

# Best Practices in Early Extubation



**Maryland Cardiac Surgery Quality Initiative**

# Why Extubate Early?

- Early Extubation patients have lower costs and shorter ICU and total hospital Length of Stay
- Patients who spend 12-24 hours on the ventilator are associated with higher pneumonia rates. A large number (~30%) of patients on the ventilator for longer than 24 hours develop pneumonia, and a similar number are also reintubated

# **MCSQI Extubation Best Practices**

- **Document the targeted extubation time of 5 hours on a whiteboard at the patient's bedside upon admission to ICU**
- **Start the extubation process at 35° C**
- **Indications for spontaneous breathing trial:**
  - **Resolution of ongoing acidosis**
  - **Chest tube drainage of <200 mL/hour for 2 hours (<150 mL/hour may be too stringent)**
- **Extubation process initiated/ overseen by RT/RN, not MD/Provider, as the latter group not at patient bedside**

# **MCSQI Implementation**

- **Reviewed early extubation and prolonged ventilation data within Maryland**
- **Reviewed hospital extubation protocols statewide**
- **Integrate the 4 extubation best practices into hospitals' extubation protocols – if you don't have one, create one**
- **Educate cardiac team (respiratory, pulmonary, and nursing) on best practices in extubation**
- **Ongoing monitoring among the 10 MCSQI hospitals and within the hospital itself (assessing self-improvement)**
- **STS Prolonged Ventilation Webinar, December 2014:  
<http://www.sts.org/education-meetings/sts-webinar-series>**