Guideline 5

Monitoring of Patients Receiving Transfusion

5.1 Purpose

Best practice guidelines are established for nurses in order to align with the standards set forth by the American Association of Blood Banks (AABB), Accreditation Canada (AC), Transfusion Services, Canadian Standards Association (CSA), and the Canadian Society of Transfusion Medicine (CTSM) for safe patient monitoring during transfusion of blood, blood products, and blood components.

5.2 Policy

Policies must be in place for all products derived from human blood as it places recipients at risk for a transfusion reaction. These reactions may be mild or life threatening, and therefore adequate monitoring of patients receiving a transfusion is essential in the recognition of a transfusion reaction.

5.3 Documentation

Assessment and vital signs monitored during a transfusion shall be written on the Cumulative Blood Product Record (CBPR) and any extra documentation should be in completed as an integrated progress note (IPN).

5.4 Materials

- Stretcher, reclining chair, bed, or equivalent
- Monitoring equipment (i.e. vital sign machine)
- Access to emergency medication
- CBPR

5.5 Quality Control

A facility-based quality improvement system or process should be in place to ensure compliance to the monitoring of patients receiving a transfusion through random patient and health care record audits, and/or other quality improvement mechanisms. Health Care Facilities/Service Delivery Organizations should implement a quality improvement system facilitated through the Transfusion Practice Committee to monitor compliance.

An education and/or competency program shall be established for all personnel involved in the transfusion process.

5.6 Procedure

Action	Key Points
Educate the patient about possible side effects that may occur as a result of the transfusion. • Instruct the patient to report if they are experiencing any symptoms immediately. Complete a pre-transfusion assessment with measurement of baseline vital signs. • Include: temperature, blood pressure, pulse, respiration rate, oxygenation saturation, and oxygen source.	• **Prior to the administration of any blood, blood component, and/or blood product, the patient must be informed, either verbal or written, about the possibility of adverse events.** • **Vital signs must be obtained and documented within 30 minutes prior to the start of the transfusion.** • **Identify any pre-existing symptoms that could be confused with a transfusion reaction (example: fever, rash, shortness of breath, lower back pain).** • **Document vital signs on the CBPR.** • **Document other findings in an IPN.**
Review the patient's transfusion history. • Assess if the patient is at increased risk for developing serious adverse events (example: elderly, low body weight, ACE inhibitors).	**Determine if the patient has any red cell antibodies, previous transfusion reactions, or special requirements.**
Once the transfusion has been established, remain with the patient for the first 15 minutes. Assess and record vital signs after the initial 15 minutes.	**You must stay with the patient for the first 15 minutes with the start of each new unit.**
Monitor and record vital signs every hour during the transfusion, upon completion, and one hour post transfusion. • Obtain post transfusion vital signs prior to removal of direct venous access In ambulatory or outpatient settings, post transfusion vital signs are carried out at the discretion of the transfusionist. In the event a patient exhibits signs and symptoms of an adverse reaction, the transfusionist should follow the established hospital policy and procedure for management of adverse reactions. See Guideline 7.	**Vital signs may occur more frequently based on the patient's clinical status.** **More frequent vitals are recommended for patients:** • **Who are unstable prior to transfusion** • **With a history of previous transfusion reactions** • **Who appear to be experiencing a transfusion reaction** • **At increased risk of developing serious adverse transfusion events**

Reporting

In the event of an adverse transfusion reaction, reporting shall be completed on the Transfusion Reaction Form (CM105). Refer to Guideline 7 for further information.

5.7 Notes/Special Considerations

- See individual product monographs for specific monitoring requirements.
- The transfusionist must be available for the *entire* duration of the transfusion, and for inpatients, at least 30 minutes following transfusion. An attending physician, or designate, must also be available for consult to any patient undergoing a transfusion.
- Most transfusion reactions occur within 30 minutes of administration. Therefore, direct observation and monitoring of the patient is essential in the first 15 minutes.
- In outpatient settings, monitoring patients post transfusion is at the discretion of the transfusionist.