

## Provincial Platelet Audit

### Background

The Provincial Agencies Trillium Gift of Life Network/Blood and Specialized Program (PATB, formerly the Blood Programs Coordinating Office) of the Ministry of Health and Long-Term Care was established in 2005. One of the PATB mandates is to lead the implementation of a provincial blood utilization strategy and monitor and make recommendations for initiatives related to blood and blood components. The Ontario Regional Blood Coordinating Network (ORBCoN) was established by the PATB in 2006 to provide an organized and integrated approach to blood management.

The Provincial Platelet (PLT) Audit project is a key activity of the provincial blood utilization strategy. This is the first time PLT utilization has been audited province-wide. Audits worldwide have shown wide variation in PLT utilization with inappropriate/non-compliant PLT use ranging from 29-43%. As PLTs are often in short supply, with critical shortages occurring often, appropriate PLT utilization will ensure those patients that legitimately require a PLT transfusion will have access to these products.

### Purpose and Rationale

The goal of this PLT audit is to determine baseline data for appropriateness using evidence-based adjudication criteria. As a requirement of the Canadian Standards Association (CSA), annual audits shall be conducted by each facility. Participating in this audit will satisfy the requirement for this standard. To facilitate ease of data collection, a web-based audit tool has been created.

### Population to be studied

This data collection project will focus on all platelets orders at the participating sites over a 3 month period (or maximum number of orders-see Sample size section). There will be no interaction with patients to collect these data. The data elements required are as listed below:

- Hospital site
- Patient care area
- Date of transfusion
- Patient age (YOB)
- Indication for platelet transfusion (bleeding status/planned procedure/medications)
- Pre/post transfusion platelet counts
- Number of units ordered/transfused
- Ordering physician specialty



**Please note: Ethics approval may be required depending on each facilities protocol for this type of activity however most REB would consider this a quality improvement initiative.**

### **Sample size**

The data collection period will occur for a maximum of 3 months (or maximum number of orders-see table below) from January 9th to April 7th, 2017. All Ontario hospitals will be invited to participate in the provincial audit.

<b>Hospital Classification</b>	<b># of platelet orders/duration</b>
Small Community	10 platelet orders or 3 months
Medium to large Community	25 platelet orders or 3 months
Teaching	50 platelet orders or 3 months

### **Method**

A prospective review of the clinical indications and laboratory data in all transfusion episodes of platelets for a maximum of 3 months. When an order for platelets is received in the Transfusion Medicine Service during the audit period, all required data elements for each order will be entered into the web-based audit tool.

Elements required for identification of patients (first name, last name, hospital identification number) will only be entered on log sheets located at the participating site. Each order will automatically be assigned a study code number when entered into the web-based portal, and all audit data is stored on a secure server housed by the Ontario Regional Blood Coordinating Network.

### **Definition of end-point**

Successful data collection and web-based entry for a 3 month period (or maximum number of orders) at all participating sites signals the end-point of the data collection period.

### **Outcome**

Following audit completion, all data will be validated and an analysis of the data will be conducted to determine appropriateness of each platelet order based upon adjudication criteria. A provincial audit report will be created using aggregate data that is anonymized. The final provincial audit report will be provided to all Ontario hospitals.

