Learning Objectives
1. To describe the burden of Intracranial abscesses in the United States and identify those who are at greater risk
2. To evaluate the neurosurgical management and outcomes of patients with intracranial abscesses.

Introduction
There is limited data on the burden of intracranial abscesses (ICA). We sought to quantify the inpatient burden, neurosurgical management and outcome of ICA in the United States.

Methods
The 2001-2010 Nationwide Inpatient Sample was queried and appropriate ICD-9CM diagnostic and procedure codes identified patients with ICA diagnosis (324.0), patients that underwent craniotomy surgery [drainage of epidural-01.24, and/or subdural-01.31 abscesses], and ventriculostomy/shunting procedures (0.22; 02.31-02.39). Descriptive analysis and multivariate logistic regression examined outcomes. Data were weighted to the US national population.

Results
A total of 55,535 ICA inpatient admissions were identified. Age distribution was bimodal (See attached figure); overall mean age was 46.8 years [Standard Error/SE=0.20]. Most patients were male (65.4%), race was distributed as follows: whites (50.8%), blacks (11.5%), Hispanics (9.3%), other/unknown (28.4%).

Results (Continued)
In all, 20.1% of patients had surgery. Average time-to-surgery was 3.18 days (SE=0.13).

Ventriculostomy/shunting was performed in 8.4% of patients and in 11.3% that underwent surgery; intracranial pressure monitors placement in 0.4% overall, and in 0.8% that had surgery, p<0.001; while mechanical ventilation was indicated in 14.5% of patients, and in 17.8% that had surgery, p<0.001.

Results (Continued)
Factors significantly associated with inpatient mortality were: >=65year-olds (OR3.8; 95%CI=2.4-6.1), Hispanics (OR2.36; 95%CI=1.53-3.64), ventriculostomy/shunting (OR1.93; 95%CI=1.46-2.54), surgery (OR0.47; 95%CI=0.35-0.61), and time-to-surgery of <=48hours (OR0.79; 95%CI=0.65-0.98).

Conclusions
Intracranial abscesses constitute a significant morbidity burden among infants and older adults. Early neurosurgical drainage is associated with improved survival.