

Does Patient Selection Account for the Perceived Cost Savings in Outpatient Spine Surgery?

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Introduction

. The perceived cost savings with comparable or improved outcomes to inpatient admission for the same procedures is desirable in an era where health expenditures are scrutinized. In this study, the authors' hypothesized that total savings in outpatient spine surgery is largely driven by patient selection and biases towards healthier patients.

Methods

A meta-analysis assessed patient selection factors and outcomes associated with outpatient spine procedures. Additional Bayesian analysis, informed by the meta-analysis results, was performed on a national administrative database to further compare inpatient and outpatient direct costs.

Results

Outpatient procedures were associated with younger patient age (MD = -2.33, 95% CI: -4.40 - -0.25) and no diabetes diagnosis (OR = 0.77, 95% CI: 0.51-0.97). Outpatient procedures were associated with a lower likelihood of reoperation (OR = 0.44, 95% CI: 0.18-0.87), 30-day readmission (OR = 0.39, 95% CI: 0.10-0.80), complication (OR = 0.29, 95% CI: 0.15-0.49), and lower overall costs (MD = -\$13,834, 95% CI: -\$22,883 - -\$4629). Additional analysis of the national administrative data revealed more modest cost savings than those found in the meta-analysis for outpatient spine surgeries relative to inpatient spine surgeries. Estimated cost savings for both younger - \$555 for those age 30-35 (95% CI: -\$733 – -\$374) - and older patients - - \$7290 for those age 65-70 (95% CI: -\$7380 –\$7190) were less than the overall cost savings found in the meta-analysis

Conclusions

Compared to inpatient surgery, outpatient spine surgery was associated with better short-term outcomes and an initial reduction in direct costs. A selection bias for outpatient procedures towards younger healthier patients may confound these results. The additional analysis of the national

Learning Objectives

By the conclusion of this session, participants should be able to:

- 1) Appreciate the current utilization trends of outpatient spine surgery.
- 2) Discuss the potential selection bias for younger healthier patients in outpatient spinal surgery.
- 3) Discuss the validity of favorable outcomes that are attributed to outpatient spine surgery in the context of facts presented above.

References