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Do Patients With Income-Based Insurance Have Access to Total Joint Arthroplasty?

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ABSTRACT

The Patient Protection and Affordable Care Act (PPACA) is expected to increase health care availability through Medicaid expansion. The objective of this study was to evaluate potential effects of the PPACA by examining access to total hip arthroplasty in Southern California. 39 orthopaedic surgeons were called to schedule a hip arthroplasty. Insurances used included a Preferred Provider Organization (PPO), Medicare, and three income-based insurances. There was a significant difference in acceptance rate when comparing PPO and Medicare patients with income-based insurances ($P < 0.001$). This study showed that in Southern California, patients with income-based insurances are limited in the number of surgeons from whom they can receive care. Thus, although the PPACA will increase the number of insured patients, it may not similarly increase access to providers.

Increasing patient access to health care has been a heavily studied topic, especially in the last half decade, culminating in the new Patient Protection and Affordable Care Act (PPACA) passed by Congress in 2010. The full implementation of the bill, expected in 2014, has been heralded by some as the solution to one of the most persistent problems of American health care – the lack of access for almost 50 million individuals [1] – and derided by others as both logistically and financially unfeasible. Older programs that were similarly intended to increase access, ranging from federal and state systems such as Medicare and Medicaid to programs at the local county or institution level, have decisively affected the role held by patients, physicians, and hospitals. That the PPACA will also change the way health care is maintained and delivered is undoubtedly true.

The majority of the population is insured, either through private insurers if they are employed or by Medicare, if they are over 65 years of age and have been working (or have been married to someone who worked) during their earlier years. And while both access and quality may vary depending on the type of insurance or geographic location, by and large these patients have coverage and can readily receive medical care. Those with a low income or without employer-provided insurance might be eligible for Medicaid. Medicaid was created by an amendment to the Social Security Act of 1965 and is a federal entitlement program administered by the states. As of 2009, there were over 61.8 million beneficiaries enrolled with almost 308 million dollars in payments making Medicaid the single largest health insurance program in the United States [2,3]. In California, Medicaid services are disbursed by the Medi-Cal program, which had over 11.0 million beneficiaries in 2009 with over 35 million dollars in payments similarly making it the largest provider in the state [2–4].

Medicaid does not, however, cover all those who do not have private insurance. Many adults of low income do not qualify for Medicaid, resulting in over 40 million individuals who are uninsured. The PPACA is expected to change this lack of coverage through the Medicaid expansion provision of the law. Based on the recent Supreme Court ruling, individual states can choose to adopt or decline this provision; at last report a total of 27 states were planning to uphold the provision, 17 states were not, and 7 states were currently in debate [5]. Depending on the ultimate number of states accepting the provision, it is estimated that by 2016, another 21 million patients will potentially be enrolled, greatly reducing the overall number of the uninsured [2].

Insurance coverage, however, does not equate to access to care. Despite programs like Medicaid, there are still significant problems with access to elective services, especially when patients have insurances considered unattractive by providers. Iobst et al showed that in Florida, children requiring evaluation for fractures were less likely to be seen by an orthopaedic surgeon if they had Medicaid as opposed to private insurance [6]. Lavernia et al showed that in Florida, adults in need of lower extremity total joint arthroplasty had a lower likelihood of receiving a timely appointment if they had Medicaid [7]. A potential reason for this disparity may be due to the low rate of payment for Medicaid patients. In 2012, the national average

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Medicaid payment for physician services was 66% that of Medicare [8]. Medicare reimbursement in turn is about 80% that provided by private insurers [9]. Low levels of reimbursement may ultimately mean that the PPACA expansion of Medicaid, although increasing the number of insured patients, may not translate into increased access to physicians' care.

The rise in the aging population, a large subset of whom will be arthroplasty candidates, combined with a relative decrease in number of fellowship-trained arthroplasty surgeons will create a demand–supply imbalance for future joint reconstruction [10,11]. This imbalance is likely to create shortage situations and place the lowest paying patients – i.e. Medicaid patients – at a disadvantage, making it very difficult to find treating physicians. The objective of this paper was to examine the rate of access to total joint arthroplasty surgery for patients with different insurance plans residing in Orange County, California. Our hypothesis is that patients with income-based insurance will have a significantly lower rate of physician access as determined by surgeon availability and surgical and clinic appointment timing.

Materials and Methods

Over a period of two months, the offices of 42 orthopaedic surgeons working in Orange County were called to schedule an appointment. These surgeons were chosen on the basis of fellowship training in joint arthroplasty and/or if they advertised total hip arthroplasty as established by telephone or online information. The caller had a standardized phone protocol to limit intra and inter-office variability (Appendix 1; available online at www.arthtoplastyjournal.org). The typical scenario was to schedule an appointment for the caller's 63 year-old mother who had been diagnosed with right hip arthritis and was considering a total hip arthroplasty. When prompted, the caller reported that the patient had one of the following insurances: a PPO, Medicare, Medi-Cal (the state Medicaid program), CalOptima (the county Medi-Cal managed care provider), or Medical Services Initiative (for low-income county residents not eligible for Medi-Cal).

