

## **HEALTH CARE RESOURCE USE OF MEDICARE BENEFICIARIES WITH PRIMARY OSTEOARTHRITIS (OA) OF THE KNEE – A CLAIMS DATA ANALYSIS**

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### **Objectives**

To estimate how health care resource use patterns have shifted over time for Medicare beneficiaries with primary knee osteoarthritis (OA) across 5 care delivery settings.

### **Methods**

De-identified patient level claims data from 2009 and 2014 were provided by CMS. Datasets for primary care, home-health, inpatient, outpatient, and skilled nursing facilities (SNF) were assessed. 534,004 primary knee OA patients were identified using ICD-9 codes 715.16, 715.36, 715.96, and excluding confounding comorbidities such as rheumatoid arthritis. Submitted costs for each site of care per dataset year were analyzed to report resource utilization trends. A benchmark population without OA will also be generated using demographics-based propensity score matching and the burden of OA will be calculated.

### **Results**

On average, each OA patient had 1.2 inpatient stays, 7.7 outpatient visits, 9.9 primary care visits, 0.89 home care episodes and 0.16 SNF stays in 2009. In 2014, the number of primary care visits increased to 11.3 and SNF stays tripled to 0.48, while outpatient visits decreased slightly to 7.28 and home care utilization dropped to near-zero. In both years, 95% of OA hospitalizations were for joint replacements with an average length of stay of 3 days. The cost of delivering care increased for most of the settings. In 2009, average cost (inflated to 2014 value) for each episode of care in inpatient, outpatient, and SNF setting was \$52,949, \$1,079, and \$8,236, respectively. In 2014, this changed to \$55,379, \$1,403, and \$8,517, respectively. For primary-care visits, while cost per visit decreased (\$165 to \$147), overall costs for visits increased.

### **Conclusion**

Primary knee osteoarthritis is a significant source of economic burden in Medicare patients. Overall, most costs have increased between 2009 and 2014, despite adjustment for inflation. Further research into overall burden and cost drivers will assist in understanding treatment trends in the OA Medicare population.