Problem Statement (from patient’s/customer’s viewpoint):

- Sedation is required in the PICU to protect medically necessary devices for critically ill children, but recent research raises concerns that these medications may affect brain development. Significant variation in sedation practice exists in the PICU at CHOP.
- Over-sedated patients have increased ICU length of stay and are difficult to wean from ventilation; under-sedated patients at risk for medical device discontinuation.

Target Condition:

- A standard approach to sedation in the PICU leading to an algorithm to guide sedation management in mechanically ventilated patients. A SBS score will be set for every sedated patient to aid in communication. The goal is to decrease population exposure to opioids and benzodiazepines by 10%, decrease ventilator days by 10%, and decrease length of PICU days by 5% by Dec 2014.

Process Measure: % use of sedation order set for sedated patients

Outcome Measures: total opioid/benzodiazepine exposure, # ventilator days, PICU LOS, hospital LOS

Balancing Measure: unplanned extubations

Propose and Test Countermeasures:

- By January 6, 2014 all patients on the 7E PICU will have SBS score discuss and order will be written on rounds. By Feb 10, 2014 100% of patients in the PICU will have SBS scores discussed and order written on rounds.
- By March 2014 a sedation algorithm will be created, initial patient testing will start by March 15 2014

Metrics/Results:

- Sedation for mechanically ventilated pts
- SBS
- Personnel
- Variability scored by nurses
- Documentation nurses but not communicated to physicians
- Non-pharmacologic
- Medications
- Titrations
- Why is it hard to set a SBS goal during rounds?

Make it Standard Work (Implement Successful Countermeasures):

- Education blitz
- Rollout

Executive Sponsor Initial Approval (signature and date):

Executive Sponsor Final Approval (signature and date):