Editor's Spotlight/Take 5

Editor's Spotlight/Take 5: Orthopaedic Surgeons Frequently Underestimate the Cost of Orthopaedic Implants (DOI 10.1007/s11999-012-2757-x)

Seth S. Leopold MD

Physicians sometimes remark that because patients are unaware of the cost of healthcare

Note from the Editor-in-Chief: In "Editor's Spotlight," one of our editors provides brief commentary on a paper we believe is especially important and worthy of general interest. Following the explanation of our choice, we present "Take Five," in which the editor goes behind the discovery with a one-on-one interview with an author of the article featured in "Editor's Spotlight."

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interventions, and because insured patients do not directly bear that cost, they are not incented to look for more cost-effective ways to achieve the same clinical result. Since patients do not need to know whether the USD

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5000 prosthesis will work as well as the USD 10,000 implant, they do not ask about pricing as they would if they were, say, comparison shopping for large-screen televisions. Some attribute climbing healthcare expenditures to this ignorance.

Call it the “no skin in the game” argument.

Turns out, it is a good thing patients do not ask us about implant costs because their guess may be as good as ours. In this issue of *Clinical Orthopaedics and Related Research*®, Jonathan Streit MD, and colleagues conducted a survey of surgeons' knowledge of the cost of 13 commonly used implanted medical devices, including fracture fixation hardware, total knee prostheses, and spinal implants. For the most part, respondents were not within screaming distance of accurate. The mean percentage error for all respondents was nearly 70%, and the guesses (the results do suggest that a considerable amount of guessing went on) varied widely. Two-thirds of the responses were underestimations — not a good kind of error, if cost-containment is an important goal.

Methodologically, Dr. Streit's study was tooled to generate conservative estimations of error; a broader sampling or evaluations of retail charges likely would have resulted in still-greater inaccuracies.

If patients cannot ask us what things cost, who can they ask? Certainly they should not ask hospitals. Earlier this year, a study in *JAMA Internal Medicine* contacted about 100 typical hospitals — “not-top-ranked,” according to their methods — from across the United States to find out the estimated charge for a hypothetical cash-paying patient seeking elective hip arthroplasty [2]. Only 10% of those hospitals were able to provide a single bundled price, meaning the price for hospital plus physician charges. The quoted prices ranged from USD 10,000 to more than USD 100,000, suggesting that the individuals giving out the answers were confusing costs and charges in a way that would be useless to an actual patient, if not frankly incomprehensible.

No rational economic decisions — by patients, physicians, or payers — are possible under such a system.

Surgeons' consulting relationships, the reluctance of vendors to provide price transparency, the chilling effect of the U. S. Department of Justice investigation of 2005–2007, and hospital confidentiality in purchasing agreements render most broad-based efforts to educate physicians about implant costs difficult. The impact of our choices on the lives of patients, particularly the uninsured who — in a cruel irony — often receive bills for the full-retail charges, is coming under

withering public scrutiny [1], perhaps appropriately. If we continue choosing and using devices as though we have no skin in the game; if we do not insist on a measure of clarity about device pricing, our profession will continue to lose both respect and autonomy.

Take 5 Interview With Jonathan Streit MD

Lead author: Orthopaedic Surgeons Frequently Underestimate the Cost of Orthopaedic Implants (DOI 10.1007/s11999-012-2757-x)

Seth S. Leopold MD: *What did you learn from this project? Were you surprised by the findings?*

Jonathan Streit MD: We had a suspicion that residents and attending surgeons would not demonstrate a good understanding of orthopaedic implant costs, but we were still surprised by the degree to which their estimations missed the mark. We expected residents to be inaccurate, since they do not deal directly with purchasing on a day-to-day basis. However, attending surgeons did not show a significantly better understanding of cost, which was the most unexpected finding of our study.

Dr. Leopold: *That surprised me, too, that attendings were not significantly*

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more knowledgeable than residents about implant costs. What does this tell you?

Dr. Streit: I think this emphasizes that simply being exposed to orthopaedics for a long time does not necessarily provide insights into implant costs. Because cost has not traditionally been an issue in medicine, there is little competition for a surgeon's business that revolves around providing implants at a lower cost. In the current environment, which emphasizes technology and innovation, cost is rarely a consideration.

Dr. Leopold: *As a specialty (and more generally, as a profession), we need to think about solutions. Given your knowledge and experience on the subject, please propose one step an individual surgeon can take, one step a hospital can take, and one step a specialty society can take to change the landscape on this important problem.*

Dr. Streit: For the individual surgeon, the key is to simply ask, what does this cost, and why? Representatives of the implant company can and should accurately answer that question when asked. It is appropriate and useful to understand the cost of any implant that a surgeon plans to use, and such knowledge should be part of the treatment plan. Hospitals can make the issue very transparent by simply requiring implant cost to be displayed on packaging. Currently, this is

often not feasible due to the confidentiality agreements required of hospitals by the implant manufacturers. Our orthopaedic specialty societies have great influence and they can improve our knowledge of cost by encouraging appropriate and transparent interactions between manufacturers and orthopaedic surgeons.

Dr. Leopold: *What is working against change here? Is it simply the complexity of the system, or do some parties benefit if we remain unenlightened about the basic costs of the work we do? If some entities win, who loses?*

Dr. Streit: The system is definitely complex, but it may be that a failure to ask the right questions is working against change in this regard. Some surgeons believe that their only responsibility is to select what they think is the best possible implant without regard to cost. However, typically there is not adequate evidence to demonstrate that one implant is superior to another. We hope that implant registries will help us address this gap in our knowledge. Currently, there is a lack of incentive in most settings for surgeons to care about cost, and this presents a significant barrier to healthcare cost containment. This lack of financially aligned incentives does not benefit surgeons, patients, or society in general. However, the implant manufacturers

certainly benefit from a lack of accurate implant cost knowledge on the part of the surgeon.

Dr. Leopold: *What are the next research questions we should ask on this topic?*

Dr. Streit: We should start by finding out how best to educate orthopaedic surgeons about implant cost. As a start, accurate financial information should be made readily available to the surgeon. How would we use this information if we were able to access it easily? Would we practice differently if we knew the cost of implants and if these expenses affected us directly? Would value-based purchasing of implants affect patient outcomes? These are important questions that will need to be answered by all specialties in this new era of health care cost containment, and orthopaedic surgeons should be leaders in this regard.

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