

Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Pediatric Sub Group Meeting Minutes – Thursday, March 23, 2017

Attendees: P=Present; A=Absent; X=Expected Absence

P	Neil Patel, Pediatric Anesthesiologist, NYU
P	Chuck Schrock, Pediatric Anesthesiologist, Wash U
P	Anshuman Sharma, Pediatric Anesthesiologist, Wash U
P	Ronak Patel, Pediatric Anesthesiologist, UVA
A	Bill Feaster, Pediatric Anesthesiologist, CHOP
P	Paul Reynolds, Pediatric Anesthesiologist, UMHS
P	Shobha Malviya, Pediatric Anesthesiologist, UMHS
P	Wilson Chimbira, Pediatric Anesthesiologist, UMHS
A	Wenyu Bai, Pediatric Anesthesiologist, UMHS
P	Robert Christensen, Pediatric Anesthesiologist, UMHS
P	Nirav Shah, Associate Program Director, ASPIRE
P	Katie Buehler, QI Coordinator, ASPIRE

Agenda & Notes

1. Introductions & Background of ASPIRE measures
 - a. Historically, measures have been largely applicable to the adult patient population. Though some measures may apply to pediatrics, have not been formally reviewed by pediatric anesthesiology specialists.
 - b. With additional sites now joining ASPIRE, more pediatric representation across the country. Goal is to adapt current measures for the pediatric population and create new pediatrics measures.
2. Confirm Charter
 - a. Review existing measures for applicability to pediatric anesthesiology population
 - i. **NMB 01:** Good for peds, any age
Conclusion: No need to change thresholds or measure criteria for NMB 01 at this time.
Discussion:
 1. TOF can be difficult to capture in children <5 years. Acceleromyography for pediatrics not available. Personal observation not sufficient. Objective and subjective measurements required to appropriately reverse.
 2. Performance does not vary drastically for anesthesiologists caring for pediatric patients for NMB 01 at UM. Though difficult to capture, ASPIRE data shows it may be possible since providers are 'passing.'
 - ii. **NMB 02:** Reverse within 2 hours of administration of NMB;
Conclusion: No need to change thresholds or measure criteria for NMB 02 at this time.
Discussion:
 1. If TOF 4/4 or acceleromyography equal to 0.9 should not require reversal. This is consistent with the measure as written.
 2. Dose of muscle relaxant suggested as potential ASPIRE measure
 - iii. **GLU 01:** Not applicable for patients <12 years.
Conclusion: No need to change thresholds or measure criteria for GLU 01 at this time.
Discussion: Rationale for excluding patients < 12 years. Do not aggressively treat glucose >200 as risks associated with hypoglycemia are much greater.

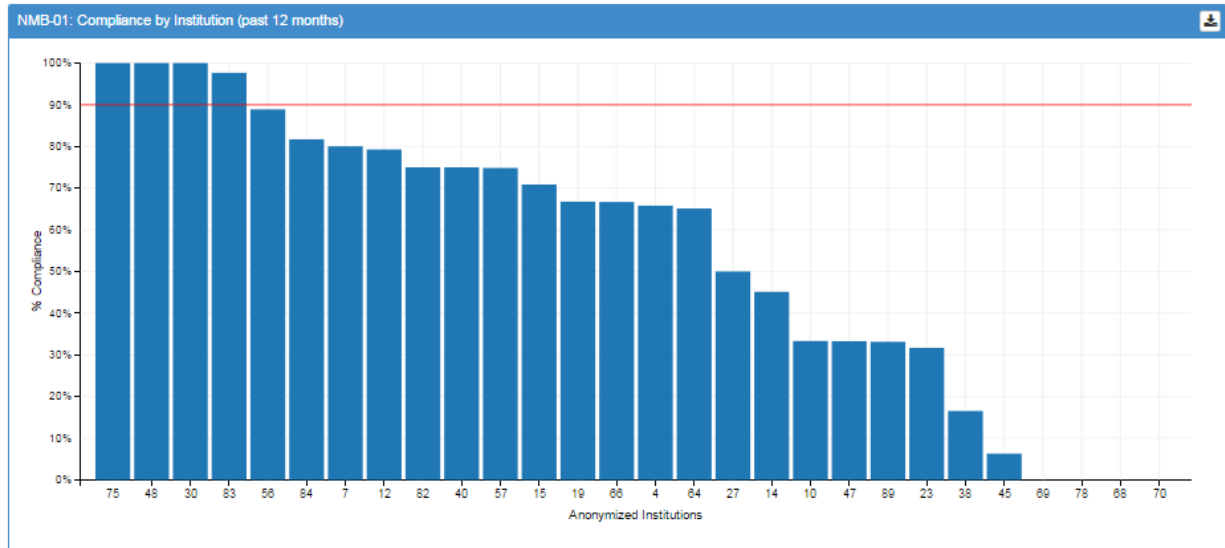
- iv. **GLU 02:** Good for peds, any age.
Conclusion: No need to change the thresholds or measure criteria for GLU 02 at this time.
Discussion: Debated need to exclude diabetic patients. Determined that since the measure does not require treatment but only recheck, is acceptable to include diabetic patients.
- v. **PUL 01:** Not applicable in pediatric patients <12 years.
Conclusion: Modify PUL 01 to exclude patients <12 years old or <20kg.
Discussion:
 - 1. Accuracy issues with ventilator settings in young children.
 - 2. No literature to support barotrauma is an issue in young children postoperatively. There is literature to support lower TV in the ICU setting.
 - 3. Discussed decreasing the age. Opted to add weight limit of 20kg instead.
- vi. **FLUID 01:** Good for peds, any age.
Conclusion: No need to change the thresholds or measure criteria for FLU 01 at this time.
- vii. **TRAN 01:** Exclude congenital heart disease <12 years and all cases for patients <2 years old.
Conclusion: Add Massive Transfusion exclusion for pediatrics. UMHS defines massive transfusion criteria as 30cc/kg. Dr. Sharma to confirm this is consistent with WashU's massive transfusion criteria.
- viii. **TRAN 02:** Exclude <2 years
Conclusion: Add Massive Transfusion exclusion for pediatrics: 30cc/kg proposed. Add exclusion for congenital heart disease patients.
Discussion:
 - 1. UMHS defines massive transfusion criteria as 30cc/kg. Dr. Sharma to confirm this is consistent with WashU's massive transfusion criteria.
 - 2. Patients with cyanotic heart disease require higher hgb levels to increase oxygen carrying capacity.

