



Healthcare Organization Commitment

Contact Details

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Position

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Commitment Details

Commitment Name

APSS #5: Anemia and Transfusions

What Patient Safety Challenge does your Commitment address?

Challenge 5 - Patient blood management

Commitment Start Date

01/01/2016

How Many Hospitals Will This Commitment Represent

Commitment Summary

Errors in the use of blood products are a significant cause of hospital patient morbidity and mortality. To eliminate these errors, hospitals must implement an effective Patient Blood Management program. Children are no different in this regard, and given their at times very small size and normal physiologic nadir of hemoglobin in early infancy, are at risk for anemia and related transfusion need, and risks of both the clinical condition and associated treatments. Similarly, children are not immune to potential adverse reactions of transfused products, and all due care must be undertaken.

Commitment Description & Detail

CHOC continues its comprehensive blood management program this year, which spans the realm of blood collection, pheresis, clinical guidelines to reduce lab testing, practices to reduce laboratory blood test volumes, surgical/procedural practices, transfusion safety, and post-transfusion monitoring. As a tertiary-quaternary regional children's hospital, vulnerable patients are common here, with concomitant transfusion risks and benefits associated with their often chronic conditions. In alignment with the Patient Safety Movement Foundation's Actionable Patient Safety Solutions (APSS) checklist, CHOC Children's Hospital has completed and reached our goal of using the below checklist items. Our Transfusion Committee has the annual goal of 100% compliance with metrics involving consent and appropriate use of four types of blood products. Our clinical goal is zero adverse events associated with preventable transfusion-related complications, including severe anemia, severe transfusion reactions and Transfusion-Related Acute Lung Injury (TRALI). There were zero such events last year.

Action Plan

- A Commitment from hospital leadership to support a Patient Blood Management program that closes the performance gap by reducing unnecessary transfusions while speeding up needed blood transfusion and care for patients who truly need it.
- Clinical and safety leadership endorse the plan and drive implementation across all providers and systems.
- Establish the Patient Blood Management Committee, which replaces the traditional hospital transfusion committee, and appoint an MD chairperson to be responsible and accountable for leading this group.
- CHOC uses Transfusion, Ancillary and Diagnostics, Operating Room, Patient Safety and Joint Leadership Committees to co-manage related functions
- On a regular basis, distribute the blood product usage report by clinicians across the hospital to hospital leaders.
- Done at CHOC by the Transfusion Committee to individual practitioners. Individual performance is also tracked by the organizational medical staff peer review committee.
- Implement interdisciplinary blood conservation modalities, including:
 - Reductions of unnecessary laboratory tests, frequency of blood sampling, and "discard" volumes.
 - A consistent protocol for preoperative management of platelet inhibitors and other anticoagulants.
- Technology that has been shown to improve patient care, such as continuous non-invasive hemoglobin monitoring and red cell recovery technology in the

operating room (OR). • CHOC perioperative practice has changed to incorporate regular blood gas sampling that includes hemoglobin. Cell-saving technologies are applied operatively in all appropriate settings, and are a part of many Care Guidelines. -CHOC is currently working to establish protocols for anemia management, including: • Screen, diagnose and appropriately treat anemia prior to surgery, allowing adequate lead time to correct the anemia before surgery. • Identify patients at risk for needing transfusion. • Increase hemoglobin levels before surgery. • Minimize the risk of hitting levels that require blood transfusions. -When appropriate, establish single unit transfusion policy and advocate for restrictive transfusion practices. -Document hemoglobin levels before the transfusion of each RBC unit, when possible. -Consider alternative therapies to RBC transfusions, such as intravenous iron or erythropoietin stimulation agents (ESAs). -Continuously monitor the effectiveness of the Patient Blood Management program, and use the results of this monitoring in medical staff educational sessions as a part of Continuous Quality Improvement (CQI). -We are currently working to develop a Patient Blood Management education program for emergency and elective hospital admissions, targeting medical students, physicians, nurses, pharmacists and other healthcare staff. • As an example, the CHOC Electronic Health Record (EHR) CPOE and Decision Support functions provide real time guidance to personnel ordering blood products, particularly for products ordered when evidence-based practice guidelines do not provide clear cut management.

Commitment Timeline

These checklist items are currently in place at CHOC Children's. Our commitment to this APSS will be ongoing and reported annually to PSMF.

Impact Details

Lives Saved

Methodology for Determining Lives Saved

The CHOC Children's transfusion medicine program follows all patients, surgical and medical, for transfusion-associated morbidity and mortality. There were zero events of moderate or severe TRALI or hemolytic reactions, and zero mortalities in the last two years.