The Journal of Arthroplasty 30 (2015) 1498–1501

Contents lists available at ScienceDirect

The Journal of Arthroplasty

journal homepage: www.arthroplastyjournal.org

The Effect of Insurance Type on Patient Access to Knee Arthroplasty and Revision under the Affordable Care Act

Chang-Yeon Kim, B.S., M.S., Daniel H. Wiznia, M.D., Walter R. Hsiang, B.S., Richard R. Pelker, M.D., Ph.D.

Department of Orthopedics and Rehabilitation, Yale University School of Medicine, New Haven, Connecticut

ARTICLE INFO

Article history:
Received 31 December 2014
Accepted 15 March 2015

Keywords:
total knee arthroplasty
knee revision
patient Protection and Affordable Care Act
medicaid
health care access

ABSTRACT

This study evaluated access to knee arthroplasty and revision in 8 geographically representative states. Patients with Medicaid were significantly less likely to receive an appointment compared to patients with Medicare or BlueCross. However, patients with Medicaid had increased success at making an appointment in states with expanded Medicaid eligibility (37.7% vs 22.8%, $P = 0.011$ for replacement, 42.6% vs 26.9%, $P = 0.091$ for revision), although they experienced longer waiting periods (31.5 days vs 21.1 days, $P = 0.054$ for replacement, 45.5 days vs 22.5 days, $P = 0.06$ for revision). Higher Medicaid reimbursement also had a direct correlation with appointment success rate for Medicaid patients (OR = 1.232, $P = 0.001$ for replacement, OR = 1.314, $P = 0.014$ for revision).
© 2015 Elsevier Inc. All rights reserved.

The Patient Protection Affordable Care Act (PPACA) has significantly expanded the eligibility for Medicaid. Previously, only individuals with low incomes (61% of federal poverty level in most states) who fell into certain categories (children, parents, pregnant women, people with disabilities, and those >65 years of age) were eligible [1]. With the passage of the PPACA, anyone with incomes up to 138% of the poverty level is qualified for Medicaid [2].

The legislation represents the largest expansion of government sponsored health insurance since the inception of the Medicaid program in 1965 [2]. A Supreme Court ruling in 2012 decided that expanding the eligibility for Medicaid was optional, and currently 28 states and the District of Columbia have decided to do so. This has created a dichotomy between states that have expanded coverage for Medicaid patients to 138% of the poverty level and states that adhere to previous guidelines, with no expanded coverage. However, all states are projected to eventually expand coverage due to financial incentives [2]. Six months after the passage of the law, 6 million new people had enrolled in Medicaid or CHIP (Children's Health Insurance Program) [1]. At full implementation (all states participating), the PPACA is projected to lower the uninsured rate by almost 50%, reducing the number of uninsured by over 23 million [3].

Increased coverage, however, does not necessarily equate to more access to care [4]. The expansion of Medicaid is occurring at a time when the number of health care practitioners willing to accept Medicaid is decreasing [5]. The low reimbursement rate from Medicaid has been cited as the primary reason for this trend [5–7]. While there have been provisions in the PPACA to improve Medicaid payments for primary care physicians, there are currently no such provisions for specialists, including orthopedic surgeons, to create an incentive to improve patient access to care [7]. Previous studies have shown that patients with Medicaid have difficulty accessing orthopedic surgeons for a wide range of issues [8–12]. Therefore, Medicaid patients may encounter particular difficulty with elective orthopedic procedures such as total joint arthroplasty and revision [5,12].

The rising age of the population and the decrease in fellowship-trained arthroplasty surgeons will likely exacerbate the issue of access to total joint arthroplasty by creating a supply–demand imbalance [13]. In addition, the projected retirement of many high-volume joint arthroplasty surgeons will put additional pressures on patient access to revision surgery in the future because physicians without specialized training in this area are hesitant to perform these procedures [13].

Our study focuses on the effect of the different types of insurance (Medicaid, Medicare, or BlueCross) on the ability of patients to obtain care for joint reconstruction and revision. The purpose of this study is to determine whether, in the setting of the Patient Protection Affordable Care Act, orthopedic surgeons are more likely to accept patients with Medicaid. We hypothesize that despite the passage of the PPACA, Medicaid patients will have increased difficulty obtaining access compared to patients with other types of insurance.