3. Discuss Next Steps

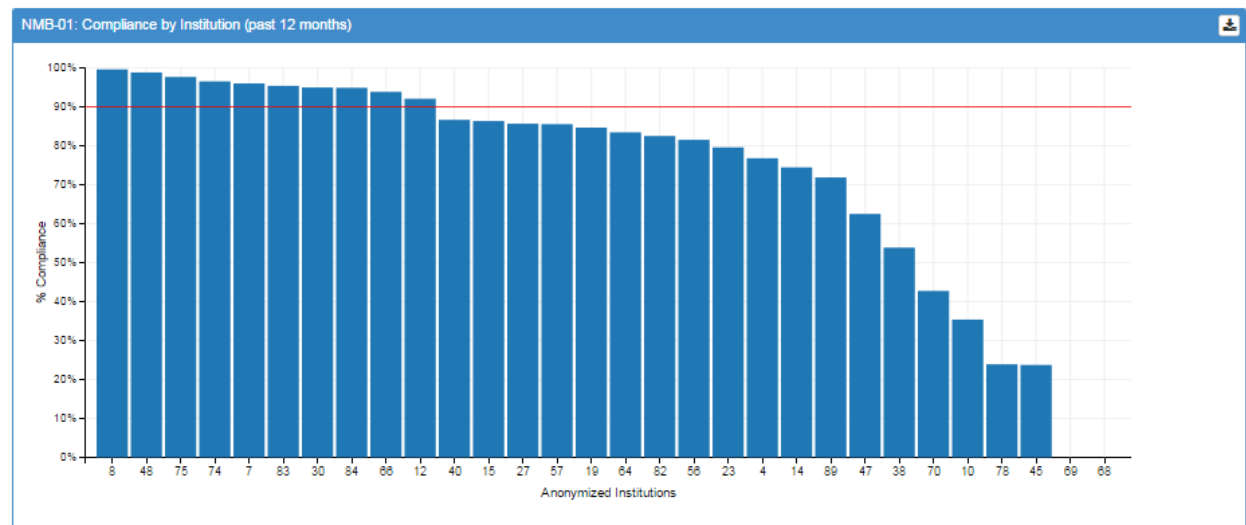
- a. Collaboration methodology: Team agrees that at least one additional in-person meeting is a good idea to discuss remaining measures. Can also communicate via forum.
- b. Action Items:**
 - i. Dr. Shah to review ASPIRE data across all sites for each measure and identify if there is increased variability when filtered to show only peds cases- will distribute to group.
 - ii. Dr. Shah to send out massive transfusion recommendations for peds.
 - iii. Dr. Sharma to confirm WashU's criteria for massive transfusion is consistent with 30cc/kg.

