

Medicaid Insurance and Access to Hip, Knee, and Shoulder Arthroscopic Surgeons

Nicholas A. Felan, BA¹; Elizabeth Garcia-Creighton, BA¹; Ryan Tseng, BS¹; Amir H. Kalani, BA¹; Madeleine M. Felan, BA²; Daniel J. Stokes, MD³; Jason P. Sidrak, BS¹; Amy Du, BA³; Miranda G. Manfre, BS³; Emmanuel J. Cruz, M. Eng¹; William D. Ton, BA¹; Eric C. McCarty, MD³; Tyler M. Muffly, MD⁴

¹University of Colorado School of Medicine, Aurora, CO, USA; ²Trinity University, San Antonio, TX, USA; ³University of Colorado School of Medicine Department of Orthopaedic Surgery, Aurora, CO, USA; ⁴Denver Health and Hospital Authority, Department of Obstetrics and Gynecology, Denver, CO

INTRODUCTION

- Medicaid provides affordable healthcare to individuals under 65 whose annual income is below 133% of the federal poverty level
- As of May 2024, 73.8 million people were enrolled in Medicaid
- Patients with Medicaid are **significantly less likely** to have success when scheduling an appointment with a physician compared to patients with private insurance
- Mystery Caller studies are an effective way to acquire objective data and insight into patients' challenges when accessing healthcare

OBJECTIVES

PURPOSE: To assess the impact of insurance status on patient access to care and appointment wait times for sports medicine-trained hip, knee, and shoulder arthroscopists.

SIGNIFICANCE: This study is the first to assess new patient wait times and access to hip, knee, and shoulder arthroscopists for patients with Medicaid insurance compared to private insurance.

METHODS

Step 1

- Physician data pulled from American Academy of Orthopaedic Surgeons (AAOS) patient-facing database
- 1,346 unique physicians identified

Step 2

- Power analysis was performed, and 674 physicians were randomly selected for further screening
- 674 physicians were screened for incorrect phone numbers, current practice status, and joint specialization by two of the authors

Step 3

- 1,046 phone calls were made to 523 sports medicine-trained surgeons with valid contact information
- Mystery Callers posed as patients with a "textbook" clinical scenario for a patient seeking care from a hip, knee, or shoulder arthroscopist
- Mystery Callers posed as patients with either Medicaid or Blue Cross/Blue Shield insurance and asked for the soonest available appointment with the physician of interest

RESULTS

Table 1. Univariate analysis of demographics of included physicians.

	Do Not Accept Medicaid (N = 129)	Accept Medicaid and/or BCBS (N=256)	Overall (N = 385)	p-value
Age, year	56 (IQR 49, 63)	54 (IQR 48, 61)	55 (IQR 48, 62)	0.06
Sex				0.16
Male	126 (34.2%)	242 (65.8%)	368 (95.6%)	
Female	3 (17.6%)	14 (82.4%)	17 (4.4%)	
Joint Specialty				0.86
Hip	38 (31.7%)	82 (68.3%)	120 (31.2%)	
Knee	43 (33.9%)	84 (66.1%)	127 (33.0%)	
Shoulder	48 (34.8%)	90 (65.2%)	138 (35.8%)	
Academic Affiliation				<0.01*
Academic	9 (17.6%)	42 (82.4%)	51 (13.2%)	
Not Academic	120 (35.9%)	214 (64.1%)	334 (86.8%)	
Central Scheduling Number, n (%)				0.03*
Yes	35 (26.3%)	98 (73.7%)	133 (34.5%)	
No	94 (37.3%)	158 (62.7%)	252 (65.5%)	

Table 2. Multivariate analysis results of factors impacting wait time for new patient appointment.

Predictors	Incidence Rate Ratios	CI	p - value
Academic Affiliation [Academic]	1.36	1.13 – 1.62	0.001*
Insurance [Medicaid]	1.2	1.14 – 1.26	<0.001*
Census Divisions [South Atlantic] (DE, FL, GA, MD, NC, SC, VA, WV, DC)			
East North Central (IL, IN, MI, OH, WI)	2.33	1.91 – 2.85	<0.001*
East South Central (AL, KY, MS, TN)	1.26	0.98 – 1.63	0.073
Middle Atlantic (NY, NJ, PA)	2.37	1.86 – 3.02	<0.001*
Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	1.72	1.22 – 2.43	0.002*
New England (CN, ME, MA, NH, RI, VT)	3.15	2.27 – 4.35	<0.001*
Pacific (WA, OR, CA, AK)	2.7	2.17 – 3.37	<0.001*
West North Central (ND, SD, MN, IA, NE, KS, MO)	2.94	2.11 – 4.09	<0.001*
West South Central (AR, LA, OK, TX)	1.86	1.38 – 2.50	<0.001*

Key Findings

- Medicaid was associated with a 20% longer wait for new patient appointments
- 34% of physicians did not accept Medicaid
- Academic affiliation was associated with a 36% longer wait for new patient appointments
- Certain regions were associated with longer wait times for new patient appointments
- No difference in wait times or Medicaid acceptance between hip, knee, and shoulder arthroscopists

CONCLUSION

When seeking a new patient appointment with a hip, knee, or shoulder arthroscopists, patients with Medicaid experienced decreased access to care and prolonged wait times compared to patients with Blue Cross/Blue Shield insurance.