A Quality Improvement Initiative to Improve Cardiac Surgical Extubation Times



Cardiac Surgeons, CICU nurses, Respiratory Therapists, Cardiac Anesthesia Athens Regional Medical Center, Cardiac ICU

Define the Problem

Extubation times for the post-operative cardiac surgery patients in 2009 were below the national benchmark. Only 26.4% of the CICU post-op cardiac surgery patients were extubated within 6 hours, the standard best practice extubation time.

Our Goal

- To increase the percentage of post-op open heart CABG patients extubated within 6 hours to 50%.
- To reduce post open heart surgery ventilation hours by 20%.

The Team

- Cardiac Surgeons
- CICU nurses
- Respiratory Therapists
- Cardiac Anesthesia







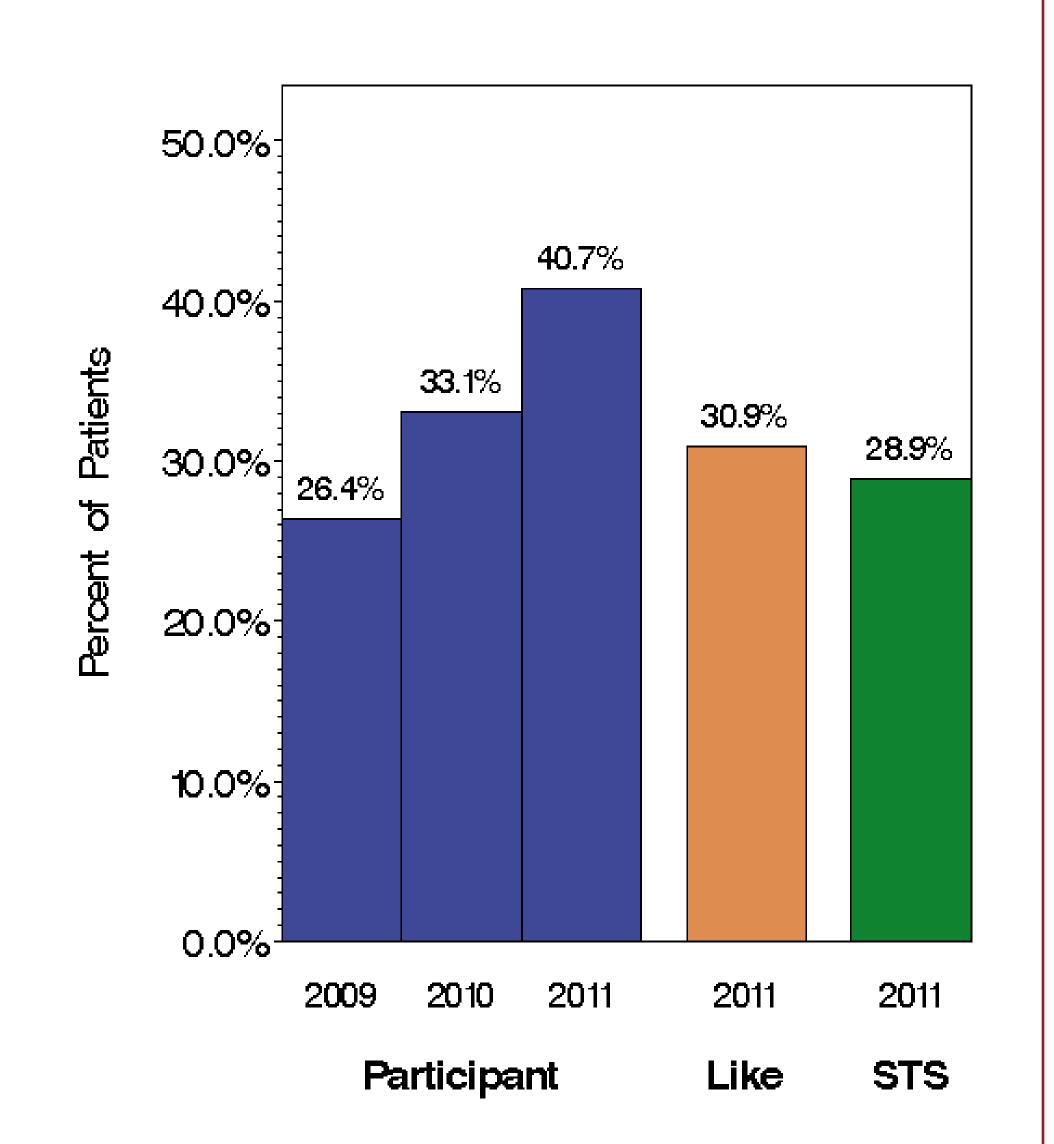
Actions Taken to Improve

- Cardiac Anesthesia practice using short-acting intravenous anesthetic agents
- Revision of Fast Track Extubation Protocol
- Improved RN-MD-RT interaction; discussion upon patient arrival by Surgeon, RN, and RT to fast track
- Cardiac Surgery added Precedex to order set to activate when patient was anxious
- Developed bedside extubation guideline tool based on physical assessment
- **Developed Early Extubation Tool**

