Initial Blood Management Rollout

To be completed within the first 3-6 months

Key Words: implementation plan, Blood Management, first steps, next steps

Expected Blood Management Deliverable

See Appendix, below.

Introduction

This document outlines the strategic steps to building a solid, system-wide blood management program. Blood management is a hospital-wide program: it involves much more than the blood bank or even the laboratory. Since World War II, infusion of blood products have become the second most common procedure in hospitals representing significant costs, both in direct acquisition as well as the activities associated with transfusion within the hospital itself. Until recently, however, little research has been performed to understand the total risk versus benefits of transfusions. Like other pharmaceuticals, blood products should be given following the Goldilocks' principle (not too much, not too little, but given at just the right amount). Understanding the right amount to transfuse is a clinical decision that must incorporate evidence-based guidelines and the experience of the medical staff along with the demographics of the patients served. Repeatedly, it has been demonstrated that 25-60% of all components transfused are unnecessary, resulting in more physicians rethinking their own transfusion practices. This Optimum TX project is designed to facilitate and complement efforts to improve transfusion practice and patient outcomes while reducing costs within the hospital setting.

Objectives of Module

1. Help demonstrate organizational leadership's commitment to the success of the Blood Management Program
2. Develop awareness of the program system-wide
3. Reinforce the importance of developing and enhancing internal infrastructure and multi-disciplinary relationships to the success of a blood management program.
4. Maintain system-wide enthusiasm and interest through frequent communication and positive reinforcement of accomplishments

What is Known

Any successful strategic project needs leadership with a solid handle on the intangibles: passion, communication, vision, consensus, and persistence with a balance of a sense of urgency and patience. Cross departmental projects also need an oversight committee of key stakeholders that will act as the strategic focal point for the initiatives and a more technical project manager to drive success.   The four pillars of a successful blood management system are;

1) clear support from the executive and medical leadership,

2) evidence-based metrics (internally and externally derived, including peer-reviewed articles and audits);

3) physician motivators (physician champions and physician-based metrics),

4) an active multidisciplinary process improvement focus throughout the hospital.

The pillars rest on a solid foundation of "quality", and are covered by a comprehensive communications plan that reaches up and down the organizational structure to all employees.   The chart below may provide insight as you develop your own implementation plan for blood management. We hope it will help guide your efforts to success. Blood Systems, Inc. (BSI) is a ready and willing partner on your journey.

Best Practices, Guidelines, and Recommendations

See Appendix, below.

Discussion Points

(1) CEO and Executive Leadership: Each hospital has its own governance and communication models, so there is no single best model. However, it is absolutely critical that the Blood Management be seen as being supported from the top down and implemented bottom up. To that end we will use "CEO" here and other modules as a placecard for Executive Leadership. Regardless of who actually performs the tasks, it is still vital that the staff know how important their projects are considered important and vital at the highest levels in the organization. It is up to the individual hospitals to determine how best to do that.

(2) Key Stakeholders may include: (*Blood Management: Options for Better Patient Care, AABB Press 2008; Shulman et al. Hema 2005, 483-90*)

- Administration, Finance/supply chain, Nursing, Quality/Risk management, Performance Improvement, Information Technology, Blood Bank/Laboratory, POCT, Pharmacy, Support services (eg Admissions, Surgical Services), Key departments (Emergency Room, Department of Medicine, Hematology, Surgery, Critical Care/ICU, OB/GYN, Anesthesiology, Outpatient), etc.

- In the end, the patient is the ultimate stakeholder. What is best for the patient should be what's best for Blood Management.

(3) Multi-disciplinary teams employed for system-wide process improvement (*see Multi-disciplinary Team module for more details and Safe Handovers: Safe Patients: Guidance on Clinical Handovers, BMA at* http://www.bma.org.uk/images/safehandover_tcm41-20983.pdf)

- "For Hospitals, handoffs [between departments] have long been the Bermuda triangle of health care." (Wall Street Journal, 6/28/06)

- "A hand-off is a precision maneuver, but in medicine it has been left to happenstance." –Richard Frankel PhD professor of medicine at Indiana Univ

(4) Transfusion Safety Officer (*http://www.bloodmanagement.com/the-bleeding-edge-bulletin/what-is-a-transfusion-safety-officer-tso, see module for more details*)

- ideally reports outside of the laboratory (eg to a Chief Clinical Officer or Risk Management) and has sufficient stature, experience, and respect within the organization to drive change
- can be either a nurse or a medical technologist but must possess a hybrid of both skills
- must possess a balance of strong interpersonal and communication skills with ability to handle technical details, be a consensus builder while being seen as the subject matter expert

(5) Identify an early project win (*see Project Management Essentials Module for more details*)

- A successful early project should motivate both hospital executives and physicians.
- Physicians will more easily be engaged if blood management results in improved patient safety and/or personal time efficiency.
- Hospital executive leadership is, in general, motivated by the same things as physicians with an added focus on cost savings.
- It is better to select initiatives that can be completed successfully in the early stages of implementation to reinforce support. Once support is established and the culture is changing to meet new expectations, stretch goals are preferred.

(6) Areas most hospitals see immediate benefit (*Transfusion Diagnostics summary, unpublished*)

- establish and approve standardized Clinical Guidelines/Transfusion Triggers
- limit double RBC transfusions
- limit unnecessary iatrogenic blood loss
- standardize pre-transfusion testing
  - Institute Type and Screen protocol based on MS-BOS
  - Implement standard laboratory specimen rejection criteria
- begin Monitoring
  - RBC Crossmatch: transfusion ratio (CT ratio) and discards (wastage)
  - clearly define numerators and denominators for everything monitored, such as
    - efficiency of the transfusion service (Turn around time (TAT), Blood Product Deviations)
    - efficacy of the transfusion review committee
- Consider additional opportunities
  - TSO training (provided by BSI)
  - electronic crossmatch
  - anemia clinics or standardized pre-procedure anemia protocols
  - guidelines for recombinant Factors, topical hemostatics, volume expanders, point of care testing

Additional Resources

If you have questions, or if you need additional guidance, please contact your Blood System's team.

Several Optimum TX modules might interest the reader;

- Getting Started in Blood Management Series
- Multidisciplinary Team
- TSO
- Project Management Essentials

Blood Management: Options for Better Patient Care, AABB Press 2008.

Getting Started in Patient Blood Management (Digital Book), AABB Press 2011.

References

Shulman et al. Hema 2005, 483-90.

Safe Handovers: Safe Patients: Guidance on Clinical Handovers, BMA (*BMA at http://www.bma.org.uk/images/safehandover_tcm41-20983.pdf*)

TSO Overview: http://www.bloodmanagement.com/the-bleeding-edge-bulletin/what-is-a-transfusion-safety-officer-tso