Introduction: The American College of Surgeons National Surgical Quality Improvement Program (NSQIP) is widely heralded as the most robust database for evaluating surgical outcomes. However, it is unclear whether NSQIP is superior to administrative databases. Methods: All patients from NSQIP and Nationwide Inpatient Sample (NIS) databases from 2010 with the following procedures were included: abdominal aortic aneurysm repair, appendectomy, aortic valve replacement, coronary artery bypass graft, carotid endarterectomy, laparoscopic cholecystectomy, total and partial colectomy, esophagectomy, sleeve gastrectomy, pancreatectomy, and ventral hernia repair. The area under the receiver operator characteristic curve (c-statistic) of multivariate logistic regressions predicting inpatient mortality and complications was compared between these databases. Results: Complication rates were higher in NIS for 7 out of the 11 operations, but mortality rates in every procedure were lower in NSQIP than NIS. The c-statistic was consistently higher in all multivariate logistic regressions predicting complications and mortality in the NSQIP database compared to the NIS database. Conclusion: Patients at NSQIP hospitals are recorded to have lower inpatient
mortality rates than patients at NIS hospitals. The detail of preoperative risk variables collected by NSQIP allows for a more robust risk-adjusted analysis compared to NIS, as evidenced by higher c-statistic values. Wider participation in NSQIP could expand hospital participation in more robust surgical outcomes and quality research.