

Near Miss (NM) Case Studies

2020 - 2025

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ABO-incompatible transfusion prevented by pre-administration checks

- *A porter collected a unit of red cells from the blood issue refrigerator for patient 1 (group A D-positive) who had the same first name and surname as patient 2 (group B D-negative) without performing robust safety checks.*
- *The porter was distracted by a colleague, and there was also a backlog of tasks due to a long-running major haemorrhage call on the previous shift.*
- *The unit of red cells was received in the clinical area and when the nursing staff were completing their pre-administration checks at the patient's bedside, they noticed that the date of birth and unique patient identification number on the blood component did not match the details on the patient identification band.*
- *They contacted the blood transfusion laboratory and arranged for the unit of red cells to be returned.*

Discrepant full blood count results identify a wrong blood in tube (WBIT)

- *Samples were taken from a patient for haematology, biochemistry and blood transfusion laboratories.*
- *Upon testing, the full blood count (FBC) showed pancytopenia which was discrepant with the patient's previous results.*
- *A repeat FBC confirmed that the first sample was a WBIT.*
- *Biochemistry and transfusion samples taken at the same time were rejected.*
- *Following investigation, it was identified that at the time of the event there was an unusually high number of staff on annual leave and sick leave and many requests for phlebotomy.*
- *In this case the request form had been labelled with the incorrect patient's bed number which resulted in the incorrect patient being bled.*

Multiple staff involved in sample taking and labelling to avoid delays

- *A group and screen (G&S) sample was taken by a resident doctor and handed over to a locum doctor for labelling.*
- *The locum doctor did not have access to the printer, so the sample was passed to the nurse.*
- *The nurse felt reluctant to label a sample that they had not taken but did not feel confident to challenge the request.*
- *Additionally, the nurse was aware that delays in sending the sample might lead to surgery cancellation.*
- *The wrong blood in tube (WBIT) was identified in the laboratory when the blood group did not match the patient's previous record.*

Assumed clerical error and incorrect patient record amended

- *A midwife registered a pregnant woman new to the healthcare organisation under a hospital number belonging to a different patient.*
- *Both individuals had the same forename, surname and year of birth.*
- *When the midwife confirmed the details with the woman and identified the discrepant date of birth, the midwife assumed that a clerical error had been made at registration and amended the details and previous records on the system.*
- *When the group and screen sample was tested in the laboratory the wrong blood in tube (WBIT) was identified as the blood group did not match previous record.*
- *Both women were contacted, and the error rectified.*

Multiple errors contributed to the misidentification of a sample

- *Patient 1 in the emergency department required a red cell transfusion and was identified by an incorrect bed space number instead of their name*
- *During a single venepuncture, the doctor took both a group and screen sample and a confirmatory sample from patient 2, with no positive patient identification performed*
- *The doctor labelled the first sample away from the patient's side using patient 1's details*
- *They then asked a nurse to label the second sample and send it to the laboratory*
- *The error was finally detected when the blood samples were rejected by the transfusion laboratory*
- *Patient 1 had a historical group of O D-negative with positive red cell antibodies, while the current samples grouped as AB D-positive*

Language barrier contributes to inaccurate patient identification

- *A patient was referred with incorrect details, which were used to update their electronic patient record*
- *An interpreter assisted during the antenatal clinic visit, but it was unclear whether the patient confirmed their name and date of birth or if their details were checked*
- *There was no evidence of positive patient identification at phlebotomy leading to a wrong blood in tube (WBIT) which was identified during testing based on discrepancies with their previous results*

Near miss helps to identify safety issues with requesting electronic system

- *A unit of red cells was collected by a porter using the porter electronic system*
- *The unit collected was for a different patient*
- *Both patients had the same surname, however no other patient details matched the blood request*
- *When the blood component arrived at the ward and the details were checked, the error was identified and reported to the laboratory*
- *The red cell unit was returned to the laboratory*

