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<b>College *</b>	College of Pharmacy
<b>Department *</b>	Pharmacy
<b>Title of Research *</b>	Postoperative Glycemic Control in Cardiovascular Surgery Patients:
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**Introduction & Purpose \***

Hyperglycemia is associated with increased morbidity and mortality in hospitalized patients. In patients undergoing cardiovascular surgery, hyperglycemia on the first and second post-operative day is the single most important predictor of serious infection and complications. Importantly, effective management of inpatient hyperglycemia has been shown to improve these clinical outcomes.

The objective of this study was to evaluate and optimize postoperative glycemic control in patients undergoing cardiovascular surgery. A multidisciplinary team of hospitalist physicians, pharmacists, and nurses completed this quality improvement project in order to identify and act upon opportunities for improvement in the approach to treatment of postoperative hyperglycemia.

**Experimental Design \***

A retrospective chart review of all patients undergoing cardiovascular surgery between January 1st, 2010 and June 30th, 2010 was completed to assess baseline blood glucose control. Subsequently, standardized, evidence-based recommendations were proposed, implemented and evaluated through a second retrospective chart review of patients admitted from October 1st, 2010 through March 15th, 2011.

**Results \***

Of 15 patients to whom hospitalists were consulted for postoperative glycemic control, a goal blood glucose of  $\leq 180$ mg/dl was met on average 38% of the time post discontinuation of the insulin drip through post-op day (POD) 2. In the post-intervention phase, 8 cases were evaluated and goal BG was met on average 59% of the time.

**Conclusions \***

This quality improvement enabled our multidisciplinary team to gain knowledge regarding the compliance with evidence-based recommendations in the area of glycemic control in post-operative cardiovascular surgery patients. Opportunities to improve upon the current glycemic control were identified and standardized recommendations put into practice with positive trends in results noted in case review. Additional opportunities for improvement may be identified with continued review of the intervention.

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