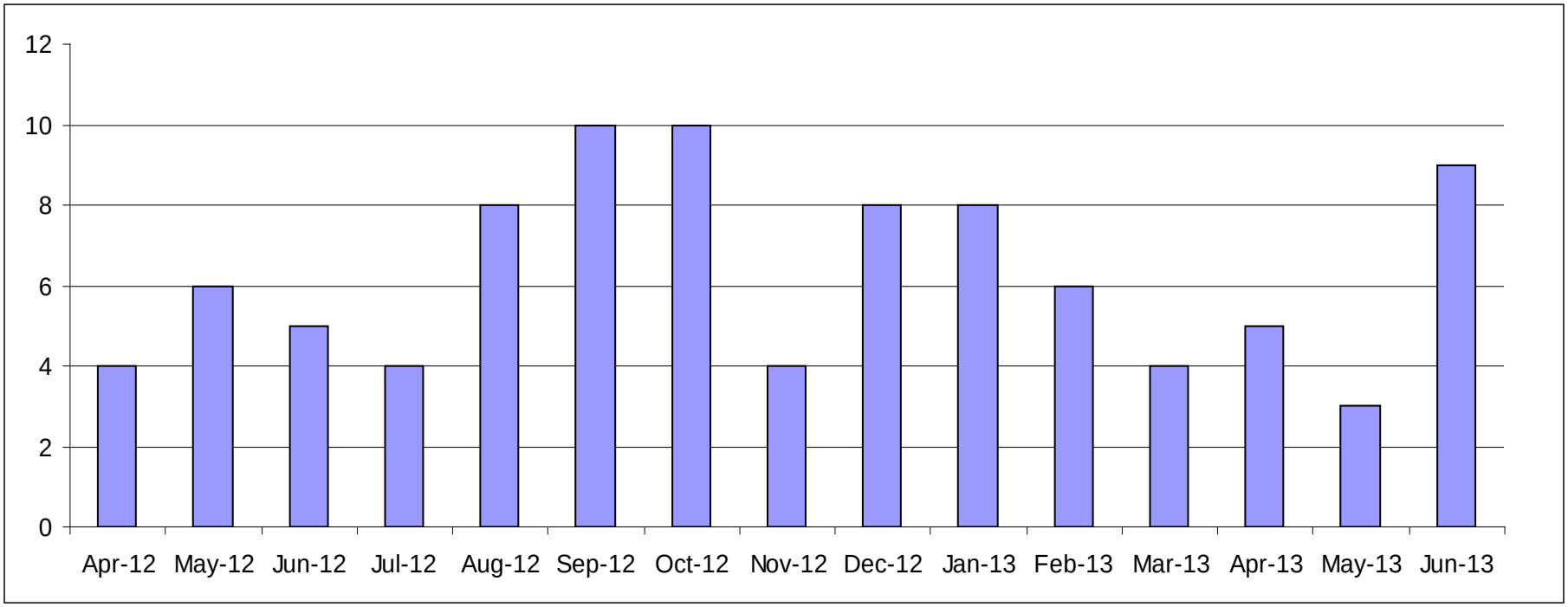
Wrong Blood in Tube:

Where does the process go wrong?

What is 'Wrong Blood in Tube'?

- A sample of blood which is collected from one patient, but the labelling is that of another patient.
  - Wrong patient blood, right patient details
  - Right patient blood, wrong patient details
- Dangers
  - Wrong blood transfusion
  - Wrong treatment

Size of the Problem



Number of Wrong Blood in Tube Incidents by month

The Project

- Observational study
- Focus group
- Process mapping

Standards

Standard	
Standard 1 - Only the identified patient's blood request card is taken to their bedside.	
Standard 2 - To identify each patient, an open question is used.	**2a - Inpatient**
	2b - Outpatient
Standard 3 – Every inpatient's wristband is checked against the blood request form.	
Standard 4 - All labelling of blood bottles is completed after the blood has been taken.	
Standard 5 - All labelling of blood bottles is completed at the patient's side.	
Standard 6 - All labelling of blood bottles is carried out by the person who carried out the blood-taking.	
Standard 7 - The complete blood-taking task is completed in one go	
Standard 8 - The complete blood-taking task is completed by one person	

