

Blood Management Performance Measures



Jonathan H. Waters, MD
Professor of Anesthesiology and Bioengineering
University of Pittsburgh
Chief, Dept. of Anesthesiology, Magee-Womens Hospital
Medical Director, UPMC Total Blood Management Program

Joint Commission Standards

- ▶ Standards address the organization's level of performance in key functional areas.
- ▶ Standards set forth performance expectations for activities that affect the safety and quality of patient care.
- ▶ The Joint Commission develops its standards in consultation with health care experts, providers, measurement experts, purchasers, and consumers.

What are “Performance Measures”?

Indicators, statistics or metrics that are used to gauge the performance of an activity, process, or operating entity. Performance measures are also the reference markers used to measure whether a goal is being achieved.

Measure Criteria

▶ Important

▶ Scientifically acceptable

▶ Useable

▶ Feasible

Blood Management Performance Measures

#	Measure Name/Priority	Numerator	Denominator	Included Population
BM-6	Preoperative anemia Screening	Patients with preoperative anemia screening 14-45 days before Anesthesia Start Date	Selected elective surgical patients Exclude: •patients with preoperative anemia screening date < 14 days from surgery •patients < 18 years of age	Cardiac, orthopedic & hysterectomy elective surgeries

Rationale: Development of formal protocols for preoperative testing of hemoglobin (hgb) for potential high blood loss elective surgeries could be used to identify and intervene for optimal management of blood resources. Preoperative anemia often goes unrecognized and untreated unless tests are ordered in advance of a planned surgery. Early recognition of anemia offers patients an opportunity to receive the most appropriate transfusion-sparing strategy, and avoid the risk of a potential transfusion. Researchers have shown that preoperative hgb and hematocrit can be used as predictors of outcome for specific types of patients such as cardiac artery bypass graft or orthopedic surgery. In a study by Salido, orthopedic patients with a preoperative hemoglobin <13 g/dL had four times the risk of transfusion than those with a hemoglobin level between 13 g/dL and 15 g/dL.

Joint Commission Blood Management Performance Measures

TABLE 4. Final measure set*

Number	Measure name	Measure	Comments
PBM-01	Transfusion consent	<i>N:</i> Patients with a signed consent who received information about the risks, benefits, and alternatives before the initial blood transfusion or the initial transfusion was deemed a medical emergency. <i>D:</i> Patients who received a transfusion of RBCs, PLTs, or plasma.	Include all patients
PBM-02	RBC transfusion indication	<i>N:</i> Number of RBC units (bags) with pretransfusion Hb or Hct result and clinical indication documented. <i>D:</i> Number of transfused RBC units evaluated.	Include all patients
PBM-03	Plasma transfusion indication	<i>N:</i> Number of plasma units (bags) with pretransfusion laboratory testing and clinical indication documented. <i>D:</i> Number of transfused plasma units evaluated.	Include all patients
PBM-04	PLT transfusion indication	<i>N:</i> Number of PLT doses with pretransfusion PLT testing and clinical indication documented. <i>D:</i> Number of transfused PLT doses evaluated.	Include all patients
PBM-05	Blood administration documentation	<i>N:</i> Number of transfused blood units/doses (bags) with documentation for all of the following: <ul style="list-style-type: none"> • Patient identification and transfusion order (or blood identification number) confirmed before the initiation of transfusion • Date and time of transfusion • Blood pressure, pulse, and temperature recorded before, during, and after transfusion. <i>D:</i> Number of transfused RBC, plasma, and PLT units/doses (bags) evaluated.	Include all patients
PBM-06	Preoperative anemia screening	<i>N:</i> Patients with documentation of preoperative anemia screening 14-45 days before anesthesia start date. <i>D:</i> Selected elective surgical patients.	Elective orthopedic and hysterectomy surgeries; patients >18 years of age
PBM-07	Preoperative blood type screening and antibody testing	<i>N:</i> Patients with documentation of preoperative type and screen or type and crossmatch completed before anesthesia start time. <i>D:</i> Selected elective surgical patients.	Elective cardiac, orthopedic, and hysterectomy surgeries; patients >18 years of age

* http://www.jointcommission.org/patient_blood_management_performance_measures_project/
D = denominator; N = numerator.



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1. **Blood transfusion: percentage of red blood cell (RBC) transfusion episodes when the HB reading is 100g/L or more, during the 6 month time period.** 2010 Jan. NQMC:005760
Australian Council on Healthcare Standards - Health Care Accreditation Organization. *View all measures by the developer(s)*

2. **Pneumonia: percent of patients whose initial emergency room blood culture specimen was collected prior**

Conclusions:

- ▶ NHS should adopt blood management performance measures in order to improve clinical outcomes and reduce variability in care.
- ▶ Should adopt on the local and national level, given adequate available resources.
- ▶ Joint Commission measures are validated and vetted, making them easy for adaptation.

Questions?

Jonathan Waters, M.D.
watejh@upmc.edu