Site Comparison Data by Measure

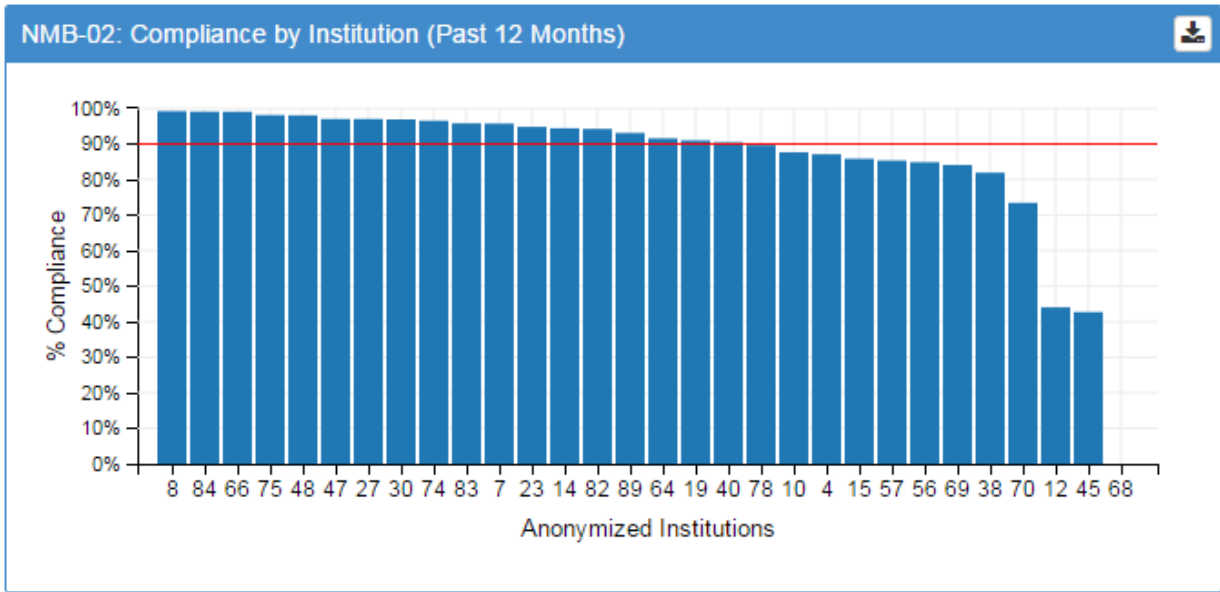
NMB 01 TOF Monitoring: All patients



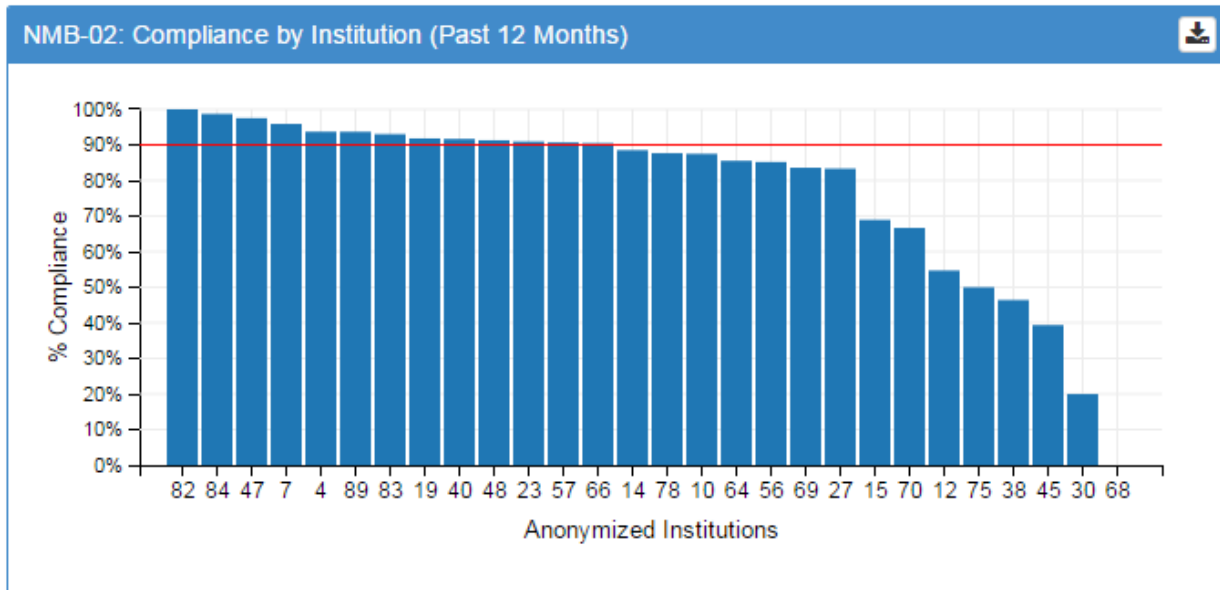
NMB 01 TOF Monitoring: Patients <12 years



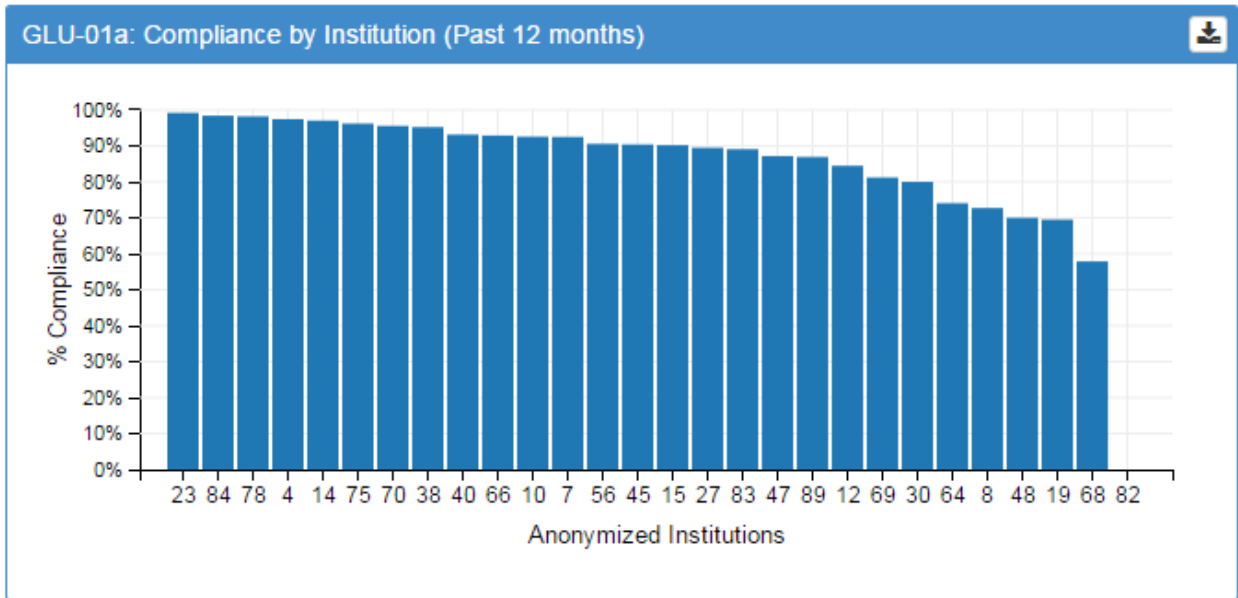
NMB 02 Reversal Administered: All patients



