Paper #5

Race, Medicaid Insurance, BMI and Female Gender Correlated with Consistently Lower HOOS JR Scores

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Introduction: The Hip disability and Osteoarthritis Outcome Score, Joint Replacement (HOOS JR) is a validated patient reported outcome measures (PROM) approved by the Centers for Medicare and Medicaid services (CMS) for use in determining reimbursement. Studies demonstrate threshold pre-operative HOOS JR scores predict patient satisfaction or dissatisfaction following THA. The goal of this study was to determine whether patient characteristics impact HOOS, JR. scores collected pre- and post-operatively.

Methods: A prospectively collected and maintained HOOS JR dataset for 1323 consecutive patients for a large, hybrid, academic integrated finance and delivery system's musculoskeletal registry was analyzed for all admissions from April 1st, 2016 through January 31st, 2017 with the Medicare Severity–Diagnosis Related Group (MS-DRG) of 469 or 470. Data was collected 0-90 days prior to procedure and at 3, 6, 9 and 12-month intervals post-operatively. A multilevel beta regression model was then applied to correlate the influence of patient characteristics on HOOS JR scores. These characteristics included race, age, gender, BMI, insurance type, severity of joint disease, disposition destination, and time from surgery.

Results: Increasing age (0.16% increase per each year p = 0.004) and time (in days) from surgery (0.29% increase, p< 0.001) had a statistically significant positive effect on HOOS JR score. Black race (5.62% decrease, p <.001), Medicaid insurance (5.70% decrease, p = 0.004), extreme joint disease (9.48% decrease, p = 0.011), disposition to SNF (5.08% decrease, p = 0.001), female gender (2.37% decrease, p= 0.001), BMI (0.23% decrease, p = 0.002) had a negative effect on HOOS JR score.

Conclusions: Black race, Medicaid insurance, BMI, female gender and discharge disposition to any place other than home is correlated with worse HOOS JR scores at every studied time point; thus, PROM should not be the sole measure in determining patient outcomes and influence physician reimbursements.

Notes