Figure 1 (from full report): Number of validated clinical and procedural reports and health services reporting to STIR each financial year

Figure 4 (from full report): Clinical reactions reported FY17

Clinical recommendations

1. Patient blood management strategies should be considered in all patients, to either eliminate or reduce the need for transfusion, thereby minimising risk to the patient (case study 4).

2. Education is important for all staff involved in blood administration. It should include monitoring, management and reporting of reactions. Several reactions were only found on audit, or when a second reaction was reported/investigated (case study 8). Patients and/or their carers should also receive education regarding potential reactions and what to report to nursing or medical staff.

3. A national database of red cell antibodies would reduce the risk of the occurrence of haemolytic reactions. Pathology services would be able to check for previously identified antibodies undetectable at time of later pre-transfusion testing, and to provide antigen negative red cells for transfusion. Haemolytic reactions often increase the level of care required and/or associated length of stay (case studies 4 and 10).

4. Steroids are of little use in the immediate management of allergic transfusion reactions. Rather, they should be considered for prevention of delayed recurrence or for premedication in patients at high risk of further events.
Procedural recommendations

1. The timing of transfusion should be considered, as 22 per cent of routine transfusions (procedural errors) occurred between 8 pm and 8 am. These times are not ideal for staffing, monitoring of the patient and patient comfort.

   ‘Transfusion must only take place when it is appropriately resourced; that is, where enough trained staff are available to monitor the patient, the patient can be observed and emergency medical support is readily available. Overnight or out-of-hours transfusion should be avoided unless clinically indicated’ (ANZSBT/RCA Guidelines for the administration of blood products, 2018) – that is, when the transfusion cannot be delayed due to the risk to the patient.

2. Transcription of patient results is not recommended, especially handwritten reports into medical records. Where possible, electronic methods that do not require transcription, such as scanning the pathology report to add to the medical record, or direct enquiry of the electronic result is a better option (case study 17).

3. Zero tolerance for specimen labelling issues must be followed. Any errors must result in the recollection of the specimen (case study 14).

4. Patient identification in all circumstances and for all aspects of the transfusion process must include identification of the patient by direct enquiry, where possible, and/or direct comparison of the patient identity on the wristband attached to the patient with the request or order and the identification attached to the blood product. This includes patients in isolation, or the emergency setting (case studies 12 and 13).

5. Prescriptions for blood and blood products must clearly state the product required and any modifications. Staff accepting these prescriptions must ensure they understand exactly what is required (case study 16).