Access to Arthroplasty in South Florida

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Abstract: Our objective was to compare the availability of hip and knee arthroplasty to an adult insured by Medicaid and by private insurance. All orthopedic surgeons’ offices in a South Florida county were contacted by telephone and presented with a hypothetical patient that needed either a hip or a knee arthroplasty for end stage arthritis. Two scenarios were presented. The hypothetical patient was presented as either having private insurance or Medicaid. 14.3% of all offices contacted offered an appointment to patients with Medicaid coverage for hip and knee arthroplasty, respectively. All offices offered an appointment to patients with private insurance. The mean time until appointment was longer for patients with Medicaid when compared with private insurance. Adults insured with Medicaid currently have limited access to total joint arthroplasty within the studied community. Keywords: Medicaid, access to care, hip arthroplasty, knee arthroplasty.

Medicaid was created as a result of the Social Security Act (Title XIX) passed by Congress in 1965. It is a means-tested (ie, there are financial criteria for enrollment) health and medical services program that provides federal matching grants to states for the purpose of giving health coverage to low-income individuals and families, as well as certain categories of the aged and disabled. An estimated 58 million low-income individuals across the United States receive this low-cost health coverage. The elderly and the disabled account for 25% of the individuals enrolled in Medicaid, and they are responsible for 69 percent of Medicaid spending [1]. From 1995 to 2005, total (federal and state) expenditures for Medicaid increased from $144.9 billion to $315.2 billion, whereas its enrollment grew from 43.3 million to 60.4 million people, making it the nation’s largest public health insurance program [2].

As a result of the new Patient Protection and Affordable Care Act (PPACA) starting in 2014, nonelderly individuals and people with an annual income below 133% of the federal poverty level would generally be made eligible for Medicaid beginning in 2014. With this bill, the federal government would pay a share of the costs of covering newly eligible enrollees that would average about 90 percent (under current rules, the federal government pays on average about 57 percent of the costs of Medicaid benefits [3]). The fundamental principle for this section of PPACA is to reduce the uninsured and to provide universal access for legal residents of the United States to medical care. Despite PPACA projections that Medicaid will solve issues of insurance coverage in the future, patients currently covered by Medicaid are finding it increasingly difficult to locate doctors who accept their coverage, particularly for specialty care. Previous reports have found that low physician reimbursements are related to low Medicaid participation [4-6]. In 2008, Medicaid reimbursements averaged only 72% of the rates paid by Medicare, which are themselves typically well below those of commercial insurers. In the State of Florida, current Medicaid rates are 60% of the already low Medicare rates [7]. The purpose of this study was to assess whether insurance status affects access to arthroplasty surgery for adults with end-stage arthritis. We hypothesize that Medicaid beneficiaries have less access to total joint replacement surgery than those with private insurance.

Methods

The membership list of the American Academy of Orthopaedic Surgeons was queried for all orthopedic surgeons’ offices within a specific county in South Florida. They were identified by the zip code of their primary practice address. A total of 117 offices were identified and studied. Each office was called on four different occasions, to make an appointment for a fictitious 55-year-old female patient. Each office was called twice to make an appointment for a hip
replacement and twice for knee replacement. The common script for all phone calls was: “My 55-year-old mom has a diagnosis of osteoarthritis of the hip/knee. I was told she has bone on bone with no cartilage and needs to see an orthopedic surgeon to have a total hip/knee replacement. Do any of your doctors replace hips/knees?” If no, the call was ended. If yes, the office was informed that the patient had only Medicaid. During the other attempt to make an appointment, the patients were said to be covered by private insurance. If an office would not see patients with Medicaid, they were asked if they could refer to an orthopedic surgeon who would be willing to provide an appointment to someone with Medicaid.

We recorded the following data from each attempt at making an appointment: date of phone appointment request, date of appointment if given, and if they did not accept Medicaid whether the office could recommend an orthopedic surgeon who accepted patients with Medicaid.

Statistical analysis was performed using SPSS version 12 (SPSS, Inc, Chicago, IL). The Fisher exact test was used to analyze differences in the proportion of patients given appointments based on type of insurance. To analyze mean differences in wait time until an appointment for total knee arthroplasty (TKA) and total hip arthroplasty (THA), Mann-Whitney U tests were used, as the data were not normally distributed. One outlier was excluded from the wait time analyses, as the mean wait time for both procedures for that single practice was greater than three standard deviations longer than the mean wait time across all practices. The excluded provider did not offer arthroplasty to Medicaid patients.

