Wrong Blood In Tube (WBIT)

West Midlands Regional Transfusion Committee

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WM RTC WBITG

(West Midlands Regional Transfusion Committee
Wrong Blood In Tube Group !!)

- July 2013 – discussed at WM RTC business meeting – agreed to set up a regional group
- August 2013 – 1st meeting held

What is the current problem?

- Estimations from national sources / publications appear to range 1:2000 – 1:8000
- Wolverhampton New Cross has had '2 sample' policy for a few years - estimates that 91% of samples have a historic group and WBIT rate of approx 1:12000 (approx 3 per year).
- Normally sample rejections are approx 2%, but when Junior Doctors start, this increases to 6%.

What is the current problem?

- Anecdotal evidence that generally phlebotomists have fewer errors (although not always the case !)
- Previous audit at University Hospital Birmingham showed no WBIT from phlebotomists – errors mostly involved doctors and nurses.

Root Cause Analysis

- All involved in the WBIT group reported completing Root Cause Analysis of WBIT incidents.
- Some concerns expressed that the resulting actions appear to vary depending on the individuals job role, with doctors tending to view the problem less seriously – not seen as a 'critical task'.

Trust Support / Clinical Governance

- Most organisations 'downgrade' the risk of WBIT – as no actual harm.
- Worcester Trust – WBIT's are recorded on the risk register as 'Near Miss Never Event'

So what can our WM RTC WBITG do?

- It was agreed that for the group to progress to produce some regional guidance and recommendations, hard facts were needed first.
- Survey – just those participating in the WMRTC WBITG

WM RTC WBITG Survey Results

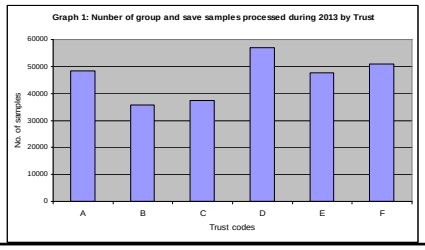
Methods

- Data was collected in two parts:
- Part 1 - Organisational questionnaire
- Part 2 - WBIT questionnaire – a separate questionnaire completed for every WBIT incident identified from 1st January to 31st December 2013.
- 6 participating Trusts

Results

Part 1 – Organisational Questionnaire

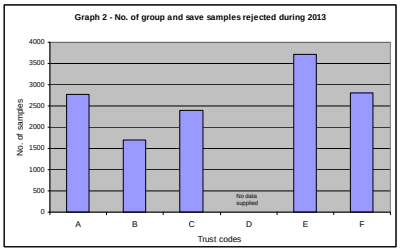
- All six Trusts are large users of blood, and comprised a mix of University Hospitals and large District General Hospitals.
- The total number of group and save (G&S) samples processed by each Trust during 2013 ranged from 35770 to 57000.



Results

Part 1 – Organisational Questionnaire

- The number of G&S samples rejected by each Trust during 2013 ranged from 1703 to 3715 (one Trust did not provide data).

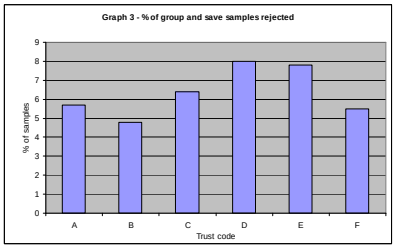


Results

Part 1 – Organisational Questionnaire

- The number of rejected G&S's as a percentage of total G&S's processed by each Trust range 4.8% - 8%.

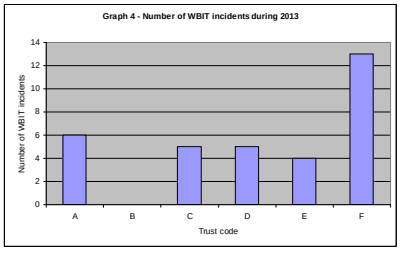
  Hospital D estimated this number.



Results

Part 1 – Organisational Questionnaire

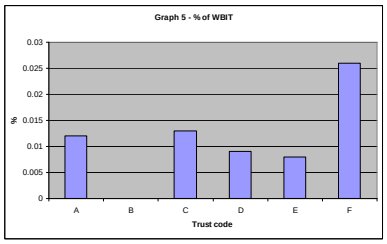
- The total number of WBIT incidents identified across the six sites was 33 (range 0 - 13)



Results

Part 1 – Organisational Questionnaire

- The number of WBIT's as a percentage of total G&S's processed by each Trust (range 0% - 0.026%). The average for the six hospitals was 0.012%.



