



Paper #40

## What Incentives are Created by Medicare Payments for Total Hip and Knee Arthroplasty?

Rutledge C. Clement, MD, MBA, **Michael M. Kheir, BS**, Peter B. Derman, MD, MBA, David N. Flynn, Rebecca M. Speck, L. Scott Levin, MD, FACS, Lee A. Fleisher, MD

**Introduction:** Differences in profitability and contribution margin (CM) between various patient populations may make certain patients particularly attractive (or unattractive) to providers. Such data typically is not available due to poor knowledge surrounding healthcare costs.

**Methods:** Purpose This research aims to identify patient characteristics associated with increased profit and CM among Medicare patients undergoing total knee and hip arthroplasty (TKA & THA). Methods All primary TKA & THA patients of Medicare-eligible age (65+) at an urban academic center over 24 months were included (n=1,416 & 612, respectively). Profit and CM were calculated as Medicare reimbursement less total and variable costs, respectively, with cost data derived from the hospital's cost accounting system which relies primarily on actual cost data rather than charges. Univariate & multivariate regressions were performed to determine associations between relevant demographic and clinic factors and profitability and CM.

**Results:** Increased profit and CM were associated with younger age ( $p < 0.01$ ), more complicated patients (higher MS-DRG weight), and shorter LOS ( $p < 0.01$ ) in the TKA and THA populations. Male gender was associated with higher profit & CM among TKA patients ( $p < 0.01$ ). Lower CM was associated with black race for both procedures ( $p=0.04$ ) and Asian race for THA ( $p=0.04$ ). No association was found with BMI.

**Conclusion:** Delete Conclusion Discussion: If our results are generalizable, CMS payments do not adequately compensate hospitals for the increased costs associated with older patients and those requiring longer LOS, potentially incentivizing against their care. Our findings suggest that Medicare reimbursements effectively compensate for the burden of patients with greater comorbidities. Future research could be valuable to better understand the associations identified here between male gender and increased profit and CM among TKA patients, and between white race and increased CM among TKA and THA patients. CMS must continue to work to ensure reimbursement levels accurately match provider costs to avoid treatment prejudices against specific patient populations.

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