Misreading the blood count results

- *A prescriber erroneously interpreted a patient's platelet count as his haemoglobin (Hb) (the last three results were 89, 68 and 66) so booked him into for a two-unit red cell transfusion the same day*
- *Blood was taken for a repeat blood count, film and a crossmatch sample was also taken*
- *An intravenous (IV) cannula was inserted, and he waited for his transfusion*
- *The blood was placed in the blood refrigerator on the ward*
- *A nurse asked why the patient was having a blood transfusion when his Hb was 141g/L which was when the prescriber realised their error*
- *The patient did not receive any blood*

Major haemorrhage protocol (MHP) activated for the wrong patient

- *Activation of the MHP for Patient 1 from the delivery suite was the incorrect patient*
- *This should have been for Patient 2, so there was potential for delay in issuing the correct blood group for the patient in an emergency situation*
- *However, this was recognised very quickly by clinical staff so did not result in significant delay*

COVID-19-related organisational problems, but the report identifies only staff issues

- *An emergency patient was admitted straight to theatre during the night*
- *Red blood cell units were removed from the recovery room refrigerator by order of the anaesthetist and kept near the patient in theatre for the duration of the surgery. No temperature-controlled storage box was requested from the laboratory*
- *Due to the units being out of temperature-controlled storage for over 4 hours, and their close-proximity to a suspected COVID-19 positive patient they were wasted*

Near miss scored 10/10 for staff only human factors, but interim change made to environment and major organisational improvement planned

- *A patient required a transfusion of irradiated platelets. During the pre-administration check of the unit of platelets in the clinical area, it was noted that the identification label containing the patient details stated that the component was irradiated*
- *Despite this the clinical staff detected that the irradiation blue-dot indicator sticker (RadTag®) was missing from the unit*
- *They alerted the laboratory staff; the unit was returned to the laboratory and it was confirmed that non-irradiated platelets had been issued*
- *An incorrect transfusion that did not meet the patient's special requirements was prevented by diligent checking*

Pre-administration transfusion checks prevented a wrong component transfused

- *Two patients with the same first name and a diagnosis of thalassaemia were sat next to each other in the day unit awaiting routine transfusion*
- *A unit of red cells was taken from the refrigerator for one of the patients and during the pre-administration check, it was realised it was for the other patient and was therefore returned to the refrigerator*

Near Miss – Wrong Blood in Tube (WBIT)

Patient care documented on the wrong patient record

- *A patient queried why they were being called by another name*
- *The patient's pregnancy records had been uploaded incorrectly to another non-pregnant patient's notes*
- *Previous clinical notes and booking in bloods were undertaken under incorrect patient details/records*
- *The patient had not been positively identified at the previous appointment*

Patient not adequately identified prior to phlebotomy

- *The hospital transfusion laboratory received two samples for a patient with no previous blood transfusion history*
- *The samples and the request forms were correctly labelled and processed*
- *However, ward staff later called the laboratory to say the samples had been taken from the wrong patient*
- *The doctor realised the mistake when the nurse was placing the wristband on the patient*
- *The patient had a similar name and date of birth as the intended patient and was without a wristband at the time of sample collection*

Failure to accurately identify patients leads to a near miss wrong blood in tube (WBIT)

- *A doctor planned to take two group and screen samples from a patient that did not have a blood group history recorded in the laboratory*
- *The samples were taken 10 minutes apart, but one was taken from the correct patient and the other was inadvertently taken from a different patient*
- *The request forms were completed prior to taking the samples and the doctor did not check the patients' identities or their identification bands*
- *Samples were then labelled away from the patient's side*
- *Testing revealed that the first sample grouped as O D-positive, and the second taken 10 minutes later grouped as A D-positive*
- *Two repeat samples had to be obtained from the right patient to ascertain their correct blood group*
- *There was a lack of medical staff on duty and the doctor involved was the only doctor on duty at the time, with multiple competing tasks to complete*
- *There were no delays to transfusion, or any other adverse outcome reported as a result of this WBIT*

A baby's blood group not as predicted from cell-free fetal deoxyribonucleic acid (cffDNA) result

- *A mother noted that her baby's blood group result (D-positive) did not correspond with the cffDNA result (predicted D-negative)*
- *The placenta had been discarded into the general placenta bucket with others, placed in individual plastic bags but unlabelled*
- *No cord bloods were taken*
- *A second midwife retrieved what she thought was the correct placenta from the bin, took a cord sample and sent it to the hospital transfusion laboratory*
- *Repeat bloods from the baby confirmed the sample from the retrieved placenta was a wrong blood in tube*

