

## Will Medicare's Bundled Payments Program Threaten Patient Access? Early Experience With Bundled Payments for Care Improvement Advanced for Internal Fixation of the Hip and Femur

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**Purpose:** The Bundled Payments for Care Improvement Advanced (BPCI-A) initiative is the most recent payment model, beginning October 1, 2018. BPCI-A for non-arthroplasty internal fixation of the hip and femur is intended to align physicians and health systems throughout the clinical encounter, yet patient heterogeneity remains a challenge to delivering equitable value-based care. In this early analysis, the aims were to describe the characteristics of patients enrolled in BPCI-A for internal fixation of the hip and femur, and to investigate whether the finances of bundled care appropriately account for patient heterogeneity.

**Methods:** We conducted a retrospective review of patients enrolled in BPCI-A at a single academic institution who underwent internal fixation of the hip or femur (DRG [Diagnosis Related Group] 480-482) from October 2018 to November 2019.

**Results:** 84 patients enrolled to BPCI-A program were included in the study. Average age was  $75.2 \pm 15.6$  years (range, 26.4-101.1). The majority of patients were white (63.1%) and female (70.2%). Preinjury functional status included independent (n = 30, 36%), ambulatory with assistive device (n = 36, 43%), wheelchair dependent (n = 17, 20%), and bedbound (n = 1, 1%). Average Charlson Comorbidity Index (CCI) was  $6.1 \pm 3.6$  (range, 0-18). The majority underwent operative management of an acute fracture (n = 73, 88.1%), of which 51 (70%) were hip fractures. Other procedures included in this cohort were nonunion repair (n = 7), revision arthroplasty with history of fracture (n = 2), deformity correction (n = 1), and excision of heterotopic ossification (n = 1). Length of stay averaged  $5.2 \pm 3.4$  days (range, 1.4-16.2). Ten patients (11.9%) developed at least 1 major complication, and 8 patients (9.5%) required an ICU stay. 90-day readmission was 10.7%, and 4 patients (4.8%) have died since enrollment. Target reimbursement varied slightly by calendar year but was the same across DRGs. Average cost was lower than target reimbursement by \$1555, but the range of cost relative to target reimbursement was wide, from patients whose net cost was \$113,000 to patients with net savings of \$41,100.

**Conclusion:** This is the first analysis of BPCI-A for patients undergoing internal fixation of lower extremity fractures. The cohort of patients included in this bundle are highly diverse with significant comorbid heterogeneity. We recommend further risk stratification within the bundle to better reflect the heterogeneity of the patient population. Without such stratification, value-based equitable care will remain elusive and may threaten access if hospitals deem the program financially unviable.