NMB 02 Reversal Administered: Patients < 12 years



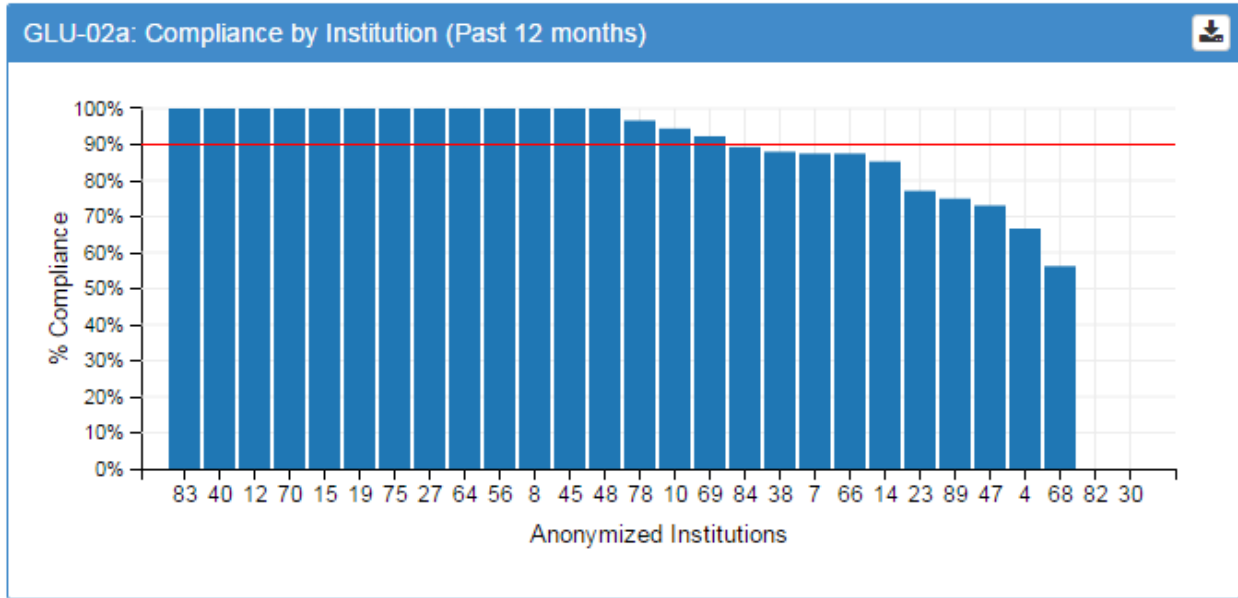
GLU 01 High Glucose: All patients



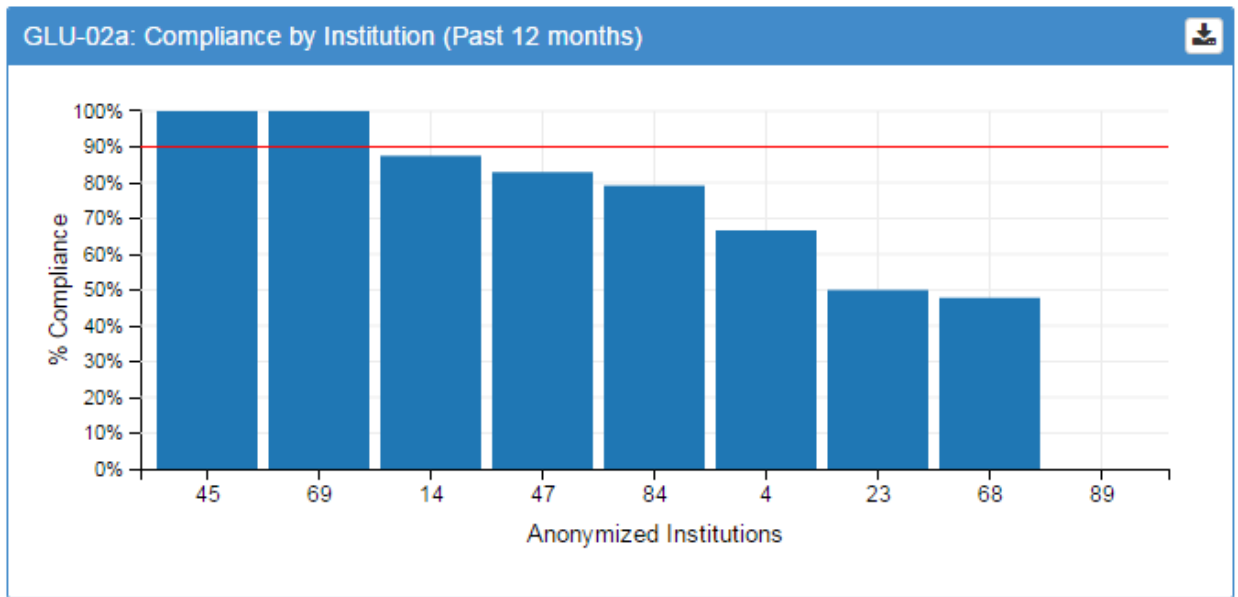
GLU 01 High Glucose: Patients <12 years

Not applicable- peds excluded for GLU 01.