Observation Study

Profession (please circle)	Doctor/Nurse/Midwife/Phlebotomist/CSW		
Location			
	Please circle		
General			
Who requested the blood test?	Person taking blood	Someone else	
Were the blood request cards for more than one patient taken to the bedside?	No	Yes	
Patient Identification			
Open question used to check patient details	Yes	No	
Wristband checked against blood request form	Yes	No	
Patient details checked against notes	Yes	No	
Sample labelling			
When was the sample bottle labelled?	After taking blood	Pre-labelled	
Where was the sample bottle labelled?	At patient's side	At bedside - patient gone	Elsewhere
How was the sample bottle labelled?	Handwritten	Sticky Label	
Sample bottle labelled by person who took the blood?	Yes	No*	
Final checks			
Sample checked against…	Wristband	Blood form	Not checked
Where was the sample placed in a bag with its form?	At bedside	Elsewhere	
Overall task			
Task completed in one go?	Yes	No*	
Task completed by one person?	Yes	No	

Results

- 92 observations

- Manchester Royal Infirmary
- St Mary's Hospital
- Royal Manchester Children's Hospital

- Inpatient
- Outpatient
- Accident and Emergency

Compliance ≥ 95%

Compliance ≥ 95%	Compliance 75% - 94%	Compliance ≤ 74%

Standard	Compliance (%)
Standard 1 - Only the identified patient's blood request card is taken to their bedside.	**95% (87/92)**
Standard 4 - All labelling of blood bottles is completed after the blood has been taken.	**99% (91/92)**
Standard 7 - The complete blood-taking task is completed in one go.	**99% (91/92)**

Compliance – 75% – 94%

Compliance ≥ 95%	Compliance 75% - 94%	Compliance ≤ 74%

Standard		Compliance (%)
Standard 2 - To identify each patient, an open question is used.	**2b - Outpatient**	**80% (37/46)**
Standard 6 - All labelling of blood bottles is carried out by the person who carried out the blood-taking.		**90% (83/92)**
Standard 8 - The complete blood-taking task is completed by one person.		**90% (83/92)**

Compliance ≤ 74%

Compliance ≥ 95%	Compliance 75% - 94%	Compliance ≤ 74%

Standard		Compliance (%)
Standard 2 - To identify each patient, an open question is used.	**2a - Inpatient**	**61% (22/36)**
Standard 3 – Every inpatient's wristband is checked against the blood request form.		**35% (16/46)**
Standard 5 - All labelling of blood bottles is completed at the patient's side.		**28% (26/92)**

Who is taking blood?

- Doctors 13
- Nurses 26
- Phlebotomists 28
- Midwives 12
- HCSW 13

Focus Group

Why might WBIT happen?

- Labelling issues
  - Not labelling at the bedside
  - Not labelling using the wristband
- Work pressures
  - So much work out there, so few staff. Blood room gets very busy.
- Communication issues
  - The patient's first language might not be English.
- No wristband in clinic. One less identification measure.

Focus Group

How can we reduce WBIT?

- Staff
  - Add transfusion training on day of induction
  - Frequent updates of training
  - Make staff feel valued, less punitive culture
- Identification
  - Scan system on wards. Scan I.D band, scan the blood request card.
  - Check each separate form to make sure it's the right patient. Tick/highlight each separate sheet.
- Mobile printer –Requests & labels printed at bedside.
- More Trolleys
- Wear a tabard on the wards, "Do not disturb me, I'm taking bloods"

Process Mapping

- Doctors
  - Labelling – ‘take the blood bottles to the nurses’ station or treatment room.’
  - There was no mention of the use of open questions to identify the patient.
- Midwives
  - ‘Read out the name on the card so patient can confirm.’
- Phlebotomists
  - ‘Read out name to patient, so they can confirm.’

General Observations

- Phleboto my trolley

- Blood Room – St Mary's Hospital

Conclusion

Salient results:

- Open question to identify patient?
  - 61% of inpatients and 80% of outpatients
- Was request form checked against wristband?
  - 35% of inpatients
- Were blood samples labelled at patient's side?
  - 28% of samples

Conclusion

- Task factors
  - Shared workspace (phlebotomy)
  - Lack of space to label samples at bedside
  - Pressure of work
  - Interruptions
  - Punitive culture

Learning Points

- This is a new concept – not done before
- Impact of human factors
- Importance of systems
- Valuing your staff
- Patient centred care
- Application to other areas

Where we are now.....

- Re-organise the layout of the phlebotomy room so phlebotomists do not cross paths or go to the same area to label/bag blood samples.
- Increase number of trolleys available
- Patient empowerment
- Work in progress

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