Foot and Ankle Procedures are Significantly More Cost Effective when Performed in Ambulatory Surgery Centers as Opposed to Hospital Outpatient Departments

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Outpatient foot and ankle surgeries have long been demonstrated to be safe with equivalent or improved patient outcomes when compared to inpatient procedures. As a result, there has been an increase in outpatient surgeries over time. In conjunction with this shift to outpatient procedures, ambulatory surgery centers (ASCs) have demonstrated better cost effectiveness than hospital outpatient departments (HOPDs) in various procedures and subspecialties. However, there is a lack of literature evaluating the difference in costs between ASCs and HOPDs for foot and ankle surgeries among Medicare beneficiaries.

METHODS:

Publicly available data from Center for Medicare and Medicaid Services (CMS) was accessed via the Medicare Procedure Price Lookup Tool. Current Procedural Terminology codes were used to identify foot and ankle specific procedures approved for the outpatient setting by CMS. Procedures were grouped into arthroscopic, fracture, and other cohorts, as well as an overall cohort. Data regarding total costs (defined as facility fees + surgeon reimbursement), facility fees, surgeon reimbursement, Medicare payments (defined as portion of costs covered by Medicare and not requiring payment from patient), and patient co-payments (defined as portion of costs required to be paid by patient and not covered by Medicare) were extracted for each procedure. Descriptive statistics were used to calculate means and standard deviations. Differences between ASC and HOPD associated costs were analyzed using Mann Whitney U test. RESULTS:

Thirty-eight individual CPT codes approved by Medicare for ASC and/or HOPD setting were identified. Fracture procedures had significantly lower total costs ($5,561.83\pm2,740.88$ vs. $8,210.33\pm2,715.16$; p=0.037), facility fees ($4,781.17\pm1,849.84$ vs. $7,429.67\pm2,529.51$; p=0.031), and Medicare payments ($4,449.00\pm1,629.89$ vs. $6,727.83\pm2,564.93$; p=0.037). Arthroscopy codes did not demonstrate a significant difference in total cost of procedure ($2,377.00\pm850.93$ vs. $4,375.75\pm1,782.90$; p=0.149), facility fees ($1,769.50\pm819.00$ vs. $4,768.25\pm1,752.50$; p=0.129), Medicare payments ($1,901.75\pm680.52$ vs. $3,500.25\pm1,426.29$ p=0.149), and patient payments (475.00 ± 169.92 vs. 874.50 ± 356.61 ; p=0.149) in ASCs as compared to HOPD although there was a non-significant trend noted. Twenty-eight CPT codes grouped as "other" showed significant cost savings in savings in total cost of procedure ($2,324.25\pm1,569.52$ vs. $4,141.07\pm2,128.84$; p=0.012), facility fees ($1,890.50\pm668.71$ vs. $3,704.11\pm1,972.24$; p<0.001), Medicare payments ($1,859.25\pm1,255.44$ vs. $3,295.54\pm1,706.19$; p=0.012), and patient payments (464.21 ± 313.81 vs. 826.79 ± 424.84 ; p=0.012) in ASCs as compared to HOPD. When grouping all CPT codes into a single cohort, ASC setting was associated with significant cost savings in total cost, facility fees, Medicare payments, and patient payments.

DISCUSSION AND CONCLUSION:

Performing foot and ankle surgeries in ambulatory surgery centers is associated with cost savings as compared to hospital outpatient departments. This was demonstrated for fracture cases and non-arthroscopic cases, while arthroscopic cases did not demonstrate a significant difference. This study will assist surgeons, patients, and policy makers in ensuring the delivery of safe and cost-effective foot and ankle care to Medicare beneficiaries.