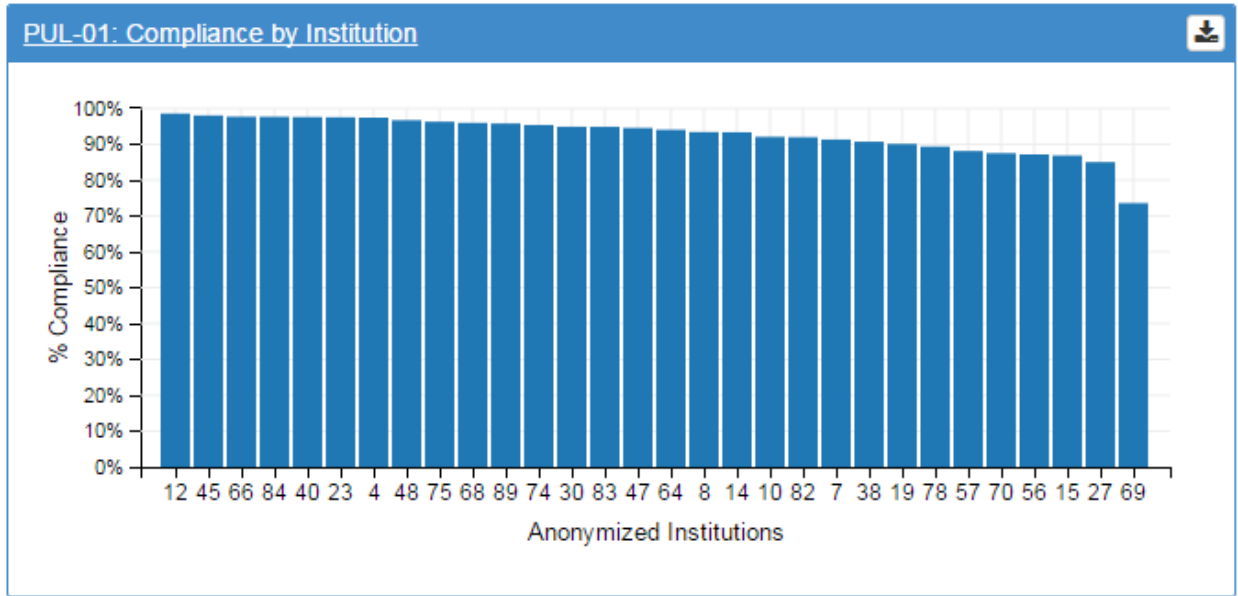
GLU 02 Low Glucose: All patients



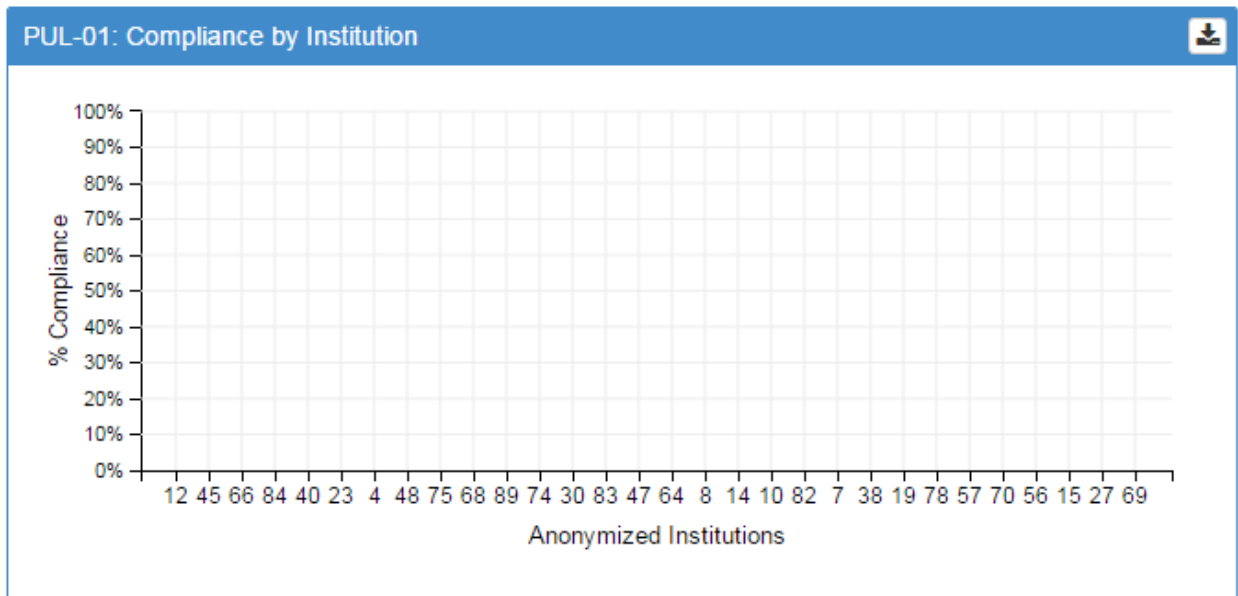
GLU 02 Low Glucose: Patients < 12 years



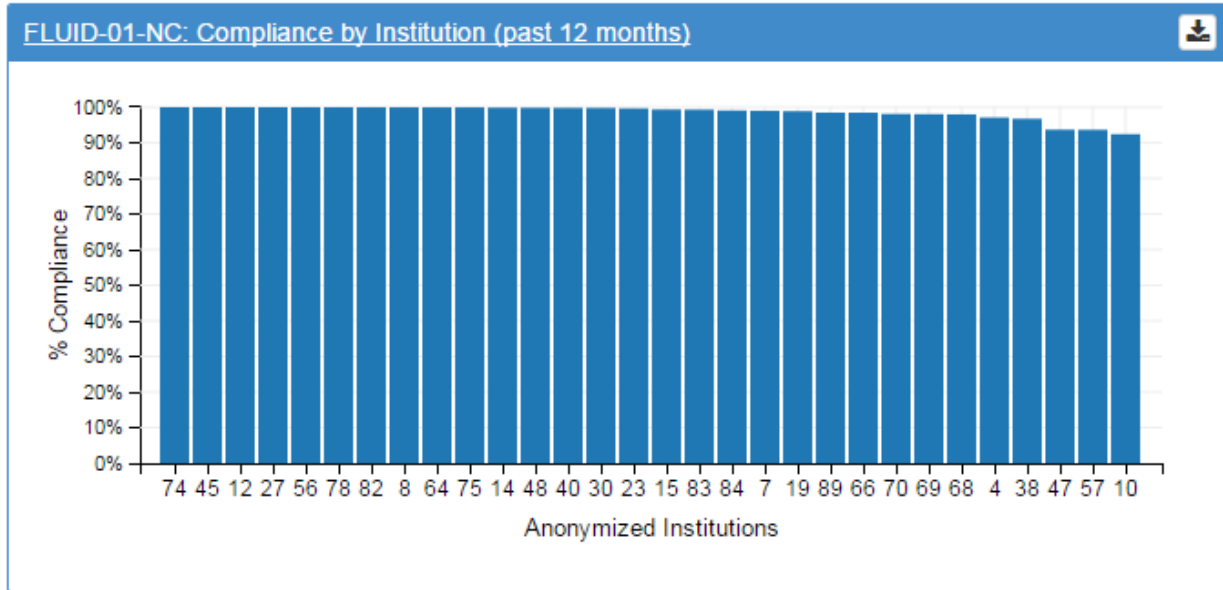
