

More Risk, Less Reward: Arthroscopy Reimbursement Fell From 2013-2021 Despite More Complex Patients

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Objectives

- Shoulder and knee arthroscopy is common, with over 250,000 such procedures billed to Medicare in the US each year¹
- Sicker and more complex patients require increased resources for their care²
- Hospital payment systems have adopted sophisticated risk-adjustment to toggle hospital payment based on patient risk factors
- Despite this, surgeons get paid largely the same regardless of who they operate on
- The purpose of this study was to assess surgeon reimbursement among arthroscopy patients with differing risk profiles within the Medicare population from 2013-2021

Methods

- The 2013-2021 “Physician and Other Provider” files were used
- Patient demographics and comorbidity profiles were collected for the patient panels of all orthopedic surgeons
- This included mean age, as well as comorbidity rate including atrial fibrillation (AF), Alzheimer’s, congestive heart failure (CHF), chronic kidney disease (CKD), depression, diabetes, hypertension, and ischemic heart disease (IHD) among patients

Methods

- Additionally, the mean patient hierarchical condition category (HCC) risk score was collected for all patients (normalized to 1.0 for an average patient)
- Data was linked to all arthroscopic rotator cuff and meniscal debridement procedures billed to Medicare in 2020 (CPT billing codes 29880, 29881, and 29827)
- Medicare surgeon reimbursement was likewise collected for all episodes throughout the study

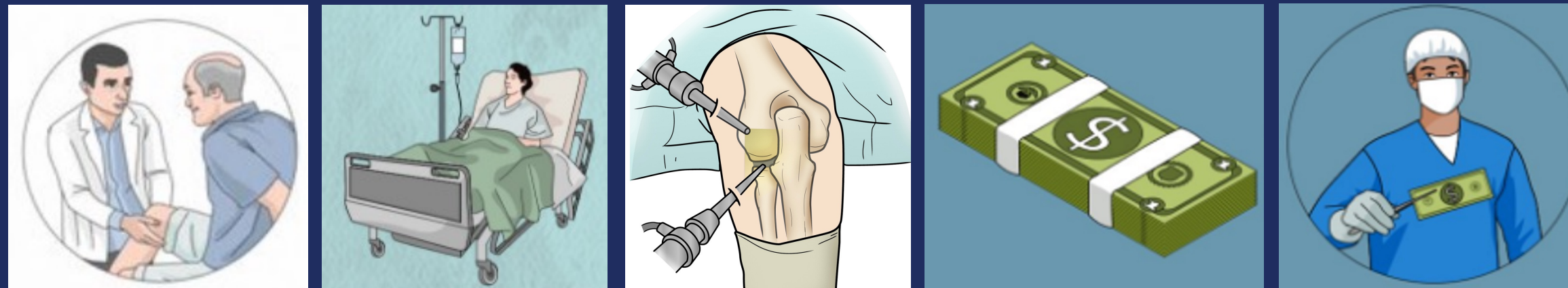


Figure 1 & 2: Patient Complexity Increased While Reimbursement Decreased 2013-2021

