18, 2013

ITEM NAME: Hips and Knees Reference Based Pricing Evaluation

PROGRAM: Health Benefits

ITEM TYPE: Information

EXECUTIVE SUMMARY

This agenda item is an evaluation report of the impact of the California Public Employees' Retirement System (CalPERS) and Anthem Blue Cross of California (Anthem) reference pricing program for total joint replacement of the knee or hip. Researchers from the University of California, Berkeley (UCB) analyzed de-identified data from Anthem's CalPERS and non-CalPERS enrollees. The analysis estimates that the cumulative savings to CalPERS from the program are \$5.5 million over the two calendar years from January 2011 through December 2012.

STRATEGIC PLAN

This informational item supports Strategic Plan Goal A: "Improve long-term pension and health benefit sustainability." Reference based pricing can reduce costs and ensure high-quality outcomes making health benefits sustainable.

BACKGROUND

In January 2011, CalPERS and Anthem PPO implemented reference pricing for knee and hip replacement surgery in response to a five-fold variation in prices for these two procedures, with no measurable difference in outcome quality across California hospitals. Anthem identified 41 hospitals as value-based purchasing design (VBPD) facilities based on having procedure prices below \$30,000, acceptable quality, and sufficient geographic dispersion. This \$30,000 payment limit applied only to hospital charges, not charges from surgeons and other physicians involved in the patient's care.

CalPERS Anthem enrollees selecting a VBPD hospital were subject to a normal 20 percent coinsurance, up to an annual maximum of \$3,000, while those selecting one of the 72 non-VBPD facilities were subject to the \$3,000 cost sharing plus the difference between the CalPERS contribution and the allowed price charged. As an illustration, a patient using a non-VBPD hospital charging \$40,000 would be required to pay \$13,000 in cost sharing.

In May 2012, a data use agreement was signed between UCB and CalPERS to permit the use of de-identified data for an analysis of the reference pricing program

for total joint replacement of the knee or hip. Subsequently, Anthem signed an agreement with UCB to share similar de-identified data on non-CalPERS enrollees.

ANALYSIS

UCB researchers compared changes in joint replacement volumes and prices across VBPD and non-VBPD facilities between 2008 and 2012. In order to control for other factors influencing hospital referral volumes and prices during this period, they compare changes of CalPERS Anthem enrollees with comparable data from non-CalPERS Anthem enrollees, who were not subject to reference pricing.

Whereas 52 percent of CalPERS procedures were in non-VBPD facilities in 2010 prior to the implementation of reference pricing, only 37 percent occurred in those facilities in 2011 and 36 percent in 2012. Taking into consideration the changes observed in the non-CalPERS Anthem enrollees, adjusting for patient demographics, co-morbidities, and geographic location, the UCB researchers estimate that reference pricing itself caused a 19.2 percent increase in referral volume for VBPD facilities among CalPERS Anthem enrollees in 2011.

The average hip/knee replacement price charged to CalPERS members across all Anthem hospitals in 2010 was \$34,742. In 2011, however, the average price fell to \$25,611, a decline of 26.3 percent. This average price reduction for CalPERS was due almost entirely to changes in prices at non-VBPD facilities. After the implementation of reference pricing, the average price charged by VBPD hospitals remained similar. However, the prices charged by non-VBPD facilities declined dramatically, from an average of \$43,308 in 2010 to \$28,465 in 2011 (38 percent) and further to \$27,149 in 2012.

Of the \$2.8 million in savings in 2011, 15.4 percent was due to market share growth at VBPD hospitals, while 84.6 percent was due to reduction in prices at both VBPD and non-VBPD hospitals. Similarly, of the \$2.7 million in savings in 2012, 12.9 percent was due to market share growth at VBPD hospitals and 87.1 percent was due to reduction in prices at both VBPD and non-VBPD hospitals.

Importantly, no significant changes were observed in average consumer cost sharing (sum of copayments, deductible, and coinsurance), except for a 30.5 percent decrease in 2012 for enrollees using non-VBPD hospitals.

UCB researchers conclude that reference pricing possibly created a tipping point in hospital pricing strategy, and that the observed reductions in prices for non-CalPERS patients were influenced by the bellwether CalPERS program. Reference pricing may be both a catalyst and an indicator of deeper changes in hospital pricing strategies.

ATTACHMENTS

Changes in Patient Volumes, Allowed Charges, Consumer Cost Sharing, and
CalPERS Payments for Orthopedic Surgery Associated with Reference Pricing

DAVID COWLING, Chief
Center for Innovation

ANN BOYNTON
Deputy Executive Officer
Benefit Programs Policy and Planning