PUL 01 Low Tidal Volume: All patients



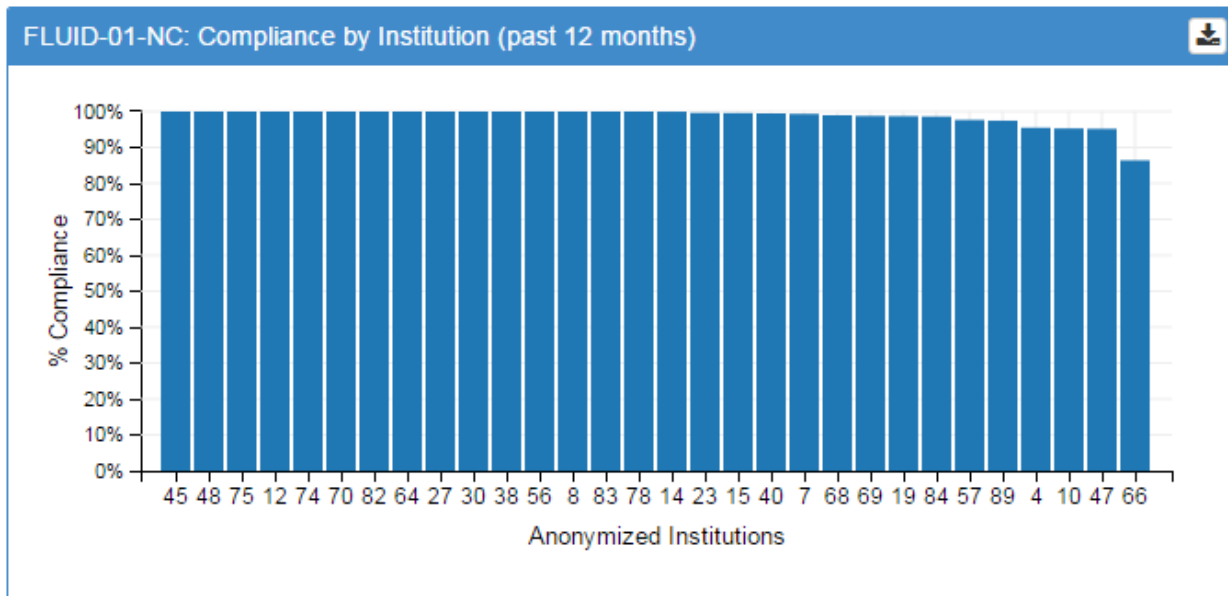
PUL 01 Low Tidal Volume: Patients <12 years



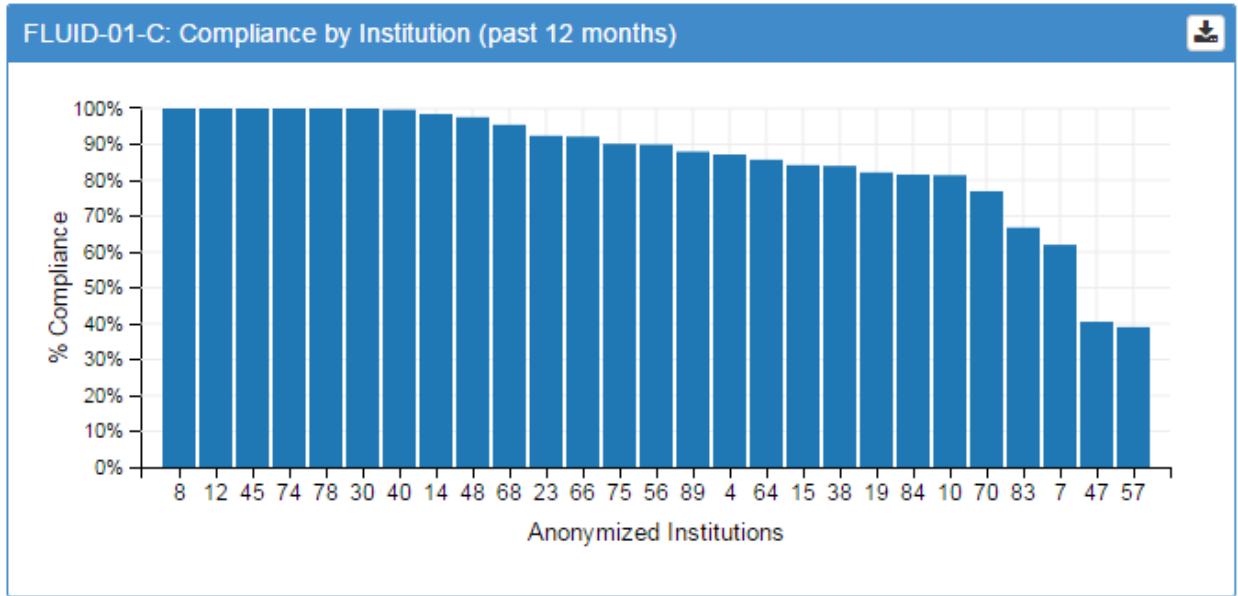
FLUID 01 Non-Cardiac Colloid Use: All patients