Materials and Methods

The study population included board-certified orthopedic surgeons who belonged to the American Association of Hip and Knee Surgeons from 8 representative states: California, Massachusetts, Ohio, New

No author associated with this paper has disclosed any potential or pertinent conflicts which may be perceived to have impending conflict with this work. For full disclosure statements refer to http://dx.doi.org/10.1016/j.arth.2015.03.015.

Supplementary material available at www.arthroplastyjournal.org.

Reprint requests: Richard R. Pelker, M.D., Ph.D., Yale Physicians Group, 800 Howard Avenue, 1st Floor, New Haven, CT 06510.

http://dx.doi.org/10.1016/j.arth.2015.03.015
0883-5403/© 2015 Elsevier Inc. All rights reserved.

York, Florida, Pennsylvania, Texas, and North Carolina. These states were selected because they represent diverse geographic areas and health marketplaces. Alphabetized lists of orthopedic surgeons from these states were generated and each surgeon was paired with a number. The numbers were then randomized and called. If a number was disconnected or inaccurate, it was excluded from the calling list and the next number was selected.

Each office was called to make an appointment for the caller's fictitious 65-year old mother, using two scenarios. The caller had a standardized protocol to limit intra and inter-office variation (see Appendix). The first scenario was a request to be evaluated for a total knee arthroplasty, with the patient having Medicaid, Medicare, or BlueCross. The second scenario was a request to be evaluated for a knee revision surgery, again with the patient having Medicaid, Medicare, or BlueCross. The two scenarios each required three separate calls, for each insurance type. Every surgeon we called was specifically asked if he or she would accept the patient for a knee arthroplasty or revision.

We recorded the following data from each attempt at making an appointment: date of phone call and date of appointment if given. If the office did not give an appointment, we asked for reasons why. If a denial occurred for a patient with Medicaid, we asked for a referral to another office that accepted Medicaid. We considered barriers to obtaining an initial appointment, such as requiring a referral from a PCP (primary care physician), as an unsuccessful attempt at making an appointment. The waiting period for an appointment was obtained by calculating the time between the date of call and the date of the appointment. For both appointment success rates and waiting periods, the data were stratified into two groups: states with expanded Medicaid eligibility (California, Massachusetts, New York, Ohio) and states without expanded Medicaid eligibility (Florida, North Carolina, Pennsylvania, Texas). At the time of our investigation, Pennsylvania had not expanded eligibility for Medicaid.

Concurrent with the telephone survey, we also sent an electronic fax to the orthopedic offices generated from randomization. The fax asked whether the respondent was an orthopedic surgeon, secretary, or receptionist. It then asked whether the respondent would accept a patient with Medicaid, Medicare, BlueCross, or self-paid insurance.

The Medicaid reimbursement rates for total knee arthroplasty and knee revision were obtained by querying each state's reimbursement rate using Current Procedural Terminology (CPT) code 27447 (primary total knee arthroplasty) and 27847 (revision for total knee arthroplasty).

Statistical analysis was performed using SPSS version 21 (SPSS, Inc, Chicago, IL). Chi-square test or Fisher's exact test was used to analyze differences in acceptance rate based on type of insurance. To compare the time period to an appointment, a Wilcoxon rank test and Kruskal–Wallis tests were used, as the data were not normally distributed. Multiple regression analysis was performed to detect whether Medicaid reimbursement was a significant predictor for successfully making an appointment for patients with Medicaid. Unless otherwise stated, all statistical testing was performed two-tailed at an alpha-level of 0.05.

The study was submitted to and approved by the Yale University Institutional Review Board office, HIC# 13637.

Results

Our query across the 8 selected states resulted in a randomly generated list of 250 offices (4 states with and 4 states without expanded Medicaid eligibility) to call for scenario 1 (knee arthroplasty) and 106 offices (2 states with and 2 states without expanded Medicaid eligibility) to call for scenario 2 (knee revision).