Cord sampling mix-up

- *Cord bloods were taken in the labour ward from newborn twins*
- *Twin 1 grouped as A D-negative and Twin 2 as O D-negative*
- *Subsequent samples were taken for Twin 1, which grouped as O D-negative*
- *Repeat bloods confirmed a wrong blood in tube from cord sampling at delivery*
- *The staff member taking samples at delivery had not undertaken transfusion training and was unaware that they were not to use pre-labelled tubes*

Multiple errors resulted in a wrong blood in tube (WBIT)

- *A nurse asked the phlebotomist to take a group and screen sample from the 'patient in bed 2'*
- *The intended patient had been moved to another bed and no positive patient identification was carried out before or after taking the sample*
- *The phlebotomist then handed the blood sample to the nurse to label*
- *This was done away from the patient's bedside using the request form*

Incorrect group detected by cell-free fetal deoxyribonucleic acid (cffDNA) prediction

- *Baby group and Kleihauer samples were received in the transfusion laboratory*
- *The baby sample grouped as O D-negative, same group recorded as maternal blood*
- *The cffDNA test predicted baby as D-positive*
- *Further testing confirmed the baby group was O D-positive*

Neonate not adequately identified by two doctors

- *During an induction week, Doctor 1 was paired with Doctor 2, who took a blood sample from a one-day old baby*
- *Doctor 1 filled out the request form to help and did not do this at the bedside and incorrectly wrote the details out from the wrong patient's notes*
- *Doctor 1 did not check with Doctor 2 before sending the request*

Two samples are safer than one

- *A neonate was transferred from another hospital for cardiac surgery*
- *A sample grouped as O D-positive, and one unit of red cells was issued*
- *The local agreement for neonatal cardiac surgery allows issue of red cell units with one sample*
- *A second sample received in the afternoon grouped as O D-negative*
- *Then staff checked with the referring hospital (which should have ideally happened when first sample was received)*
- *The patient's group recorded there was O D-negative*

Patient wrongly identified in an emergency at home

- *Paramedics were called to a patient in cardiac arrest at home*
- *A paramedic registered the patient as somebody with a similar name and these details were used by hospital staff to print the patient identity band and label blood samples*
- *The patient deteriorated and died in the intensive care unit, and a death certificate was completed for an incorrect patient*
- *The general practitioner was informed of his patient's death and realised the patient was still alive and there had been an incorrect identification of the patient*
- *He requested the episode of care be removed from his patient's records*
- *Transfusion group and screen result was removed as part of this process*

The cord blood sample was shown to be unrelated to the mother

- *Fetal genotyping in pregnancy predicted the baby to be D-negative*
- *However, the cord and Kleihauer samples at delivery typed as D-positive*
- *Samples from both mother and baby were referred to the Blood Service for investigation because of this apparent discrepancy*
- *The two maternal samples pre and postnatal were from the same person, but the cord sample did not share at least one allele with the mother indicating that the cord was not related to the mother*
- *The cord was female, and the baby was predicted to be male*
- *The cord sample was from the placenta which was not sampled at the patient's bedside*
- *The mother received anti-D immunoglobulin inappropriately*
- *This maternity department is reviewing their procedures for sample taking and labelling for cord samples*

A wrong blood in tube (WBIT) in the setting of major haemorrhage identifies several errors (1)

- *A major haemorrhage procedure was activated for a woman with a postpartum haemorrhage. Samples were sent to the transfusion laboratory with a request for two units of red cells. Two samples arrived in the same bag. The patient received two units of emergency group O D-negative red cells.*
- *The switchboard operator did not wait to receive all the information, in particular the extension number to be used during the emergency. A bleep message using the extension number from labour ward from a call received earlier was sent erroneously. There was then a delay in the BMS establishing the correct contact number*
- *Maternal samples were taken by Midwife 1 and then handed to Doctor 1 who completed the details on the hospital transfusion request form and pre-transfusion sample. The mother was bleeding profusely, and Doctor 2 had to attend to her*

Continued...

