Discoveries of Distinction

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The Implementation of a High-Fidelity Simulation Process Improvement Protocol Using Malignant Hyperthermia

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Patient safety and the delivery of quality care are major concerns for healthcare in the United States. Special populations (e.g., obese patients) need study in order to support patient safety, quantify risks, advance education for healthcare-workers, and establish healthcare policy. Obesity is a complex chronic disease and is considered the second leading cause of preventable death in the United States with approximately 300,000 deaths per year. Obesity is recognized by the Agency for Health Related Quality (AHRQ) as a comorbid condition. These concerns emphasize the need to focus further research on the obese patient. Through the use of clinical and administrative data, this study examines the incidence of adverse outcomes in the obese surgical population through AHRQ Patient Safety Indicators (PSI) and allows for the engagement PSIs as measure to guide and improve performance. In this study, the surgical population was overwhelmingly positive for obesity. BMI was also a significant positive predictor for two of three postoperative outcomes. This finding suggests that as BMI reaches the classification of obesity, the risk of these adverse outcomes increases. It further suggests there exists a threshold BMI that requires anticipation of alterations to systems and processes to revise outcomes.

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