For our first scenario (evaluation for a primary total knee arthroplasty), the rate across all states for successfully obtaining an appointment was 30.1% for Medicaid patients, 96% for Medicare patients, and 100% for patients with BlueCross (Table 1A). In states with expanded Medicaid eligibility, the success rate was 37.7% for Medicaid patients, 96.7% for Medicare patients, and 100% for patients with BlueCross. In states without expanded Medicaid eligibility, the success rate was 22.8% for Medicaid patients, 95.3% for Medicare patients, and 100% for patients with BlueCross. The success rate was significantly lower for Medicaid compared to either Medicare ($P < 0.0001$) or BlueCross ($P < 0.0001$). However, patients with Medicaid were significantly more likely to obtain an appointment in states with expanded Medicaid eligibility (37.7% vs 22.8%, $P = 0.011$).

Table 1
Appointment Success Rate.

	Medicaid	Medicare	Private
A. Knee arthroplasty			
All states			
Yes (%)	75 (30.1)	240 (96)	248 (100)
No (%)	174 (69.9)	10 (4)	0
P value		<0.0001	<0.0001
States w/ expanded Medicaid eligibility			
Yes (%)	46 (37.7)	119 (96.7)	122 (100)
No (%)	76 (62.3)	4 (3.3)	0
P value		<0.0001	<0.0001
States w/o expanded Medicaid eligibility			
Yes (%)	29 (22.8)	121 (95.3)	126 (100)
No (%)	98 (77.2)	6 (4.7)	0
P value		<0.0001	<0.0001
B. Knee revision			
All states			
Yes (%)	37 (34.9)	99 (93.4)	103 (100)
No (%)	69 (65.1)	7 (6.6)	0
P value		<0.0001	<0.0001
States w/ expanded Medicaid eligibility			
Yes (%)	23 (42.6)	52 (96.3)	51 (100)
No (%)	31 (57.4)	2 (3.7)	0
P value		<0.0001	<0.0001
States w/o expanded Medicaid eligibility			
Yes (%)	14 (26.9)	47 (90.4)	52 (100)
No (%)	38 (73.1)	5 (9.6)	0
P value		<0.0001	<0.0001

* *P* value in comparison to Medicaid.

For our second scenario (evaluation for a total knee revision), the rate across all states for successfully obtaining an appointment was 34.9% for Medicaid patients, 93.4% for Medicare patients, and 100% for patients with BlueCross (Table 1B). In states with expanded Medicaid eligibility, the success rate was 42.6% for Medicaid, 96.3% for Medicare, and 100% for BlueCross. In states without expanded Medicaid eligibility, the success rate was 26.9% for Medicaid, 90.4% for Medicare, and 100% for BlueCross. Statistical results were similar to those for a total knee arthroplasty. The success rate for Medicaid was significantly lower when compared to Medicare ($P < 0.0001$) and BlueCross ($P < 0.0001$). Patients with Medicaid were more likely to obtain an appointment in states with expanded Medicaid eligibility (42.6% vs 26.9%, $P = 0.091$).

Barriers to an appointment differed according to insurance type. For a knee arthroplasty, not having a referral from a PCP (primary care physician) was a barrier to an appointment for patients with Medicaid in 13.8% of offices called. In contrast, lack of a PCP referral was not an obstacle for any patient with Medicare or BlueCross. For a knee revision, not having records from the previous surgery was a barrier to an appointment for patients with Medicaid in 18.8% of offices called. However, the majority of patients with Medicare and BlueCross were able to schedule an appointment even when the office required previous records. For Medicaid patients who did not get an initial appointment, 32% of offices referred the caller to another office that took Medicaid for knee arthroplasty and 26% of offices did so for knee revision. The majority of offices either could not refer the caller to an office that took Medicaid or instructed to contact the number on the patient's Medicaid card for a list of state-generated offices that may accept Medicaid.

Patients who successfully made an appointment experienced different waiting periods based on expansion of Medicaid eligibility. In states with expanded Medicaid eligibility, patients experienced significantly longer waiting periods (Table 2A) for both knee arthroplasty (27.2 days vs 22.9 days, $P = 0.001$) and knee revision (41.8 days vs

Download English Version:

https://daneshyari.com/en/article/4060116

Download Persian Version:

https://daneshyari.com/article/4060116

Daneshyari.com