NHS

South West Regional Transfusion Committee

SW RTC Meeting

26TH MAY 2021

(VIA MICROSOFT TEAMS)

South West Regional Transfusion Committee

Electronic Tracking Rollout

NORTH BRISTOL NHS TRUST

ROYAL DEVON & EXETER NHS FT

GLOUCESTERSHIRE HOSPITALS NHS FT

Implementation of BloodTrack in NBT

NHS
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NHS Trust

Procurement Process

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- Experienced Project Manager essential!
- Business Case rewritten MANY times
- Tender process in collaboration with UHB
- Joint specification prepared
- Ability to opt in and out of certain features

NBT options:

- No handheld printers to be purchased for TX
- Electronic phlebotomy to be added at a later phase

Early Considerations

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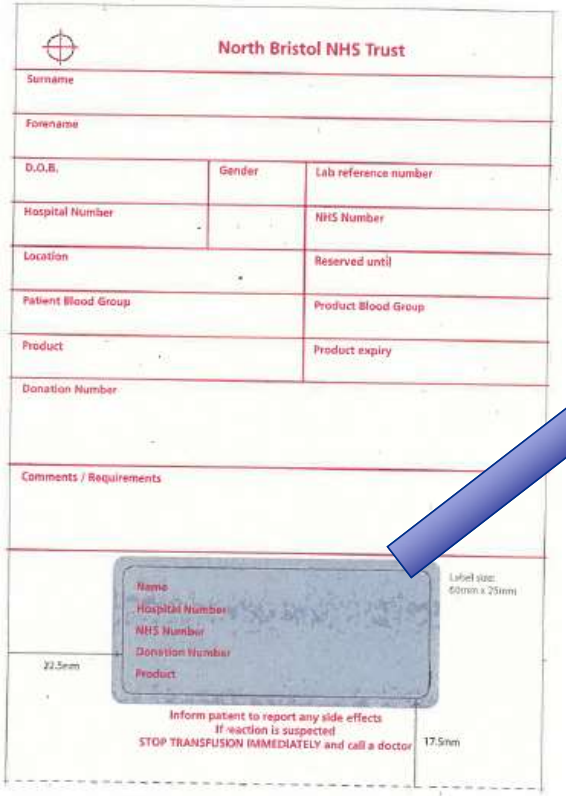
- Which type of fridge set up should we use?

Fridge Configurations Risk scoring Vs Function

	Electronic control of system	Training of staff-controlled access	Remote Stock management (blood location, stock levels)	Selection of Remote issue	Segregation of named patient blood vs unallocated	Segregation of ABO and Rh type	Segregation of individual unit types	Cold Chain adherence	Temperature Control	Quarantine ability	Segregation of Emergency Stock
Current system	No	No	No	No	No	No	No	No	Depends on the fridge modification status	No	Yes- but unrestricted
4 drawer fridges	Yes	Yes	Yes	Yes- with risk due to incorrect ABO selection	No	No	No	Yes	Yes	Possible but not segregated	No
9 drawer fridges	Yes	Yes	Yes	Yes- with risk due to incorrect unit selection	No	Yes	No	Yes	No – unknown if filled to capacity	Yes	No
Individual drawer locks per unit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes – as otherwise wouldn't be accepted.	Yes	Yes

Early Considerations

- How do we document transfusion in patient notes?
  (usually managed by sticker printed from PDA)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Surname

