

Right Blood Right Patient (RBRP) n=200

8

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Definition:

Incidents where a patient was transfused correctly despite one or more serious errors that in other circumstances might have led to an incorrect blood component transfused (IBCT).

Key SHOT messages

- Staff must perform patient identification steps thoroughly and with attention to detail during all stages of the transfusion process. The four main key identifiers must be checked i.e. first name, last name, date of birth, unique identifier (and first line of address in Wales) (BSH Robinson et al. 2018)
- All National Health Service (NHS) Trusts/Health Boards must ensure that a bedside checklist is introduced in accordance with the SHOT recommendation (Bolton-Maggs et al. 2017 and DH 2017). All staff must use a bedside checklist. Further information can be found in Chapter 10, Incorrect Blood Component Transfused (IBCT)



In 2017, 200 cases were reported compared to 227 cases in 2016 (Bolton-Maggs et al. 2017). Clinical errors accounted for 123/200 (61.5%) and laboratory errors for 77/200 (38.5%), Figure 8.1. Patient identification (ID) errors accounted for 115/200 (57.5%).

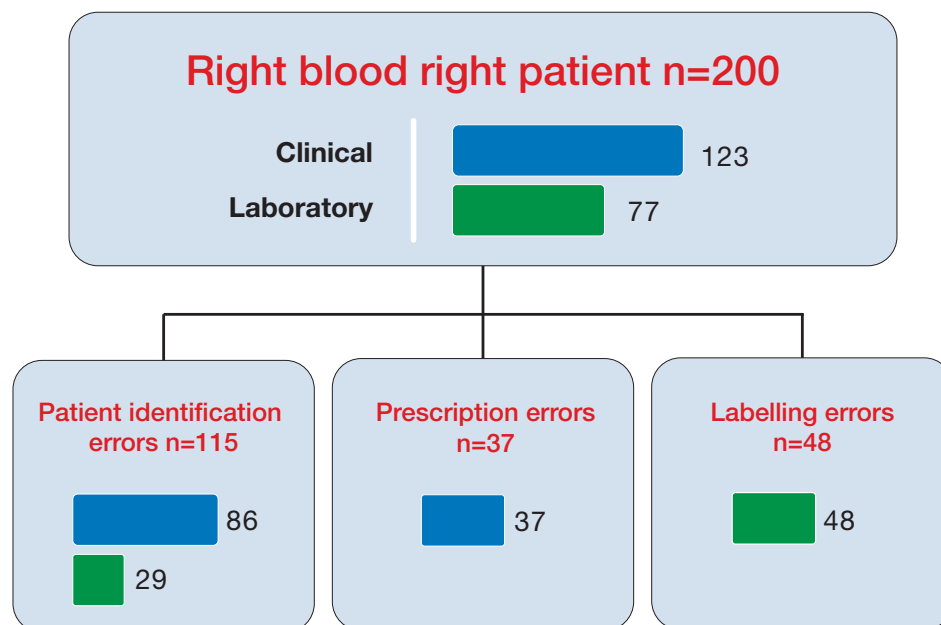


Figure 8.1:
Breakdown of
2017 RBRP reports
n=200

Patient ID n=115

Errors in patient ID occur in both the clinical area and in the laboratory, but 86/115 (74.8%) of these occurred in the clinical area, Table 8.1.

Table 8.1:
Patient ID errors in
2017 n=115

Area/location	Patient ID error	Number of reports
Clinical	Incorrect ID in relation to four key identification datasets i.e. first name, last name, date of birth (DOB), unique identifier	71
	No identification band	12
	Bedside check not performed	3
Laboratory	Demographic data entry errors in relation to four key identification datasets i.e. first name, last name, DOB, unique identifier	29
Total		115

Case 8.1: Doctor uses their own name by mistake when completing the transfusion record sheet

A unit of red cells had been collected according to hospital policy by using the collection slip. However, when the transfusion record sheet (TRS) was returned to the laboratory for traceability purposes, the name on the TRS did not correspond with the expected patient's name. On investigation the doctor had filled in their own name when completing the TRS with the patient's hospital number and DOB. This was not identified when two clinical staff (one reading the tag and one reading the TRS) were undertaking the final bedside check and subsequently signing the TRS. The tag attached to the unit had the correct details for the patient.

Case 8.2: Final bedside check not undertaken correctly

A unit of red cells was administered without the final bedside check being undertaken correctly. Another member of staff had the electronic hand-held personal digital assistant (PDA) which is used in the checking process to verify the patient details. The nurse proceeded to administer the transfusion, stating it was to save time rather than waiting for the PDA. Furthermore, the correct checks could have been carried out by using the tag attached to the unit which has a checklist. This can also be used for the correct procedure to administer the unit to the patient. The error was identified by another staff member who brought the PDA over for the staff member to use. The staff member knew the correct hospital procedure but thought that a short cut would save time and permit the transfusion to proceed more rapidly.

Each of the errors reviewed including the two cases outlined above, and Case 7.1 in Chapter 7, Laboratory Errors, highlight that staff must always remain vigilant when identifying patients, particularly at the final bedside check. They must use information technology (IT) devices correctly including when entering patient ID onto the laboratory information management systems (LIMS).