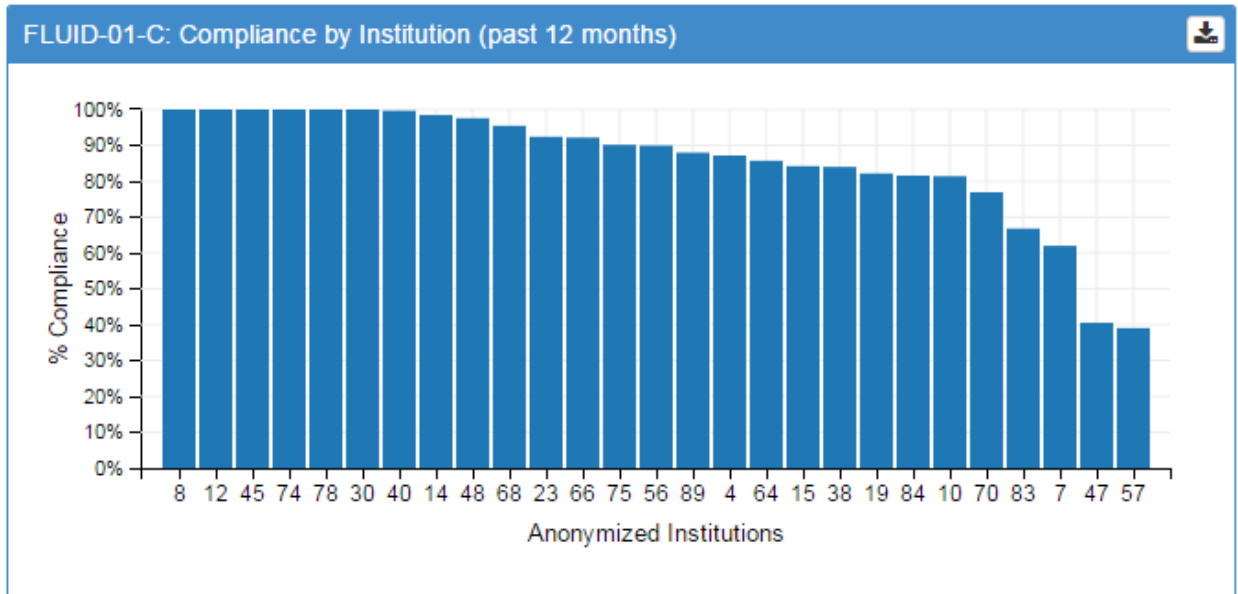
FLUID 01 Non-Cardiac Colloid Use: Patients <12 years



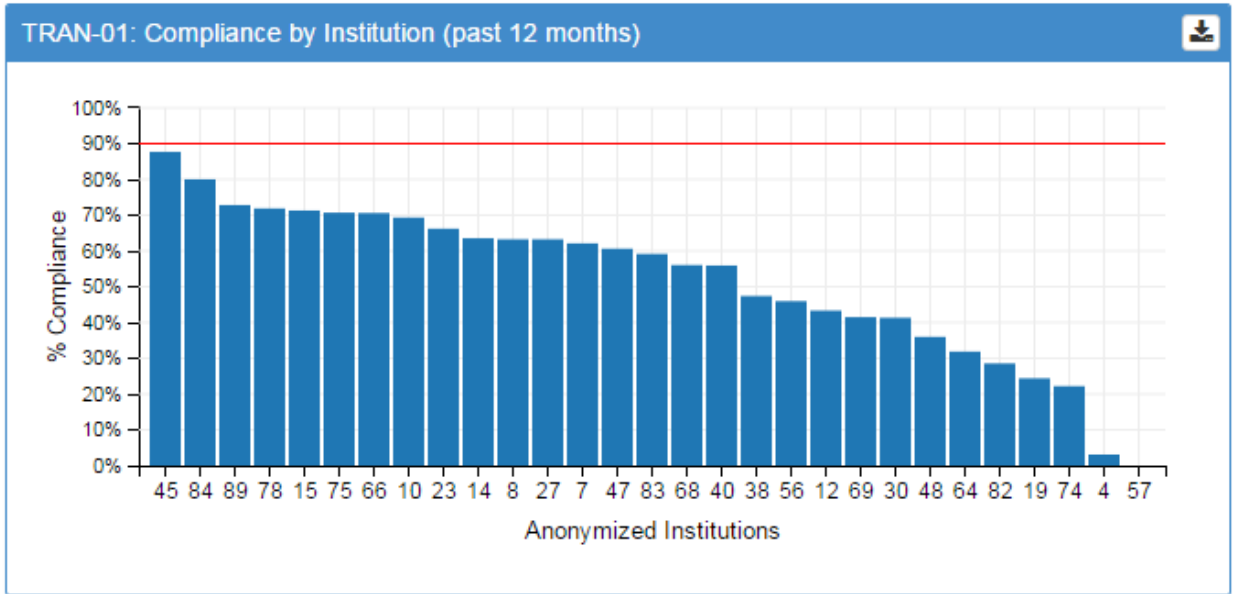
FLUID 01 Cardiac Colloid Use: All patients