Forename

D.O.B. | Gender | Lab reference number

Hospital Number | NHS Number

Location | Reserved until

Patient Blood Group | Product Blood Group

Product | Product expiry

Donation Number

Comments / Requirements

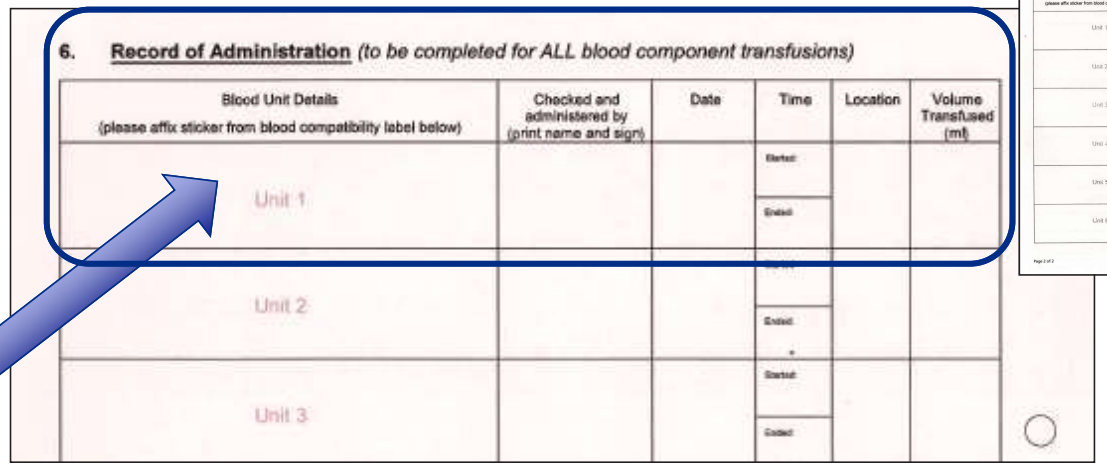
Name
Hospital Number
NHS Number
Donation Number
Product

Label size: 60mm x 25mm

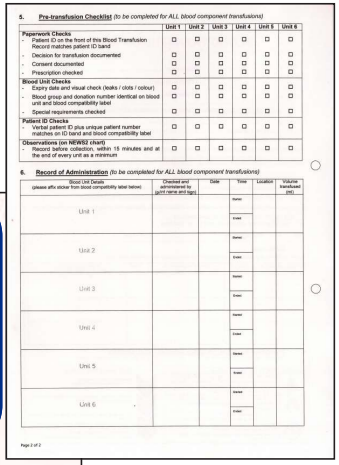
22.5mm

Inform patient to report any side effects
If reaction is suspected
STOP TRANSFUSION IMMEDIATELY and call a doctor

17.5mm


6. **Record of Administration** *(to be completed for ALL blood component transfusions)*

Blood Unit Details (please affix sticker from blood compatibility label below)	Checked and administered by (print name and sign)	Date	Time	Location	Volume Transfused (ml)
Unit 1			Started: / Ended:		
Unit 2			Started: / Ended:		
Unit 3			Started: / Ended:		



Remove sticker from bottom of compatibility label,
affix to Blood Transfusion Record
and complete all details in table above

Early Considerations

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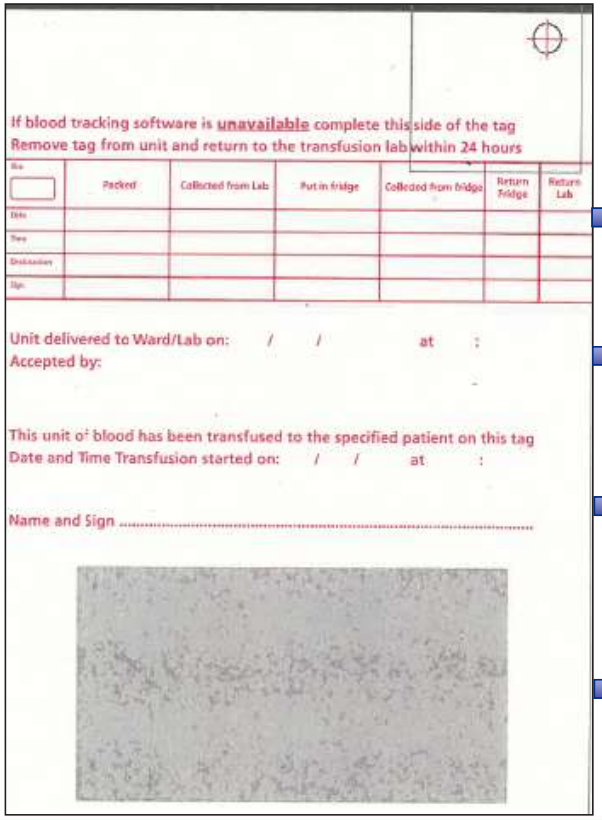
- How do external locations record cold chain and traceability?

