Patient Safety Alert

File Number: 16/17-03
February 7, 2017

ENSURING TIMELY PATIENT REGISTRATION AND AVAILABILITY OF BLOOD PRODUCTS

Pre-registration of trauma patients arriving by emergency medical services to the emergency department, along with clear care protocols such as massive transfusion protocols, can reduce delays in the provision of care.

RECOMMENDATIONS

The Ministry of Health recommends regional health authorities and health care organizations:

- **Have a standard procedure to "pre-register" incoming Level 1 trauma patients with as much identifying information as is available from the transferring emergency medical service.**
- **Have protocols in place for massive transfusion, including roles and responsibilities of those involved. Appropriate staff will be trained and comply with the protocol.**
- **Have a standard procedure that ensures a unique identifier meeting the patient identification requirements of the Transfusion Medicine Laboratory is assigned to patients in a timely way in the event of a malfunction in electronic information systems in registration areas.**

Supporting Documents

1. Canadian Standards Association – Blood and Blood Components CSA Z902-15
2. Work Standard – Traumas Needing Blood – Saskatoon Health Region
3. Work Standard – STAT Patient Registration Process – Regina Qu'Appelle Health Region

Background of the Critical Incident

At 09:33 hrs, the emergency department was notified of a level 1 trauma alert with an estimated time of arrival of 15 minutes or less. The patient was unconscious and in critical condition. Eight units of type O negative blood were immediately requested for the patient but could not be issued until the patient was registered in the emergency department. The patient arrived in the emergency department at 09:45 hrs in cardiac arrest. Blood products were available to the emergency department at 09:55 hrs and the first unit of blood was hung at 09:59 hrs. The massive transfusion protocol was activated by the emergency department at 10:00 hrs. For the next 30 minutes, the emergency department worked to stabilize the patient, giving the patient several units of O negative blood product.

The patient was taken to the operating room at 10:30 hrs. There was confusion in obtaining the ordered units of red blood cells, plasma, and platelets because the massive transfusion protocol had not been communicated by the emergency department staff to the operating room staff.

Analysis

It is estimated that blood products were delayed in getting to the patient's bedside by 10-15 minutes due to the cumulative requirements of registering the patient, issuing, collecting and delivering the blood products to the bedside.

Contributory Factors

At the time of the incident, the patient registration process required a patient to be on-site before any registration could occur, even as an unidentified patient. The patient registration system generates a unique patient identification number that is required for all other ancillary services. Without a unique patient identification number, the Transfusion Medicine Laboratory was unable to issue blood products, due to the risk of patient misidentification and ABO-incompatible transfusion.

The first computer used to register the patient on site became non functional. A second computer was accessed to register the patient. The estimated delay was an additional 1-2 minutes in registering the patient.

issuing facility and the receiving facility in maintaining traceability of the blood component to its final disposition.

9.5.3 Within a facility

Operating procedures shall be in place that clearly define

a) individuals who may sign out blood components from the transfusion service and transport them to the recipient's location;
b) transportation conditions and acceptable time frames for blood components to be in transit;
c) acceptable time frames from the time blood components are released from the transfusion service until the time the transfusion is completed (Clauses 11.4.5 and 11.4.6 shall apply); and
d) appropriate processing and storage procedures.

10 Requests, pre-transfusion testing, selection of components, and acceptance criteria

10.1 General

10.1.1

The facility shall have operating procedures for acceptance of blood components into the facility.

10.1.2

The facility shall have operating procedures for

a) the management of requests for blood components;
b) pre-transfusion testing of the recipient;
c) pre-transfusion testing of the blood components intended for transfusion;
d) the selection of blood components for use; and
e) confirming essential identifying information at time of pickup (See Clause 10.2.4).

These procedures shall be consistent with the requirements in Clause 10.2 to 10.10 and shall be maintained as specified in Clause 4.6.1.6.

10.2 Requests

10.2.1

Requests for blood components shall be documented and shall contain sufficient information to allow for unequivocal identification of the recipient. Verbal requests may be accepted in emergency circumstances but shall be followed up with the appropriate written or electronic documentation. The request shall include at least the following information:

a) the first and last names of the recipient or equivalent information if these are not available (see Clause 10.2.2);
b) the identification number of the recipient or equivalent information if this is not available (see Clause 10.2.3);
c) the recipient's location;
d) the blood component being requested;
e) the required volume or quantity of the component; and
f) special requirements, if any.

10.2.2

If any of the information required by Clause 10.2.1 is incomplete, inaccurate, or illegible, the request shall not be accepted by the transfusion service unless an alternative procedure, as provided for in Clauses 10.2.5 and 10.2.6, is being used.

10.2.3

The request should also include the clinical indication for the blood component.

10.2.4

The operating procedures for pickup of blood components shall include steps to ensure there is sufficient information to link the blood component with the request and the intended recipient. Blood components shall not be released for pickup without the necessary information, which shall include at least the following:

a) full name of the recipient;
b) recipient identification number; and
c) name of the blood component or product being issued.

10.2.5

There shall be an operating procedure concerning recipient identification in emergency transfusions and for other situations where the patient's identity is unknown.

Note: *Such situations can occur in emergency rooms*

10.2.6

There shall be unequivocal identification of the recipient before drawing blood samples for pre-transfusion testing. This shall include verification of the recipient's identification number or, if this not available, the alternative procedure in Clause 10.2.7 shall be used. If inaccuracies or discrepancies are discovered during the identification process, blood samples shall not be collected until the inaccuracies or discrepancies have been satisfactorily resolved.