Results

Out of the 117 physicians’ offices contacted, 35 (30%) physicians perform THA and 42 (36%) perform TKA. One hundred percent of physicians’ offices that performed THA gave an appointment when the patient had private insurance. In contrast, when the patient was reported to be insured with Medicaid, only 14.3% (5/35) of physicians’ offices offered an appointment which was significantly lower rate than for private insurance patients (P < .05). Among the physicians that performed TKA, 100% would give an appointment when the patient was reported to be insured with a private provider organization. On the other hand, when the patient was reported to be insured with Medicaid, only 14.3% (6/42) of the physicians’ offices offered an appointment. Thus, physicians were significantly less likely to give a TKA appointment to a Medicaid patient (P < .05).

The mean time for a THA appointment for prospective patients insured with a private provider organization was 11.2 days (±8.3 SD; range, 1-33 days, n = 34) and, for Medicaid, 24 days (±5.7 SD; range, 20-28 days, n = 2). There was a trend towards significant differences in the length of wait time for THA between Medicaid and private insurance (P = .052). The mean time for a TKA appointment when insured with a private provider organization was 8.0 days (±7.2 SD; range, 1-28 days, n = 41) and, for Medicaid, 26.7 days (±6.1 SE; range, 20-32 days, n = 3). The difference in wait time for TKA was significantly longer for prospective patients with Medicaid than for patients with private insurance (P < .05). In three offices, the orthopedic surgeon had to review the case prior to giving an appointment when insured with Medicaid.

Of the 42 physicians’ offices that performed TKA, that would not see a patient with Medicaid, 35 (83%) were unable to recommend an orthopedic office that accepted Medicaid. None of the offices that stated they performed THA recommended an orthopedic office that accepted Medicaid.

Discussion

The purpose of this study was to examine whether insurance status (private vs. Medicaid) affects timely access to orthopedic care for adults in need of total joint arthroplasty. In this study, less than 15% of orthopedic surgeons’ offices within our studied community were willing to give an appointment to an adult Medicaid patient that needed an arthroplasty. In contrast, every physician who performed THA or TKA extended an appointment to an adult with an identical profile if they had private insurance. These results are consistent with a recent study [8] which used a similar methodology to show that children with Medicaid-Children’s Health Insurance Program (CHIP) insurance needing specialty care were denied appointments 66% of the time in comparison to only 11% with private insurance. In that study, multiple specialties were contacted, and orthopedic specialists only provided an appointment 20% of the time for patients with Medicaid-CHIP, while extending appointments to private insurance patients 98% of the time. Thus, while access to care for Medicaid is a significant issue across specialties, it is particularly salient in orthopedics.

Previous reports have documented the disparity in access to orthopedic care between children with Medicaid and private insurance [9,10]. In 2006, a national survey of 250 orthopedic offices found that children with Medicaid had access to only 38% of offices who treat children [10]. Similarly, a survey of 50 orthopedic surgeons’ offices in California found that children with Medicaid coverage were almost 17 times less likely to receive an appointment for an arm fracture and in only one case a timely appointment was offered [9]. In addition, our findings show that Medicaid patients who need a hip or knee arthroplasty experienced longer waiting times than those patients with private insurance. The wait in these cases exceeded an...
additional 12 days and 18 days for a hip and a knee patient, respectively. The timeliness of the actual intervention is important since previous studies [11,12] have shown that delaying an arthroplasty produces suboptimal results.

A recent national survey of physicians conducted from 2004 to 2005 found that 35.3% of physicians in solo and two-physician practices were not accepting new Medicaid patients, up from 29% in 1996 to 1997 [13]. Low physician reimbursement rates relative to those of Medicare and private insurance are considered to be a primary reason for minimal physician participation in the program. Most doctors' offices function as small businesses [14]. The overhead costs per hour to run an orthopedic physician's office in the United States averages $162.94 [14]. The average reimbursement per hour for Medicaid patients is $87.48. It is not possible for an orthopedic surgeon to break even with the current Medicaid per hour reimbursement.