Results

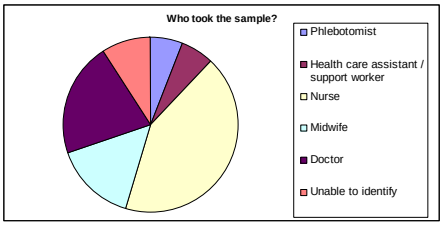
Part 1 – Organisational Questionnaire

- Trust B is the only site to have fully implemented the 'two sample' recommendation
- Trust D implemented the two sample recommendation during September 2013, whilst Trust C encourages two samples, but does not enforce this.
- None have implemented electronic patient identification for phlebotomy.
- None routinely investigate WBIT's as a 'Serious Untoward Incident'. One stated 'except antenatal screening' and one only if the sample was converted into a cross-match (whether or not transfused).
- WBIT's are categorised on Trust risk registers differently across the region:
  - 2 x No harm (low or very low)
  - 1 x Green (possible / insignificant)
  - 2 x Never Event Near Miss (one site had this implemented December 2013)
  - 1 stated 'depends upon consequences'

Results

Part 2 – WBITs during 2013

- A total of 33 WBIT incidents were identified by the six participating Trusts during 2013.



Nurse 14 / Doctor 7 / Midwife 5 / Unable to identify 3 / Phlebotomist 2 / HCA 2

Results

Part 2 – WBITs during 2013

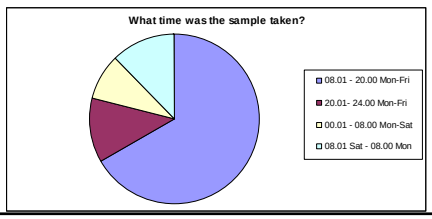
- Did the person who took the sample have up-to-date transfusion training?
  - Yes 23
  - No 5
  - Unknown 4
  - No answer 1
- Did the person who took the sample have up-to-date transfusion competency assessment?
  - Yes 15
  - No 10
  - Unknown 6
  - No answer 2

- 4 x No answer
- 15 both trained AND competency assessed
- 7 trained but not competency assessed (including 2 x ? Assessed)
- 4 x not known (competency assessed)
- 2 x not known (training)

Results

Part 2 – WBITs during 2013

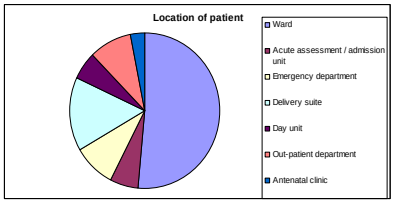
- What time was the sample taken?
  - 08.01 - 20.00 Mon-Fri 22
  - 20.01- 24.00 Mon-Fri 4
  - 00.01 - 08.00 Mon-Sat 3
  - 08.01 Sat - 08.00 Mon 4



Results

Part 2 – WBITs during 2013

- What was the location of the patient and speciality

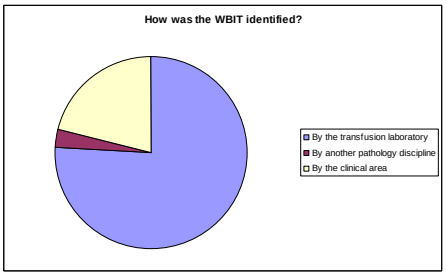


Trauma	2
Cardiothoracic	4
Haematology	3
Oncology	1
Other medical	9
Emergency surgery	2
Elective surgery	2
Obstetrics	7
Gynaecology	1
Other	4

Results

Part 2 – WBITs during 2013

- Who identified the WBIT?



Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes

The in-depth responses relating to individual incident investigations were analysed using a process known as 'bracketing' whereby the data is coded for key themes.

Many of the incidents had more than one key theme.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Sample labelled away from the patient:*
- This is most common key theme which emerged, being identified in 16 / 33 cases.

The trained doctor asked the student doctor to take sample. Labelled away from the bedside. Neither checked patient details.

Sample not labelled at patients' bedside

Sample not labelled at patients' bedside

Sample not labelled at patients' bedside

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Use of wrong request form / notes:*
- The use of either the wrong request form, or the wrong patients notes, was stated in eight cases.

The nurse printed the same request form she had used for the previous patient and labelled both patients samples with the same patients details.

Patient not positively identified – sample labelled from request form.

Labelled sample away from patients' bedside using another patients notes

Nurse used request form labelled with patient 1 details, but bled patient 2 – labelled away from bedside.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Errors related to addressograph labels:*
- Addressograph labels were mentioned in five of the incidents. Four of these were also in the 'labelled away from the patient' category.

Staff nurse used another patients label when writing details on the sample tube.

Sample taken by student nurse who attached addressograph label to sample tube. A staff nurse then removed the addressograph label, but mislabelled the sample away from the patient.

Sample taken first, and then request form completed. Distraction led to incorrect addressograph label being attached to the request form.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Busy clinical area:*
- This was specifically mentioned in five cases.

Midwife admitted to being behind schedule and tried to cut corners.

Ward very busy with constant distraction.

Emergency situation (no other details given)

Nurse took sample but then distracted by emergency call. When returned labelled sample against wrong patients notes.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Patients with similar name / details:*

Two patients with very similar names. Wristband and request form completed using wrong set of notes.

Two ladies (antenatal) with same first name, same DOB, and consecutive hospital numbers – only the last digit was different. Midwife completed request form for patient A but with patient B's hospital number.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Sample labelled by another member of staff:*
- Identified in three cases, all involving midwives, two at the same Trust.

