

Section A: Research Design

- ✓ Does the study consider that it can only detect disease conditions, procedures, and diagnostic tests in hospital settings? * Methods
- ✓ Does the study acknowledge that it includes encounters, not individual patients? * Limitations
- ✓ Does the study avoid diagnosis/procedure-specific volume assessments for units that are not a part of the sampling frame of the NIS, and are therefore not representatively sampled, including Yes, we are not including any volume based analysis.
 - a) geographic units, like U.S. states
 - b) healthcare facilities (after 2011)
 - c) individual healthcare providers?

Section B: Data interpretation

- ✓ Does the study attempt to identify disease conditions or procedures of interest using administrative codes or their combinations that have been previously validated? *
We have utilized the same ICD-9 codes mentioned in previous publications on the topic; however, apart from PPV reported in a study, there is limited data available on the validity of the administrative codes, therefore, readers should interpret findings with caution until validated by future studies.
- ✓ Does the study limit its assessment to only in-hospital outcomes, rather than those occurring after discharge? * Methods/Results
- ✓ Does the study distinguish complications from comorbidities or clearly note where it cannot? * Methods

Section C: Data Analysis

- ✓ Does the study clearly account for the survey design of the NIS and its components - clustering, stratification, and weighting? * Methods
- ✓ Does the study adequately address changes in data structure over time (for trend analyses)? * Methods. Yes, discharge weights were used for the trends analysis.

*Fields marked with asterisk may specifically be included as a checklist in published studies