

Right blood right patient- improving blood administration safety in the emergency department setting.

Katie Murdoch, Catherine Walker, Meredith Symons, Andy Waugh, Lauren Kite, Sharyn Ireland, Sorcha Carwood, Carly Challis, Chris Ackers

The administration of blood products to the wrong patient is widely accepted as one of the most serious hazards associated with blood transfusions. Prior preparation before blood administration and bedside pre-transfusion checking procedures are vital for ensuring the right blood is administered to the right patient, preventing the potential for fatal errors.

Over the course of 2011 and 2013, there were four serious blood transfusion errors. After local and wider organisational investigations, including a root cause analysis, the errors were attributed to a confluence of complex events from issue of the product from the Blood bank to product administration at the bedside.

These errors highlighted a need for improved local processes around blood product administration. In order to achieve this, there was a need to identify and understand the human factors contributing to these errors. A multidisciplinary blood-working group was established in October 2013 to examine and improve current processes when ordering, checking and administering blood in the Emergency Department and Trauma Centre (E & TC).

In January 2014, key changes around the process of blood product ordering and administration in the E & TC were implemented. A clear process of communication for activation of the Massive Transfusion Guideline between the medical and nursing team members was established as well as a structured communication tool for use between the E & TC Clinician and blood bank staff. Implementation of a 'Time out' principle with use of a specific transfusion trolley and visual cues was established and disseminated extensively to all clinical staff.

While formal evaluation of the changes is still being conducted, there have been no further blood transfusion-associated errors. Using a multi-faceted approach to the preparation and administration of blood products will improve transfusion safety and minimise the risk of transfusion errors in the emergency department setting.