Mean HCC Risk Score for Arthroscopy Patients 2013 - 2021

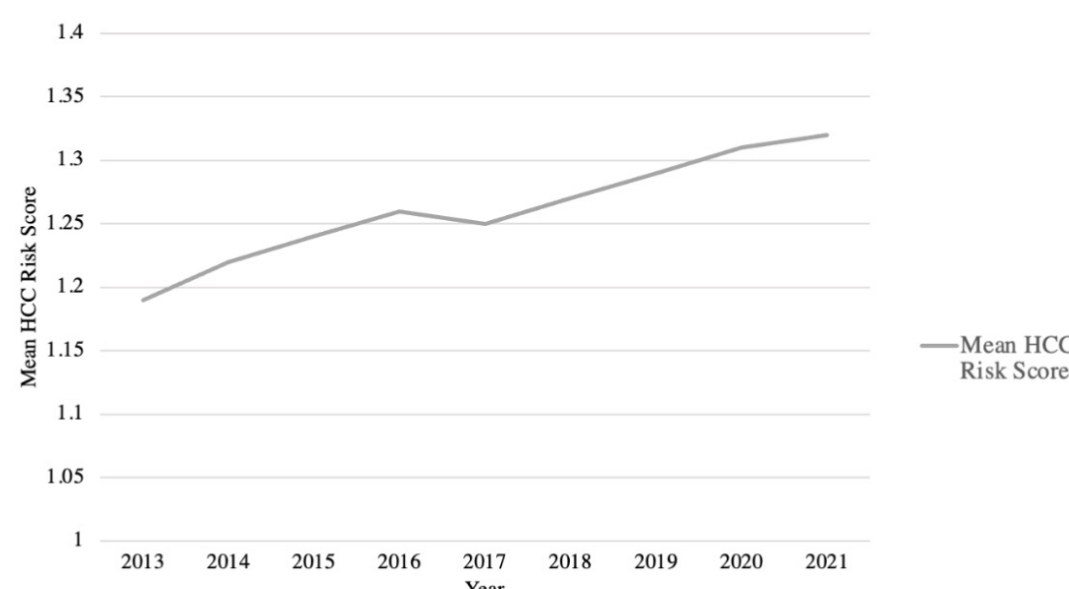


Figure 1. Mean Hierarchical Condition Category (HCC) Risk Score for Arthroscopy Patients from 2013-2021

Adjusted Medicare Reimbursement for Included Arthroscopic Procedures 2013 - 2021

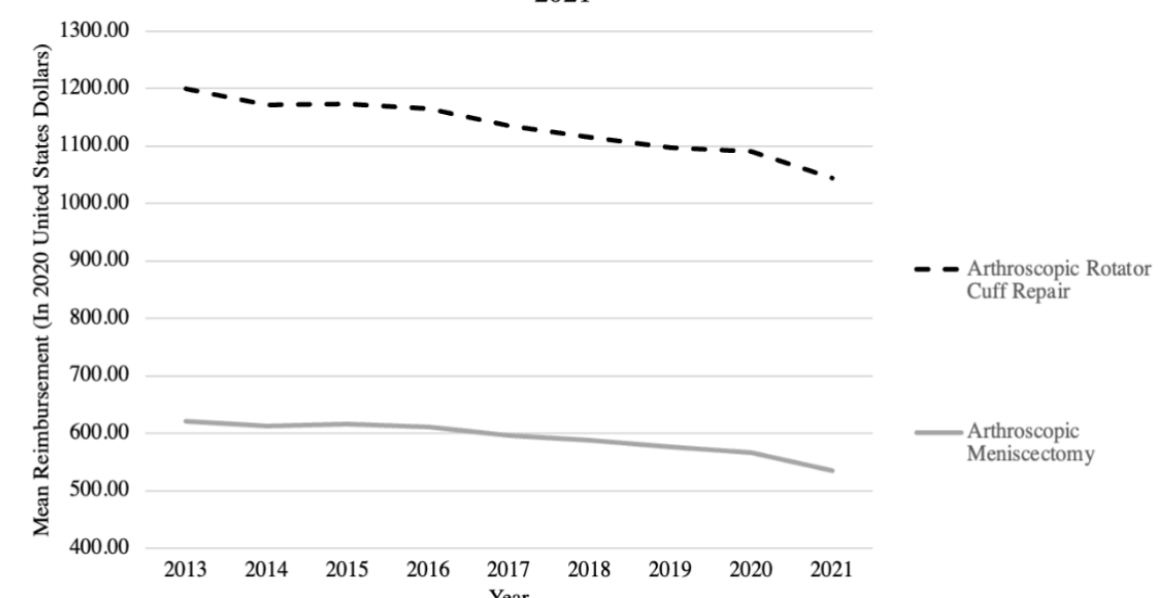


Figure 2. Mean Medicare Reimbursement for Arthroscopy Procedures from 2013-2021 (All monetary values adjusted for inflation)

Results

- From 2013 to 2021, 1,317,796 arthroscopic meniscal debridement procedures and arthroscopic rotator cuff repairs were billed to Medicare and included
- Patients were increasingly sicker and more complex throughout the study, with a mean HCC risk score of 1.19 in 2013, and a mean HCC risk score of 1.32 in 2021 (+11.0%; p<0.01)
- Meanwhile, the mean reimbursement for meniscal debridement procedures decreased by 13.9% per procedure while the mean reimbursement per procedure for arthroscopic rotator cuff repair decreased by 13.0% from 2013 to 2021

Simple Summary

- Who?** Included all arthroscopic rotator cuff and knee arthroscopy procedures billed to Medicare from 2013 to 2021
- What?** Evaluated mean surgeon reimbursement and patient complexity throughout this time
- Findings?** Reimbursement to the surgeon decreased by 13.9% and 13.0% for meniscal debridement and shoulder arthroscopy respectively, while HCC, an objective patient complexity measure increased by 11.0%

Conclusion

- This study demonstrates that surgeons are getting a lower mean reimbursement to operate on more complex/sicker patients
- Hospital payment currently risk adjusts for comorbidities currently, while surgeon fees do not
- This study suggests that CMS could consider risk-adjusting for surgeon reimbursement to maintain incentive to care for complex patients, and assure access to quality care for at-risk patients

References

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