

Editorial Commentary: Stagnant Surgeon Reimbursement Since 2005 Does Not Reflect the Current Complexity of Arthroscopic Rotator Cuff Repair in 2020

Seth Gamradt, M.D.



Abstract: Hospitals operate at a financial loss when performing rotator cuff repair in Medicare patients because of high direct costs, high indirect costs, and low reimbursement. Surgeon reimbursement has been stagnant since 2005 despite increased cost and complexity of our labors. Reimbursement poorly reflects the complexity of shoulder surgery. It is essential that we advocate for reimbursement that matches the high complexity of the procedures we perform and the evidence-based societal value we provide.

See related article on page 2354

Increases in health care costs, an aging population, and the advent of bundled payments for surgery have prompted a new genre of orthopaedic research that focuses on the economics of surgical procedures. Several veins of research have emerged that study the cost-effectiveness, direct costs, implant costs, reimbursements, and perceived economic value of various orthopaedic procedures. LaPrade, Camp, Brockmeier, Krych, and Werner,¹ in their study “The Cost of Outpatient Arthroscopic Rotator Cuff Repairs: Hospital Reimbursement Is on the Rise While Surgeon Payments Remain Unchanged,” examined the reimbursement of both hospitals and surgeons from Medicare after arthroscopic rotator cuff repair. They examined hospital charges across 12,000 patients from the PearlDiver database between 2005 and 2014. They found that hospital reimbursements increased substantially relative to surgeon reimbursements. In 2005, hospitals were reimbursed 65% more than surgeons. By 2014, hospitals were reimbursed 255% more than surgeons. Surgeon reimbursements remained

unchanged (around \$1,800 per case) while hospital reimbursements increased \$3,007 to \$6,696.

We studied the direct costs and reimbursement of 181 rotator cuff repairs in our own hospital in 2016.² My theory or hypothesis in initiating that research was that because Medicare patients were typically older, their tears would be larger and more difficult and costly to fix in comparison to patients insured by private payers. That was not the case; we found no difference in tear size, number of suture anchors used, implant cost, surgical duration, or overall cost of arthroscopic rotator cuff repair between Medicare and other insurers. However, hospital reimbursement was significantly higher for private payers (\$11,464) when compared with Medicare (\$6,104). The lower amount of hospital reimbursement for Medicare patients resulted in a mean loss of \$263.54 per case. This means that the actual cost to the hospital to treat the case was, on average, more than the hospital was reimbursed.

In 2018, Tashjian et al.³ examined the factors that influence the direct clinical cost of arthroscopic rotator cuff repair. They found that higher direct costs were associated with subscapularis repair, as well as biceps tenodesis with anchors, and the total number of anchors used influenced the direct cost. Moreover, patient complexity such as high body mass index and systemic illnesses increased the facility costs. Relatedly, Li et al.⁴ performed a database study to evaluate the primary cost drivers of arthroscopic rotator cuff repair. They found

University of Southern California

The author reports no conflicts of interest in the authorship and publication of this article. Full ICMJE author disclosure forms are available for this article online, as [supplementary material](#).

© 2020 by the Arthroscopy Association of North America
0749-8063/201010/\$36.00

<https://doi.org/10.1016/j.arthro.2020.06.021>

added cost owing to various factors including patient comorbidity, Medicare insurance, operative time, number of anchors, distal clavicle excision, subacromial decompression, and regional anesthesia. Finally, in 2013, Mather et al.⁵ published a societal-economic Markov model study in *The Journal of Bone and Joint Surgery* (American edition) and found that the 250,000 rotator cuff repairs provided lifetime societal savings of \$3.44 billion!

When re-reviewing this literature and reading the excellent research of LaPrade et al.¹ regarding the costs and reimbursement of rotator cuff repairs in Medicare patients, several points become clear. First, surgeon reimbursement has become stagnant since 2005 despite increased cost and complexity of the work we do. Second, there is little to no recourse for surgeons or hospitals that treat costlier complex patients with large rotator cuff tears that are expensive to fix (besides the difficult-to-use modifier 22). That is, a 1-anchor rotator cuff repair in a completely healthy patient with private insurance is going to be reimbursed more than a large tear in an older unhealthy patient with Medicare insurance. Third, the Current Procedural Terminology Relative Value Unit (RVU) system is somewhat outdated and poorly equipped to reflect the complexity of shoulder surgery in 2020. For example, in what alternate universe should a SLAP repair be 14.62 RVUs

while a forequarter amputation is only 20.72 RVUs? LaPrade et al.,¹ in the article at hand, show us that surgeon reimbursement has plateaued; we, as surgeons, must continue to study the cost-effectiveness and value of our surgical procedures so that we can advocate for reimbursement that matches the complexity and societal value we provide.

References

1. LaPrade MD, Camp CL, Brockmeier SF, Krych AJ, Werner BC. The cost of outpatient arthroscopic rotator cuff repairs: Hospital reimbursement is on the rise while surgeon payments remain unchanged. *Arthroscopy* 2020;36:2354-2361.
2. Narvy SJ, Didinger TC, Lehoang D, et al. Direct cost analysis of outpatient arthroscopic rotator cuff repair in Medicare and non-Medicare populations. *Orthop J Sports Med* 2016;4:2325967116668829.
3. Tashjian RZ, Belisle J, Baran S, et al. Factors influencing direct clinical costs of outpatient arthroscopic rotator cuff repair surgery. *J Shoulder Elbow Surg* 2018;27:237-241.
4. Li L, Bokshan SL, Ready LV, Owens BD. The primary cost drivers of arthroscopic rotator cuff repair surgery: A cost-minimization analysis of 40,618 cases. *J Shoulder Elbow Surg* 2019;28:1977-1982.
5. Mather RC III, Koenig L, Acevedo D, et al. The societal and economic value of rotator cuff repair. *J Bone Joint Surg Am* 2013;95:1993-2000.