

Paper #10

Clinical Outcomes and 90-Day Costs following Hemiarthroplasty or Total Hip Arthroplasty for Hip Fracture

Notes

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Introduction: In the era of bundled payments many hospitals are responsible for costs from admission through 90 days. Total joint arthroplasties can trigger bundling, including hip fracture. This study examines the resource burden among patients with hip fracture.

Methods: Using Medicare 100% Files (2010-2014), we identified four cohorts: (1) hemiarthroplasty (Hemi) DRG 469, (2) Hemi DRG 470, (3) total hip arthroplasty (THA) DRG 469, (4) THA DRG 470. Patients were 65+ with admitting diagnosis of closed hip fracture, without concurrent fractures, and no history of hip surgery within 12-months. Continuous Medicare enrollment during baseline through discharge was required. Complications and resource use, from admission through 90 days, were summarized. Cox models, controlling for patient and hospital characteristics, evaluated factors associated with readmission or mortality.

Results: A total of 19,634, 77,744, 1,686, and 9,314 patients met selection criteria, respectively. Mean age ranged from 78.5-82.9 with 64%-76% female. The majority waited one day from admission to surgery (41%-51%). Median length of stay was 8.0 days for each 469 cohort and 5.0 days for 470 cohorts; with the majority discharged to skilled nursing (SNF) (50%-64%). Overall 25.7%, 18.4%, 26.3%, and 13.9% were readmitted within 90 days, respectively. All-cause mortality during the study period was 51.6%, 29.5%, 48.1%, and 24.9%. Unconditional mean 90-day cost was \$28,952, \$19,243, \$29,763, and \$18,561. In Cox models, age 90+, male gender, West South Central residence, obesity, anxiety, psychoses, longterm anticoagulant use, presence of all-cause complication or transfusion, and discharge to SNF were predictive of readmission (3 of 4 cohorts P<.05). Similarly, age 90+, male gender, psychoses, and presence of all-cause complication was predictive of mortality (3 of 4 cohorts P<.05).

Conclusions: This study confirms patients with hip fracture are a costly sub-population. Tailored care pathways to minimize post-acute care resource use are warranted for these patients.