INTRODUCTION
• With improvements in perioperative care, 30-day mortality rates after bariatric surgery are < 0.1%; a rate similar to elective laparoscopic cholecystectomy.
• With such low mortality rates, identifying patients at increased risk becomes difficult.
• Given the emphasis on shared decision-making and informed consent, predictive tools have become increasingly useful to guide physician-patient discussions.

AIM
• The purpose of this study was to identify predictors of 30-day mortality after bariatric surgery using the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) database.

METHODS
• This is a retrospective review of prospectively collected data from the MBSAQIP database for the years 2015 and 2016.
• A derivation was created using the 2015 dataset and validated using the 2016 data. Variables with p-value < 0.05 in univariate analysis were included in the predictive model.
• A forward selection algorithm was used to build a logistic regression model predicting probability of death within 30 days.
• The area under the receiver operating characteristic curve was calculated for the derivation and validation dataset. The accuracy of the predictions was assessed with the Brier score.

RESULTS
• Overall 30-day mortality rate was 0.1%, with 249 reported events.
• Risk of Death = (13* therapeutic anticoagulation) + (0.5*BMI) + (0.5*Age) + (3* Operation length) + (-10* Female) + (8*Sex) + (3* Diabetes)
• Subjects were stratified into high (>5%), medium (1-5%), and low risk groups (<1%) for mortality at 30-days, based on points received from the model.
• The discrimination of the model was 0.80.

CONCLUSIONS
While death following bariatric surgery is rare, a cohort of patients exist who are at increased risk. Identifying these patients before surgery may allow for proper informed consent and preoperative optimization.

DISCLOSURES
None to declare.