“In the postoperative cardiothoracic surgical patient being mechanically ventilated, is there a difference in outcomes when comparing sedation with dexmedetomidine versus propofol?”

Abstract
Patients undergoing a cardiothoracic operation typically require mechanical ventilation in the postoperative phase. Each year approximately 395,000 of these operations are performed in the United States alone. As many as 10% of these patients require reoperation within the first few hours of recovery due to complications (Barash & Cullen, 2013). This comprehensive review of the literature was performed to determine whether postoperative sedation with dexmedetomidine leads to better patient outcomes than sedation with propofol. Inclusion criteria included publications written in the English language, articles available in full text, articles written within the last 10 years, and publications with a focus on a population over the age of 18. Exclusion criteria included articles not written in the English language, articles not available in full text, articles not from peer-reviewed journals, and articles focused on pediatric populations. A comprehensive review of the literature was performed and the results from the included studies were analyzed regarding patient outcomes in the postoperative cardiothoracic surgery patient being mechanically ventilated. The results of these studies were compiled and disseminated via a practice change proposal.