10.2.7

There shall be a written procedure for the establishment of positive identification in situations where recipients do not have an identification number.

Note: *Such circumstances can occur in instances where specimens are drawn outside of the health care facility or when pre-operative tests are performed on an outpatient basis.*

10.3 Recipient blood samples

10.3.1

The name, initials, or computer identification code of the person drawing the blood sample shall be documented, as well as the date and time of collection. This information shall be retained for one year in a place where it can be readily retrieved if needed (e.g., the patient's chart or the transfusion record or the written or electronic request for the sample).

10.3.2

At the time of blood sample collection, in the presence of the recipient, the tube shall be labelled with the recipient information. The recipient information on the label shall include at least two identifiers, one of which shall be the recipient name. The person taking the sample shall verify that the information on the label of the sample matches the identity of the recipient. All documentation that accompanies a

Putting Patients First Transforming Health Care through Lean Jba-Consulting	**Name of Activity: Traumas needing blood** **Role performing Activity: Registration Clerk**		
WORK STANDARD	**Location: ER Registration**		**Department: Registration Services**
	Document Owner: Registration Managers	**Region/Organization where this Work Standard originated: SHR**	
	Date Prepared: April 8, 2014	**Last Revision: Oct 1 2015 July 18, 2016**	**Date Approved: Dec 7 2016**

Work Standard Summary:
When we are unable to obtain Patient name, DOB, and HSN, we will register the patient as a DOE

	Essential Tasks:
1.	Triage RN notifies Registration of a Trauma needing blood on route and gives Registration clerk the PATIENT NAME, DOB, and HSN.
2.	Registration Clerk looks patient up in SCI.
3.	Registration Clerk Registers patient in Enovation: Arrival mode: Stretcher Accompanied by: Ambulance Presenting complaint: Trauma needing Blood (or ER Visit) Location: EMER Attending: ZZZZZ (Level one trauma, use the Trauma team leader on the RUH ER dept daily call list
4.	Print:, Armband, 1 sheet of labels, Med REC Label: Emergency Department Initial Order Set, Practitioner's orders, and Allergy Intolerance record
5.	Give package to the triage RN. Keep one label for yourself in order to update arrival time when patient arrives at RUH
6.	Triage will notify Registration when the patient arrives. Once patient arrives, use labels to update arrival time: click on Visit Professional Maintenance, Visit Detail, back space the time and enter the current arrival time, save, save.
7.	If family presents please confirm all patient information and update Enovation. When time permits update the patient EROP in ER with proper information.
8.	In cases where you have registered the Level 1 trauma needing blood as a DOE, update the patient information asap as a priority. Ensure you update all ancillary departments via phone (Pharmacy, MI, Lab). Give updated forms to ER. Keep a copy for Health Information Support Services.

Supplies:

Putting Patients First better health • better care • better value • better teams	**Name of Activity**: STAT Patient Registration Process – TTA 1 &2 presenting with Regina EMS **Role Performing Activity**: EMS, RGH ER Registration Clerk, Triage and Primary Nurse, RGH ER Unit Clerk		
Regina Qu'Appelle HEALTH REGION **WORK STANDARD**	**Electronic Location**: **Hard Copy Location**:		**Department**:
	Document Owner: Cory Brossart, EMS Kristy Waffle, Emergency Jamie Appel, Trauma Manager RGH Registrations **Position**: **Email**:		**Source :** Regina Qu'Appelle Health Region **AND/OR**
	Initial Date Prepared: 03/02/2016 **Email electronic revisions to:** **Replication.Specialist@rqhealth.ca**	**Status Date(s)**: 07/03/2016 15/12/2016	**Status**: Trial Trial

Work Standard Summary: STAT Patients currently refer to **Level 1 and 2 Trauma Patients, coming from Regina EMS**
**Success of this trial could lead to the inclusion of Stroke Alerts, MI Alerts and Cardiac Arrest

	Essential Task
1.	**EMS** will arrive on scene and determine a STAT Registration.
2.	**EMS** will send verified patient identification or unidentified determination to the RGH Emergency Room Registration Clerk via JABBER. ***Work Standards – Patient Identity Verification, Entering JABBER Information, and Unidentified Process should be followed.
3.	**RGH Emergency Room Registration Clerk** will register the patient using the information sent via JABBER.
4.	**Registration Clerk** will send a response to EMS via JABBER indicating that the registration is complete.
5.	**Registration Clerk** will attach the STAT REGISTRATION reminder to the Pink Sheet. 
6.	**Registration Clerk** will hand the patient chart to the triage nurse.
7.	**Triage nurse** receives the chart from registration clerk, assigns patient to a room once patient name is populated in SCM, ensures that chart is taken to the patient room and notifies the primary nurse a STAT patient is enroute.

8.	When EMS patches, **triage nurse** will update triage note with information provided in patch and update with an ETA.
9.	Once patient is assigned to a room, the **Primary nurse** for that room will • Prepare team and room for patient arrival • Open Trauma Electronic Document on SCM in the assigned room and complete the pre-hospital information as provided by the triage note and updates • Prepare necessary medication as directed by the TTL • Ensure lab requisitions completed as directed by the TTL
10.	Patient arrives in room: • **Primary nurse** will document the time the patient arrives on the pink sheet • **Unit clerk** will check the patient arrival time box on the SCM facility board
11.	**Primary nurse** will continue documenting trauma resuscitation on the Trauma Electronic Document.