Each type of insurance was utilized until all offices were contacted and then the insurance switched, with a lag time of at least a week between repetitive calls to the same office. Each office received five different calls representing each one of the insurances examined in our study. Each insurance type was utilized until all the physician offices were contacted then the insurance type was switched and phone calls were repeated to all the offices. If the insurance was accepted by the physician's office, the earliest possible appointment was requested. If the insurance was not accepted, the scheduler was asked if a referral could be made to a local physician who would accept the insurance. The only alteration made in the protocol was changing the patient's age to 67 if she had Medicare to fulfill age requirements.

The data collected included the number and type of insurances accepted by each practice as well as the time period in-between the initial call date and the earliest appointment. The type of fellowship (if any) completed by the orthopaedic surgeon was also recorded.

Statistical Analysis

A Fisher Exact Test was used to compare the overall proportion of patients accepted with each type of insurance. The Fisher test was also used to pair each of the insurances to allow for direct comparison. A Student's T-test was used to compare the average time period to appointment for each insurance type. A Fisher Exact Test was used to compare the proportion of patients accepted by fellowship-trained joint arthroplasty surgeons for each insurance type. Finally, although not tested statistically, the possible referrals and other pertinent information mentioned by the scheduler were recorded to determine if there were any broad inter-office generalizations for access to total hip arthroplasty.

Results

Out of the 42 offices called, sufficient data for the five types of insurance were obtained from a total of 39 offices. For PPO patients, 100% (39/39) of offices were willing to provide an appointment. For Medicare patients, 97.4% (38/39) were willing to provide an appointment. A much lower proportion of offices were willing to treat patients with income-based insurance: 12.8% (5/39) were willing to accept Medi-Cal patients, 10.3% (4/39) for MSI patients, and 7.7% (3/39) for CalOptima patients (Fig. 1).

As a group, there was a statistically significant difference between the type of insurance the patient had and access to care ($P < 0.001$). There also were significant statistical differences when comparing PPO patients with Medi-Cal ($P < 0.001$), MSI ($P < 0.001$) and CalOptima patients ($P < 0.001$). Similarly, there were significant statistical differences when comparing Medicare patients with Medi-Cal ($P < 0.001$), MSI ($P < 0.001$) and CalOptima patients ($P < 0.001$). There was no statistical difference when comparing access to care between PPO and Medicare patients ($P = 0.500$), Medi-Cal and MSI patients ($P = 0.500$), Medi-Cal and CalOptima patients ($P = 0.356$), and CalOptima and MSI patients ($P = 0.500$).

The average time period from the initial call date to the first available appointment for PPO patients was 6.6 days ($\sigma = 8.7$). For Medicare patients, the average time period was 9.7 days ($\sigma = 18.2$). For the Medi-Cal, MSI, and CalOptima patients, the average time period could not be calculated because scheduling visits required prior authorization from a primary care physician and as such exact appointment dates could not be given. There was no statistical difference when comparing the average time period to an appointment for PPO and Medicare patients ($P = 0.346$, $T = 0.9483$, 95% CI −3.430, 9.566, DF 75) (Fig. 2).

Of the surgeons called, 71.8% (28/39) of the surgeons called had fellowship training in joint arthroplasty. The remainder either had no fellowship training or had completed a fellowship in another field but advertised joint arthroplasty as a service. There was no statistical difference in the proportion of PPO ($P = 1.000$), Medicare ($P = 0.282$), Medi-Cal ($P = 0.125$), MSI ($P = 0.687$), or CalOptima ($P = 0.642$) patients accepted by fellowship-trained joint arthroplasty surgeons compared to the other group of surgeons.

For patients with income-based insurance, the majority of offices that denied access were unable to provide a referral to another physician that would accept the insurance. The few offices that were mentioned as possible providers all denied access when called. Of note, when calling for MSI patient referrals, the academic centers in the region were mentioned specifically as possible providers multiple times (the author's home institution three times, another center once).

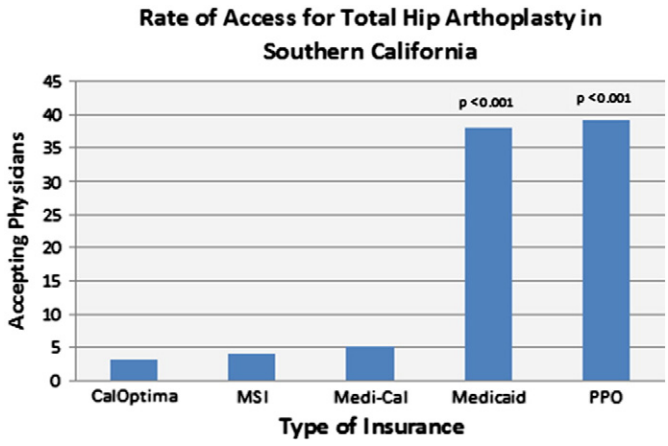

Fig. 1. Rates of access for total hip arthroplasty in Southern California depending on patient insurance type (number of physicians accepting each insurance type).