Midwife caring for two women in labour. Locum doctor took sample and handed to midwife for her to label. Midwife completed both the request form and the sample from the wrong patients' notes, which the doctor had also handed to her. Doctor later denied bleeding the patient.

Mix up between cord and maternal blood. Midwife taking sample did not label – labelled by another midwife

Sample tube completed using wrong sticky patient label, away from the patients' bedside, by a midwife who had not taken the sample.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Patient misidentified:*

Five specific incidents to draw attention to

Patient answered to the wrong first name. No further attempts to identify the patient. Sample labelled away from the patient.

No wristband present - not applied at admission.

Possible that patient was wearing wrong wristband. Same individual then took sample and labelled against wristband without verbally checking patient ID.

Results

Part 2 – WBITs during 2013

- Incident investigation – Key Themes
- *Patient misidentified:*

Nurse took wrong set of patients' notes to the patient. Asked patient date of birth. When patient gave a different DOB nurse thought patient was confused. Nurse did not check patients name or wristband.

Took sample from patient 1 and placed in transport bag with booking in slip unlabelled. Did same thing with patient 2. Later, when writing the two samples, transposed the wrong patients details onto each sample.

Reporting

- 32/33 reported internally – 1 not reported as 'no further information available' – unable to identify who took the sample.
- 23/33 reported to SHOT
- 10 not reported to SHOT (1x6 not, 1x4 not)
- 6/33 reported to SABRE

So what next ?

The WM RTC have suggested that this is taken forward to a full regional audit - looking back over two years.

? Regional Guidance

2012 Audit of Blood Sample Collection & Labelling
The London TP Group's Top 10 Tips for improving sample collection and labelling practice

Top Tips for reducing sample rejections and WBIT incidents	
1.	**Positive Patient Identification** *Positive patient identification is arguably the most important step in the sample collection process. Identifying the patient correctly significantly reduces the risk of a Wrong Blood in Tube (WBIT) incident occurring.* ***Patient core identifiers are:** Last name, first name, date of birth, unique identification number.* ***Positive patient identification**: Whenever possible ask the patient to state their full name and date of birth. For patients who are unable to respond, ID verification should be obtained from a parent or carer (if present), or by conferring with colleagues/checking the patients' medical notes.*
2.	**Have an agreed sample labelling and rejection policy** *All organisations must have a sample labelling policy and it is essential that this is adhered to. Any samples received where labelling does not comply with the organisations sample labelling policy should be rejected. Report non-compliance with the policy at the HTC and in the Annual report to the clinical governance committee.*
3.	**Zero Tolerance and 2 sample approach is the gold standard** *A zero tolerance policy is one that states that no changes can be made to a sample label after it has been received by the laboratory. If a zero tolerance policy is implemented it should include all samples even 'precious samples'. If a mislabelled sample is received it will not be tested, thus no blood or blood component can be issued based on that sample.* *Unless secure electronic patient identification systems are in place, a second sample should be requested for confirmation of the ABO group of a first time patient prior to transfusion, where this does not impede the delivery of urgent blood components.*
4.	**It is up to the sample taker to ensure labelling is correct – ensure they know this** *Responsibility of correct sample labelling is with the person taking it. All samples should be labelled at the patient's bedside from the patient's wristband by the person who took the sample.*
5.	**Ensure the Trust is aware of the frequency of sample rejection and wrong blood in tube (WBIT) incidents** *Report internally and to Serious Hazards of Transfusion (SHOT) all WBITs. Internally report every mis-labelled sample to escalate the problem. Use department league tables on sample rejection to make people aware of the problem and use a 'name and shame' system to prompt a change in practice. Provide financial figures regarding the cost of sample rejection to highlight the problem at Trust level. Photocopy mislabelled samples to build up a library of possible errors which can be used in education sessions to change practice.*
6.	**Take a varied risk-assessed approach to tackle sample labelling problems** *Sample rejections and WBITs in different clinical areas will require different approaches. A solution that worked in Critical Care may not work in A&E or Maternity. Involve the users in understanding and solving the problem.*
7.	**Ensure that the staff taking samples for group and save and pre-transfusion testing are trained and competency assessed** *A section on the blood sample request form could prompt person completing to indicate that they are trained and are solely responsible for the correctness of the sample.*
8.	**Consider Bedside Technology** *Discuss and risk assess the use of bedside blood tracking to allow printed labels to be produced by the patient's bedside to reduce any omissions and transcriptional errors on the sample label.*
9.	**Rejection of a patient's sample does not mean that the patient cannot have blood in an emergency – make the users aware of this** *Also make them aware that blood issued will not be group specific or cross matched. Where full patient identification is not available, transfusion of group O blood may be a safer option, but supply of group O is limited and its use should be restricted, with a safe blood group being established as soon as possible.*
10.	**Be tough and keep at it – and celebrate success!** *Stand your ground and practice will change slowly, it takes time to change culture. Share success stories with colleagues in other hospitals.*

London RTC