In 2008, the Medical Group Management Association conducted a nationwide survey of 109 orthopedic offices which found that the mean cost to the office practice for seeing a patient was $107.78; including supplies, personnel, billings, collections, and other operating costs [15]. An analysis of the Medicaid physician fees data from 2003 to 2008 showed that in Florida, Medicaid fees decreased 1% annually relative to general inflation [16]. In Florida, Medicaid reimburses a community-based orthopedic surgeon $31.2 for a level 1 [Current Procedural Terminology (CPT) code 99201] new patient visit. In comparison, Medicare reimburses a new patient visit for hip or knee pain (CPT Code 99201) $42.74; 27% more than Medicaid for the same code. The current reimbursement for DRG 470 (primary TJIA) from Medicare is $11,653. Most hospitals pay between $5591 and $18,850 just for the implant [17]. Medicaid reimburses approximately $825 per day the patient spends in the hospital. The average length of stay for a primary hip or knee procedure rarely exceeds 4 days. This implies an average reimbursement of about $3300 for an uncomplicated total hip or knee arthroplasty. This amount does not cover the cost of the implant.

Though Medicaid reimbursement rates be an important determinant in physicians' decisions about accepting Medicaid patients, other factors related to the Medicaid patient population may play a role in the decision to accept Medicaid patients. Medicaid patients present a range of challenges to community-based physicians. In 2002, between 40% and 50% of non-elderly adults were covered by Medicaid for reasons non-related to their income or welfare status [18]. This means they were eligible most likely because of poor health, disability or other major health expenditure. Several reports have documented how Medicaid beneficiaries compared with Medicare and private insurance population, have a higher prevalence of substance abuse [19], worse general health [20], and worse outcomes after medical and surgical procedures including arthroplasty [21-25]. Due to financial and insurance restrictions, they may not have access to home health or adequate physical therapy. Thus, some physicians may feel that the cost-benefit ratio for TKA/THA in the Medicaid population is different than in patients with more resources.

Health care access and reimbursement issues for medical and surgical services in the United States remain controversial and a politically sensitive topic. The proposed solutions often have an ideological bent, whether mandating universal access or by deregulation or application of free market principles to health care. The data presented in this study demonstrate a strong relationship between low reimbursement rates and orthopedic physician participation; however, the data do not provide a causal explanation for the observed relationship. That being said, the data are consistent with the common sense notion that physicians will not deliver services that costs them more money to perform that they get reimbursed. Any proposed solution to the health care access issue for low-income patients is likely to fail if physicians are unable to pay their overhead.

It is our concern that by increasing the number of patients with Medicaid, the PPACA will only “pretend” to solve the health care access problem rather than actually fixing it. With the projected increase in joint arthroplasties to more than 4 million by the year 2030 and the expected decrease in providers [26], access to arthroplasty may become even more difficult and will likely clog the practices of the few specialty practitioners that accept the insurance. Moreover, the predicted expansion in enrollees may increase the costs to states at a time when budgetary issues are paramount. During the last 11 years, the expenditures for Medicaid in the state of Florida have grown to $21 billion from $9 billion, which amounts to a third of the state budget [27]. Over the next ten years, an increase in federal Medicaid spending is expected to increase to $541 billion [28].

An unanticipated finding of our study was that less than 40% of the orthopedic surgeons in this community perform hip and knee replacements regardless of insurance. The predicted manpower issues in orthopedics and particularly in arthroplasty [26] will make access to this extremely cost effective intervention even more difficult.

Our study has several limitations. First, our findings are based on telephone calls made in an urban area. Medicaid access to an orthopedic surgeon in this setting may differ from that in suburban communities or rural areas. However, previous studies had found that most Medicaid enrollees seek care in large urban areas [13,29]. A second limitation is the small sample size and the potential lack of generalizability of the study. Third, although financial reimbursement may play a key
role on why physicians choose not to treat certain patient populations, other reasons (e.g., greater incidence of substance abuse and mental health problems, poor housing, inadequate transportation, limited post-discharge rehabilitative resources) may influence the provider’s willingness to offer elective surgery. All these factors that may impact the surgeon’s decision to treat Medicaid patients were not assessed in our study.

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References