Learning points

- When available, staff should always use electronic devices correctly to enhance patient safety
- All staff working in transfusion should follow standard operating procedures (SOP), especially during busy or stressful periods when errors are more likely to occur

Near miss RBRP cases n=138

The near miss incidents related to RBRP cases show similar learning points to the full incidents that led to transfusion of components.

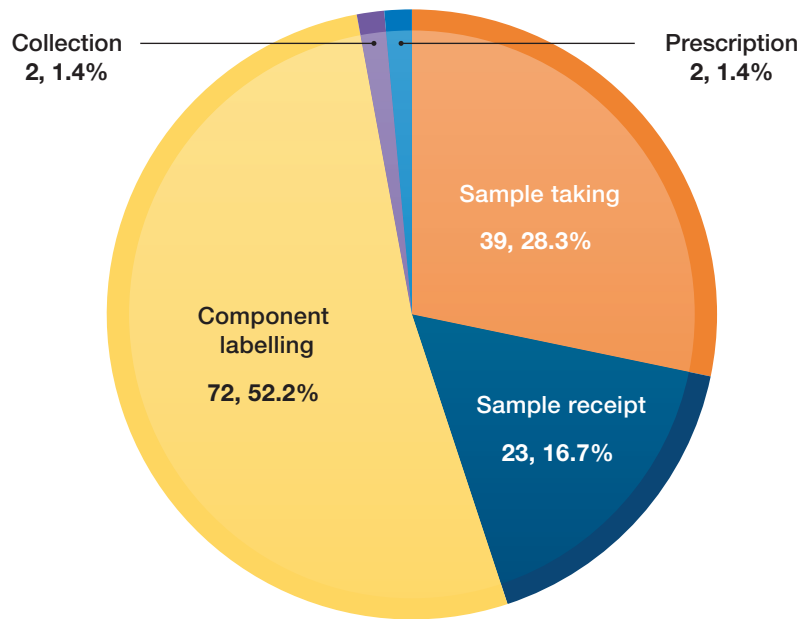


Figure 8.2: Near misses that could have led to RBRP n=138

IT-related RBRP cases n=24

Discrepancy between LIMS and patient administration system (PAS) or wrong record selected on LIMS or PAS n=8

In 3 cases there was some discrepancy between LIMS and the PAS or hospital information system (HIS), one of which was due to use of the American configuration of the date of birth (MM/DD/YYYY instead of DD/MM/YYYY). A further 5 cases were reported where the wrong record was selected on either LIMS or PAS/HIS. This manual step is prone to human error.

Blood issued against wrong ID n=1

This case related to collection of blood from an electronically tracked refrigerator and the details were not checked correctly between the blood compatibility label and the screen.

Incorrect result or data entered or accessed manually n=9

Manual steps are error-prone and there were 9 cases in this category.

IT systems and equipment failure n=3

During a cyber-attack, a sample was processed manually and when retrospectively entering the sample onto the LIMS an incorrect spelling was noted. In another case there was a mismatch between the number of characters permitted in LIMS and PAS so that a shortened last name was printed on the compatibility label and this did not match the identification band.

Case 8.3: Inadequate validation of new LIMS results in potential for inappropriate electronic issue (EI)

Following implementation of a new LIMS it was noted that the default to 72-hour sample validity was not present on all patients to whom red cells had been issued. Further investigation revealed that the product codes for some red cells had been put into the LIMS directory incorrectly so that the EI algorithm indicated that ‘crossmatch was not necessary’. Nine patients were given the right blood but should not have been eligible for electronic issue. A full validation of the EI programme would have identified this problem but was not carried out.

Incorrect use of an electronic blood management system n=3

There were 3 cases in this category. In one the system worked as intended because bedside tracking prevented transfusion of a unit with an incorrect spelling of the name.

Case 8.4: Bedside alarm not heeded

A patient with gastrointestinal (GI) bleeding was admitted to the emergency department (ED) where he was registered with a misspelling of his first name (by one letter). The doctor used these details to generate request forms and labelled the samples from details on the identification band. After the samples had been dispatched the error was noted and the first name changed so a new identification band was printed. When the blood was issued it did not match the identification band so the bedside PDA highlighted the discrepancy. The doctor checked this with the laboratory who advised that the blood should not be given but the doctor said he knew it was the right patient and that it was an emergency. The transfusion of three units went ahead.

Commentary

SHOT continues to highlight that **all** staff participating in the transfusion process must adhere to correct patient identification procedures with attention to detail in all steps in the transfusion process.

For further laboratory-related errors and key messages and learning points for laboratory staff please see Chapter 7, Laboratory Errors.

References

BSH Robinson S, Harris A et al. The administration of blood components: a British Society for Haematology Guideline. *Transfus Med* 2018;**28(1)**:3-21. <http://onlinelibrary.wiley.com/doi/10.1111/tme.12481/pdf> [accessed 22 February 2018].

Bolton-Maggs PHB (Ed), Poles D et al. on behalf of the Serious Hazards of Transfusion (SHOT) Steering Group. 2016 Annual SHOT Report (published 2017). https://www.shotuk.org/wp-content/uploads/SHOT-Report-2016_web_11th-July.pdf [accessed 8 January 2018].

Department of Health (DH). Safe transfusion practice: use a bedside checklist (CAS) CEM/CMO/2017/005 (2017). <https://www.cas.dh.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102663> [accessed 22 February 2018].