

### Introduction

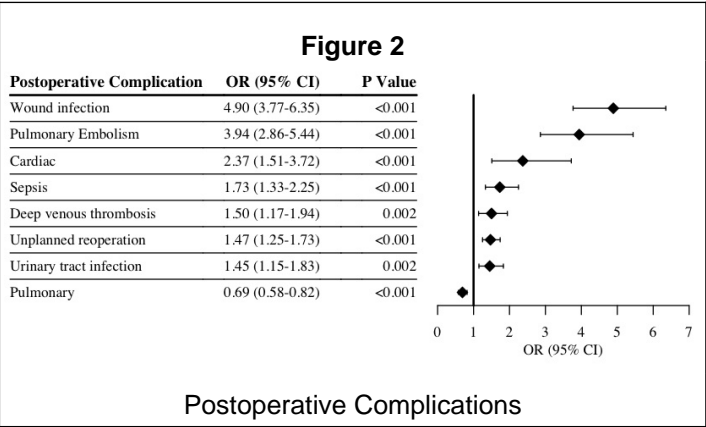
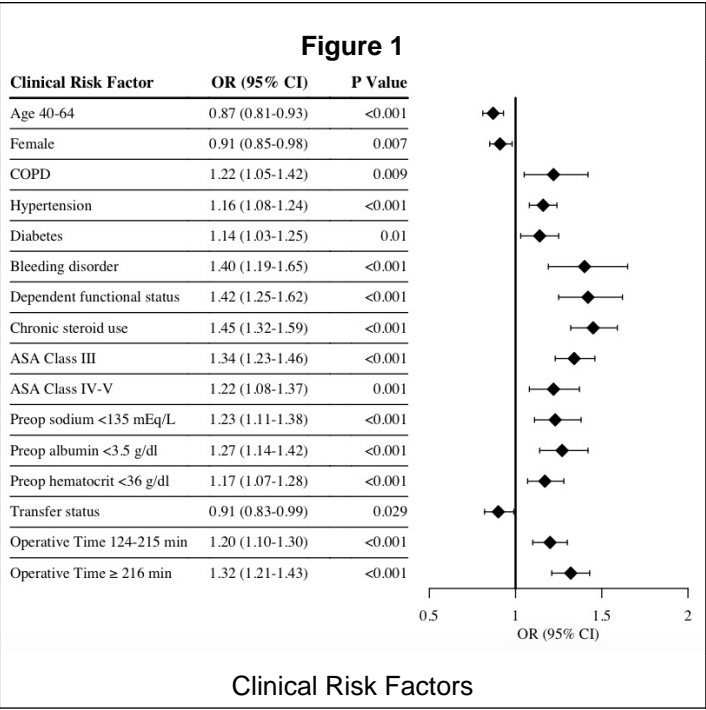
- Hospital readmission is a key surgical quality metric associated with financial penalties and higher healthcare costs
- We examined clinical risk factors and post-operative complications associated with 30-day unplanned hospital readmissions after cranial neurosurgery

### Methods

- We queried the American College of Surgeons National Surgical Quality Improvement Program database (2011-2016) for adults that underwent a cranial neurosurgical procedure
- Patient demographics, comorbidities, clinical characteristics, and post-operative complications were extracted. Patients who died during initial hospitalization were excluded.
- Multivariable logistic regression with backwards model selection was used to determine predictors associated with 30-day unplanned hospital readmission.

### Results

- Of 40,802 cases, 4,147 (10.2%) had an unplanned readmission. Postoperative complications were higher in the readmission cohort (18.5% vs 9.9%, p <0.001).



### Conclusions

- Unplanned hospital readmission after cranial neurosurgery is a common event.
- Identification of high-risk patients who undergo cranial procedures may allow hospitals to reduce unplanned readmissions and associated healthcare costs.

### Learning Objectives

1. Discuss preoperative comorbidities and preoperative laboratory values associated with increased risk of unplanned readmission
2. Discuss post-operative complications associated with unplanned readmission

### References

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