A WBIT in the setting of major haemorrhage identifies several errors (2)

- *WBIT: one pre-transfusion sample was group O D-positive, but the other sample and the patient's transfusion history indicated that the patient was O D-negative (retrospectively known that one sample was the cord sample). The cord sample was taken by Midwife 2 but was not labelled immediately after the sample was taken. Doctor 2 then completed the details on the cord sample bottle with the mother's details (but no indication that this was the cord sample) and sent this to the transfusion laboratory with the other pre-transfusion sample (in the same bag)*
- *No patient identification details were completed on the traceability record that was returned to the transfusion laboratory. However, the donor number for the unit was documented in the transfusion record (which had patient identification details attached)*

Wrong practice was the norm, lack of safety culture in the organisation

- *An elderly man was admitted for surgery*
- *A first sample was sent for grouping (O D-positive) and later two more were sent*
- *Both these later samples were taken at the same time but labelled 15 minutes apart and were found to be a different group (A D-positive) compared to the first one*
- *The newly qualified nurse (transfusion training had been suspended due to lack of resources) who took the sample had filled out the request forms later at the computer away from the patient*
- *She selected the wrong patient details*
- *She noted that ‘the practice I have witnessed throughout my training and in our hospital is that blood sampling labels are not completed at the bedside, an action by many professionals, doctors and nurses. The ward was busy, and I was rushing to help the demand.’*
- *She was working in a different healthcare organisation from the one where she trained suggesting this poor practice was embedded in other hospitals*

Misidentification of an adult triplet

- *A woman attended the early pregnancy unit wearing a facemask (COVID-19 precautions). The midwife asked for her name, first line of address and date of birth. Blood samples were taken but allocated to the wrong patient record*
- *She was one of triplets with the same date of birth, family name and address. The first name was misheard but very similar to the others, differing only by a letter*
- *The patient was concerned that this might have happened and clarified her name when the results were telephoned*
- *The triplets were advised for any hospital attendance always to ensure they were identified in addition by their middle names which were different*

Patient identification errors by three different members of staff (1)

- *Before admission, a ward clerk updated a patient name for a child <5 years of age (Patient 1) from 'baby' to a name already belonging to another patient (Patient 2)*
- *On admission no ID band was put on, Nurse 1 sampled the patient without positive identification and labelled the sample using patient notes. This sample from Patient 1 (labelled with Patient 2 details) was rejected due to an insufficient amount of blood in the sample tube*
- *Nurse 2 (without required competency for transfusion) took another sample again without positive ID from Patient 1 (labelled with Patient 2 details) labelling it away from the bedside using the request form and prescription chart. This sample was also rejected as there was no signature to confirm the patient had been identified*
- *A blood group request was made on the computer with Patient 2's details, further samples were taken from Patient 1 and accepted by the transfusion laboratory. The blood group result was entered on Patient 2's record (sample was from Patient 1)*

Continued...

Patient identification errors by three different members of staff (2)

- *A request was made for platelets using the correct details for Patient 1, but the laboratory staff now asked for blood samples as they did not have a confirmed group*
- *The ward staff knew their patient had several blood samples taken earlier and the nurse was asked to confirm the ID of the patient she had sampled. She then confirmed with the mother that this was Patient 1 who had been misidentified as Patient 2*
- *Platelets were transfused with delay while the child was admitted to the high dependency unit and an ID band was applied*

A D-negative mother apparently had a D-negative baby

- *An antenatal cell-free fetal DNA test predicted the baby would be D-positive*
- *Laboratory testing of the paired samples showed that maternal blood was present in both mother and 'cord' sample bottles. Repeat sampling from the baby confirmed the group as D-positive*
- *The reporter noted: 'There have been several WBIT errors from midwives and the transfusion practitioners have been taken off the training programme for face-to-face sessions so there is a reminder about sample labelling to be included in the drills and skills'*

A mother identifies that her baby cannot be D-positive

- *Blood was taken from a neonate for grouping as the mother was known to be D-negative. The baby's sample grouped as B D-positive*
- *The mother was informed of her requirement for anti-D Ig, but she informed the staff that the child's father was also D-negative.*
- *The baby was bled again twice and grouped as A D-negative on both occasions*