Medicare Advantage Enrollees are Increasing and Demonstrate Distinct Characteristics from Traditional Medicare THA Patients

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INTRODUCTION: Medicare Advantage (MA) enrollment is becoming more popular among the Medicare population. Despite this growth, little is known about the difference in characteristics and proportion of growth, if any, between traditional Medicare (TM) and MA beneficiaries undergoing primary total hip arthroplasty (THA). We aimed to compare baseline characteristics and overall growth in numbers between MA and TM patients who underwent primary THA in a single healthcare system.

METHODS: A total of 5741 Medicare patients who underwent primary THA between 2016–2023 from a single healthcare system were analyzed. Among these, 3209 (55.9%) were TM and 2532 (44.1%) were MA patients. Baseline characteristics recorded included age, gender, race, body mass index (BMI), smoking status, Charlson Comorbidity Index (CCI), Area Deprivation Index (ADI), preoperative Hip disability and Osteoarthritis Outcome Score (HOOS) scores for pain, Physical Function Shortform (PS), and Joint Replacement (JR), and Veterans RAND 12-Item Mental Component Summary (VR-12 MCS) score. Proportions of TM and MA over the study period and baseline characteristics were compared. A p-value <0.05 was considered statistically significant.

RESULTS: The overall number of patients in both groups increased from 2016 to 2019 but declined thereafter. The MA group demonstrated greater stability and a slower decline in patient volume compared to TM. By 2022, MA patients outnumbered those in Traditional Medicare (50.6 vs. 49.3%), suggesting a temporal shift in enrollment patterns. However, the proportions were similar in 2023 (49% MA vs. 51% TM). When comparing baseline characteristics of MA relative to TM patients, MA patients had a younger age (median 70 vs. 71, p=0.01), higher BMI (28.8 vs. 28.7, p=0.04), higher proportion of non-white race (14.4% vs. 6.8%, p<0.001), higher proportion of smokers (7.8% vs. 5.1%, p<0.001), and higher ADI score (median 48 vs. 40, p<0.001), but similar proportion of females (60% vs. 58%, p=0.18), and similar CCI score (median 1 vs. 1, p=0.08). Also, MA patients showed lower baseline scores for HOOS-pain (median 35 vs. 37.5, p<0.001), HOOS-PS (median 49.2 vs. 53.9, p=0.001), and VR-12 MCS (median 49.9 vs. 51, p=0.001). Although both groups had similar median scores for HOOS-JR (43.3), MA patients had a lower range compared to TM patients (32.7-53 vs. 36-53, p<0.001).

DISCUSSION: In this single-institution study of Medicare patients undergoing primary THA, we observed a slight shift in insurance distribution in recent years, with MA patients surpassing TM enrollees by 2022. MA patients demonstrated distinct baseline characteristics, including younger age, higher BMI, greater social deprivation, and lower baseline functional and mental health scores. These findings highlight the evolving demographic and clinical profile of the Medicare population undergoing THA and underscore the need to account for insurance type when evaluating outcomes and planning resource allocation in value-based arthroplasty care.

CLINICAL RELEVANCE: Medicare Advantage now constitutes roughly half of THA cases and is associated with patients who have greater social deprivation and lower baseline function/mental health; recognizing MA status as a distinct risk context can improve preoperative optimization, equity-minded resource planning, and risk adjustment for PROM- and value-based benchmarks.