**BACKGROUND**
Tuberculosis (TB) is
- often difficult to detect
- very contagious unless caught early
- sometimes not identified during hospitalization
- sometimes misdiagnosed
- Healthcare Cost and Utilization Program (HCUP) State Inpatient Database (SID)
  - contains data on most inpatient hospitalizations that occur in participating sites
  - includes anonymized patient identifiers, diagnoses, procedures, patient location information and more

**DATA and METHODS**
Steps:
- purchased HCUP SID data for California 2009 and 2010
- dealt with formatting issues
- loaded data into a relational database
- identified patients admitted, not diagnosed with TB, but later admitted again and diagnosed with TB (These are possible missed diagnosis opportunities)

**RESULTS**
- 2.1 million patients admitted to inpatient care
- 801 admitted due to TB
- 284 of those had possible missed TB diagnoses

**IMPLIEDATIONS and CONCLUSIONS**
This study
- shows that missed diagnosis opportunities could arise
- sets an upper bound on their rate
- lays the groundwork for future studies

**FUTURE DIRECTIONS**
Future studies could
- group possible missed diagnoses based on time between the last visit without TB and the first visit with TB
- identify misdiagnosed TB based on diagnoses received before TB visits (a non-TB pneumonia diagnosis in early visits would suggest a misdiagnosis of what was actually TB)
- train a support vector machine to differentiate between those admissions which are likely to be a missed diagnosis opportunity and those admissions which are not
- include HCUP State Emergency Department Databases and State Ambulatory Surgery Databases, which contain data on medical encounters that do not result in hospitalization

**References**