Does Health Insurance Type Impact Pain and Function in Patients with Knee Osteoarthritis?
Dargan, C; Kedia, R; Dasa, V

Introduction: As of 2012, the Center for Disease Control (CDC) reported that 61.2% of the United States population had private health coverage, 23.4% had public insurance, and 14.7% were uninsured. Objective: To investigate how different types of insurance affect severity of diagnosis, pain levels, and patient satisfaction.

Methods: Patients were recruited as part of a prospective observational study at an outpatient orthopedic clinic that presented with knee osteoarthritis symptoms. Data was gathered regarding socioeconomic information, x-ray grades, feedback surveys, and health-status instrument surveys. X-ray grades were scored using the Kellen-Lawrence Grading Scale (KL) and Ahlback Radiographic Grading Scale (AR). The feedback survey assessed for physician-patient interaction time, pain levels, satisfaction, and understanding. The health-status instrument surveys included the OKS, WOMAC, KOOS, and SF-12 Health Survey.

Results: The average pain levels for private insurance, Medicaid, and Medicare were respectively 6.09, 6.46, and 6.22 on a scale from 1-10 (p>0.05 between each other). The average SF-12 Physical Component Score were respectively 34.44, 29.98, and 28.25 (p=0.05 between private insurance and Medicare). Insurance type was not found to be significantly correlated with satisfaction or understanding.

Conclusion: This study shows an association between private and Medicare patients, where patients with Medicare reported worse functional health from their perspective. Although there was no such significant association between private insurance and Medicaid, there was still a discrepancy, and Medicaid patients had similar scores to Medicare patients. This is important because it shows patients with public insurance feel as if they have decreased functional health compared to patients with private insurance. Due to the Affordable Care Act, it is expected that there will be more patients with public insurance compared to private insurance within the next decade. It is therefore important to continue to investigate how insurance coverage could affect patient health care for the future.