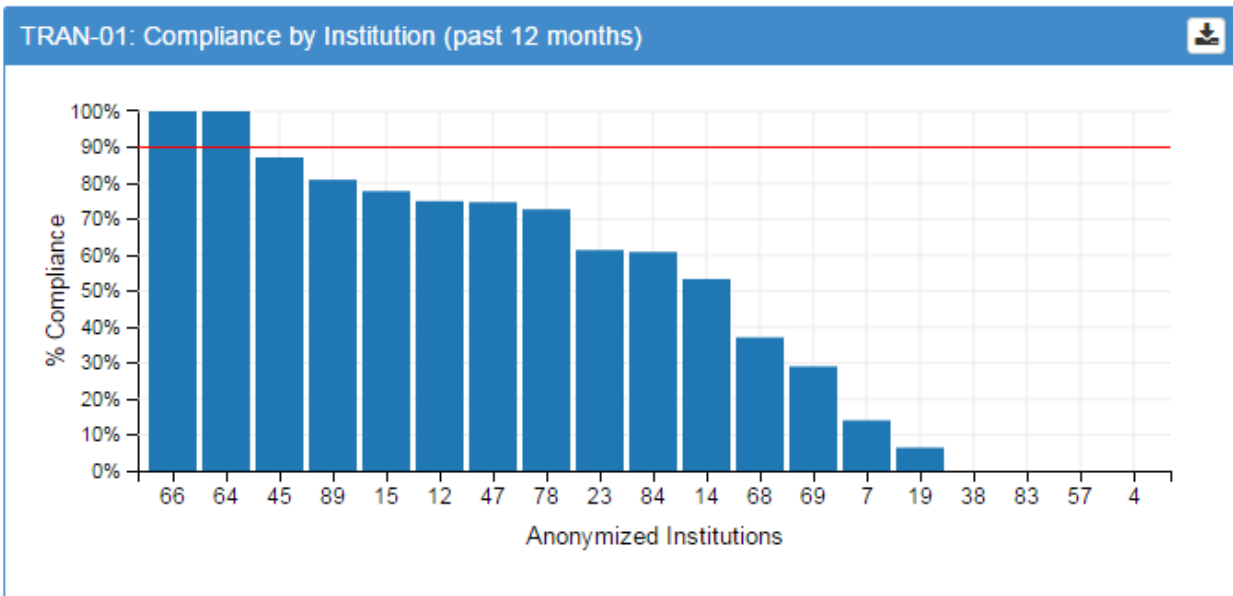
FLUID 01 Cardiac Colloid Use: Patients <12 years



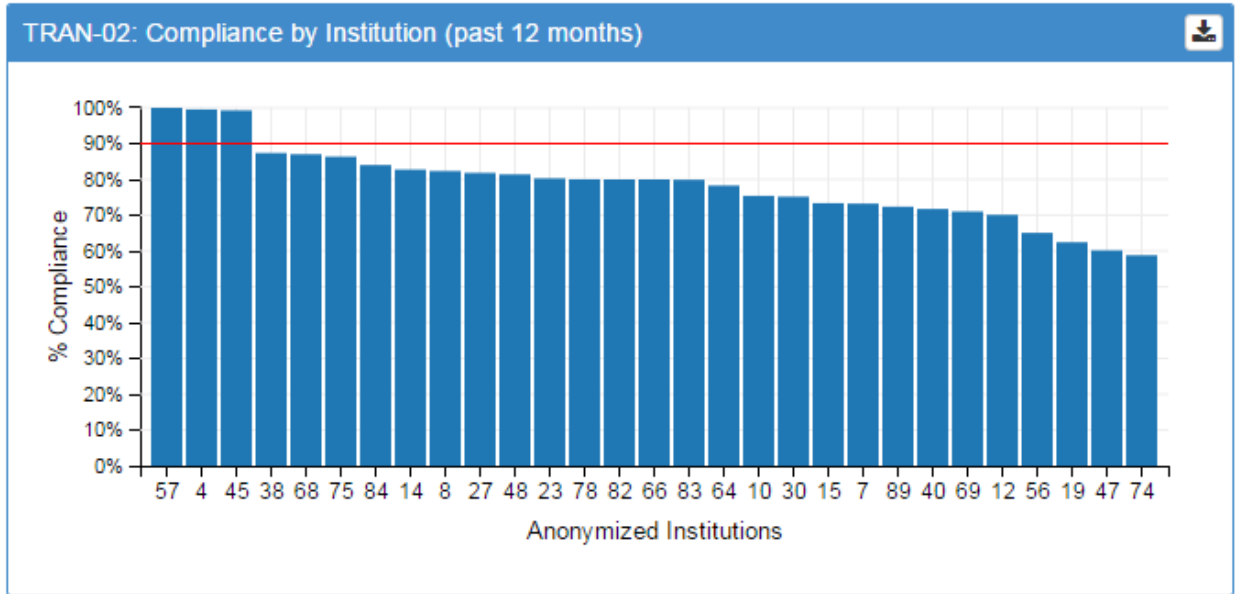
TRAN 01 Hgb/Hct Checked: All patients



TRAN 01 Hgb/Hct Checked: Patients < 12 years



TRAN 02 Post Transfusion Monitoring: All patients



TRAN 02 Post Transfusion Monitoring: Patients <12 years

