Background

“Haemovigilance is required to identify and prevent occurrence or recurrence of transfusion-related unwanted events, to increase the safety, efficacy and efficiency of blood transfusion, covering all activities of the transfusion chain from donor to recipient.”

The World Health Organisation and the International Haemovigilance Network emphasise the fundamental role of reporting systems in enhancing patient safety by learning from failures of health care systems. Effectiveness of haemovigilance systems should be measured not only by data reporting and analysis but by the use of such systems to improve patient safety.

In NSW, the centralised Incident Information Management System (IIMS) is voluntary, however, notification of some transfusion complications is mandatory. Haemovigilance in NSW is managed at a local level and analysed by the CEC with a biennial report submitted to the National Blood Authority (NBA) for inclusion in the Australian Haemovigilance Report.

Since 2005 the reporting of blood and blood product incidents has increased.

National Standard or Strategic Imperative

7.2 Undertaking a regular, comprehensive assessment of blood and blood product systems to identify risks to patient safety and taking action to reduce risks

7.3 Ensuring blood and blood product adverse events are included in the incidents management and investigation system

Aim Statement

• In six months, 100% of notified transfusion reactions at pilot sites will be followed up appropriately
• In six months, 100% of notified transfusion reactions at pilot sites will have a documented appropriate clinical response

Problem identified

• 23% of reported transfusion reactions are unclassifiable due to limited information (source: NSW IIMS)
• Feedback from Blood Watch network members revealed variations in management of blood and blood product incidents and suspected under-reporting of transfusion reactions
• Blood Watch unable to provide data on blood and blood product complications that maps with the National Data Dictionary

Diagnosis of the problem

Factors contributing to under reporting of transfusion reactions

Results

The diagnostic phase of the project, involving the manual classification and analysis of over 17,000 blood and blood product related notifications, provided a vast quantity of data to identify risk and inform and guide process improvements. These have been incorporated into the Blood Products module of the new incident management system IMS+ currently in development.

Delays to the implementation of the IMS+ program to pilot sites, has affected the progress of this project, and project aims have not been achieved.

Outcomes:

• New dataset developed for Blood and Blood Product related incidents in IMS+
• Suite of haemovigilance tools developed and to be implemented with the roll-out of IMS+
• Transfusion complications mapped to the Australian Haemovigilance Data Dictionary
• NSW data submitted for inclusion in the Australian Haemovigilance Report now compliant with NBA requirements

Plans to sustain change

Standardisation

• Implementation of IMS+ across NSW planned for 2017

Documentation

• PD20012_016 Blood – Management of Fresh Blood Components to be updated March 2017
• Tools embedded within IMS+ system

Measurement

• RCAs and SAC 1 incidents reviewed by Blood Watch
• Blood Watch will continue to analyse all IMS+ Blood and Blood Product incidents and complications on an annual basis

Training

• Hover-over tool tips and policy jump-out within reporting environment
• Generic IMS+ training

Plans to spread /share change

Done:

Ten Years of Haemovigilance: A Systematic Review of Patient Safety Data in New South Wales, Australia presented at International Society of Blood Transfusion Congress, Dubai, September 2016

Ten Years of Haemovigilance: A Systematic Review of Patient Safety Data in New South Wales, Australia published in Vox Sanguinis, September 2016

Planned:

• Spread is implicit in state-wide approach for the implementation of IMS+
• Publication of focus report based on the analysis of historical haemovigilance data obtained from current incident management system

Team members

Guidance Team
Sally Francis – Blood Watch Program Lead
Project Team
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A Clinical Practice Improvement Project