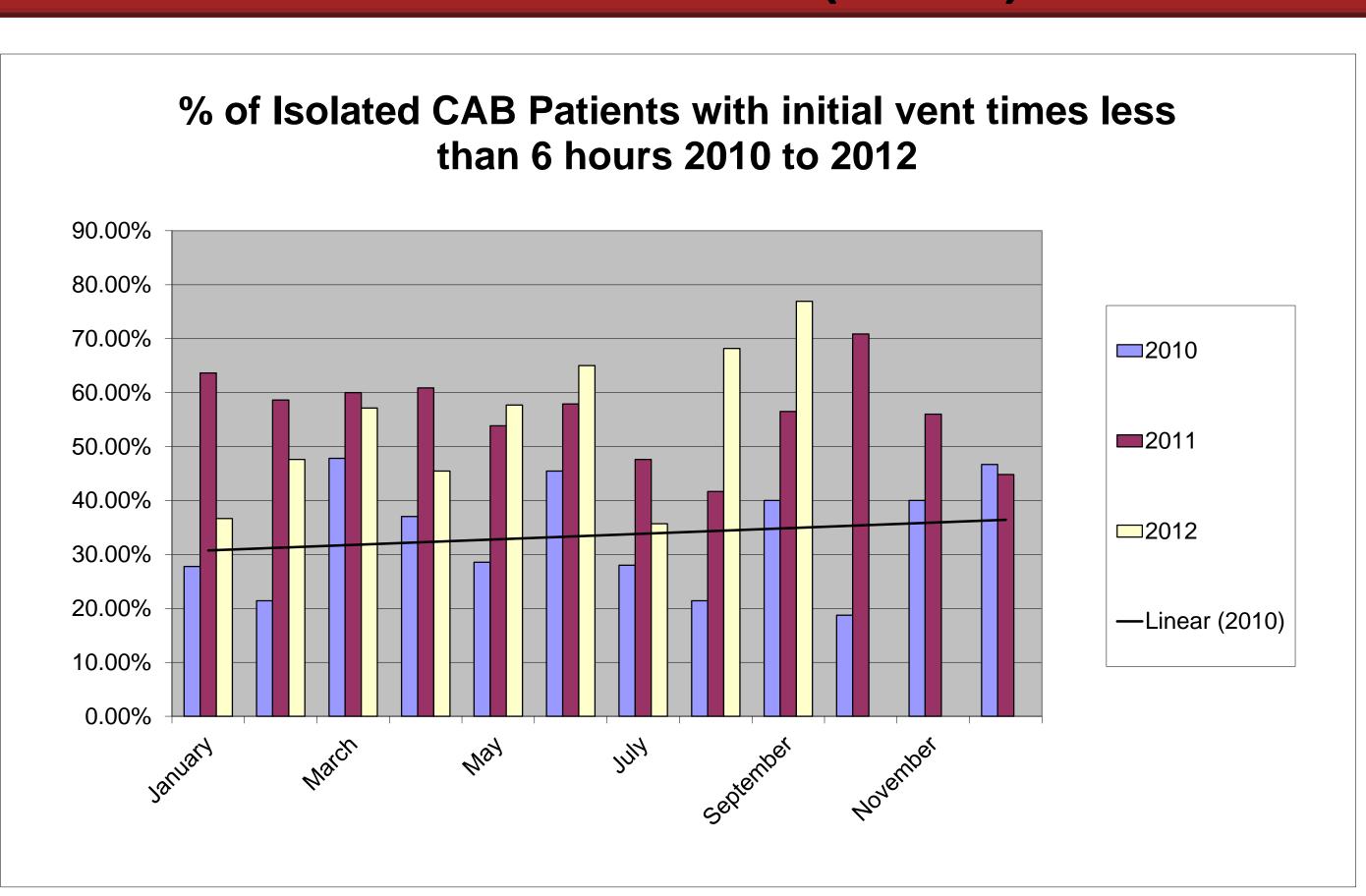
The Results

Initial Ventilation < 6 Hrs

In 2011, our percentage of extubations under 6 hours improved by 14.3%. Our total ventilation hours decreased to less than 11 hours.



The Results (cont.)



Lessons Learned & Next Steps

Through this project, we are now able to utilize data from the tool to facilitate the team to approach problem solving and promote individual accountability. The data also provides earlier identification for improvement opportunities, allowing the team to intervene quickly and implement effective changes as needed. Practices may need to be changed to serve patients better and we must incorporate all clinical staff involved with patient care to achieve these practice changes.

> **For More Information Contact** Antonio Arata MBA, BSN, RN, NE-BC **Director Cardiac ICU/Cardiology/CVSU** aarata@armc.org