  (Also management of possible down-time)


If blood tracking software is unavailable complete this side of the tag
Remove tag from unit and return to the transfusion lab within 24 hours

	Packed	Collected from Lab	Put in fridge	Collected from fridge	Return Fridge	Return Lab
Date						
Time						
Destination						
Sign						

Unit delivered to Ward/Lab on: / / at :
Accepted by:

This unit of blood has been transfused to the specified patient on this tag
Date and Time Transfusion started on: / / at :

Name and Sign .....

This label must be completed, detached from the blood component and returned to the laboratory

Table to manually record movement into and out of lab and remote fridges

Space to manually document receipt of single unit in clinical area following blood collection

Confirmation of transfusion to include date and time of infusion and signature of the person administering the blood component

If emergency stock issued, patient demographic label to be placed here to identify recipient

Early Considerations

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- How do we manage go live?

Phase 1: BloodTrack Courier

Kiosk training & assessment for ~330 staff

Six remote fridges – all must go live together

Introduce interim paper-based system to ~3000 staff

- Removal of lab compatibility report
- Launch revised Transfusion Record and Compatibility Label
- Adapted traceability system

Phase 2: BloodTrack TX

PDA training and assessment for ~1850 staff

Stagger go-live by area based upon:

- Location of remote fridge
- Patient journey through hospital

Phase 3…

Phase 1 Training

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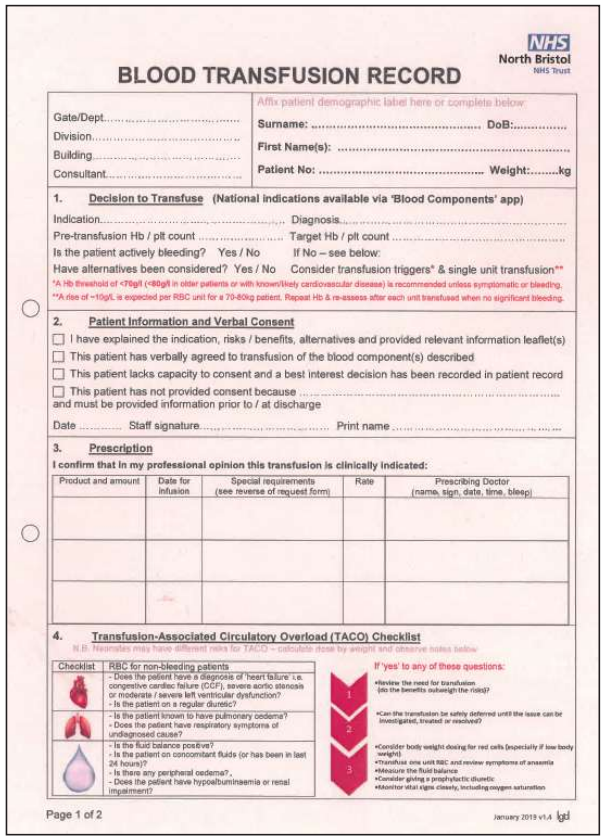
Training & Competency for Fridge Collection ~330 clinical / portering staff



BLOOD TRANSFUSION RECORD

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Affix patient demographic label here or complete below:

Gate/Dept.....
Division.....
Building.....
Consultant.....

Surname: ..... DoB:.....
First Name(s): .....
Patient No: ..... Weight:.....kg

1. Decision to Transfuse (National indications available via 'Blood Components' app)

Indication..... Diagnosis.....
Pre-transfusion Hb / plt count ..... Target Hb / plt count .....
Is the patient actively bleeding? Yes / No If No – see below:
Have alternatives been considered? Yes / No Consider transfusion triggers* & single unit transfusion**

*A Hb threshold of <70g/l (<80g/l in older patients or with known/likely cardiovascular disease) is recommended unless symptomatic or bleeding.
**A rise of ~10g/L is expected per RBC unit for a 70-80kg patient. Repeat Hb & re-assess after each unit transfused when no significant bleeding.

2. Patient Information and Verbal Consent

- ☐ I have explained the indication, risks / benefits, alternatives and provided relevant information leaflet(s)
- ☐ This patient has verbally agreed to transfusion of the blood component(s) described
- ☐ This patient lacks capacity to consent and a best interest decision has been recorded in patient record
- ☐ This patient has not provided consent because ..... and must be provided information prior to / at discharge

Date ..... Staff signature..... Print name .....

3. Prescription

I confirm that in my professional opinion this transfusion is clinically indicated:

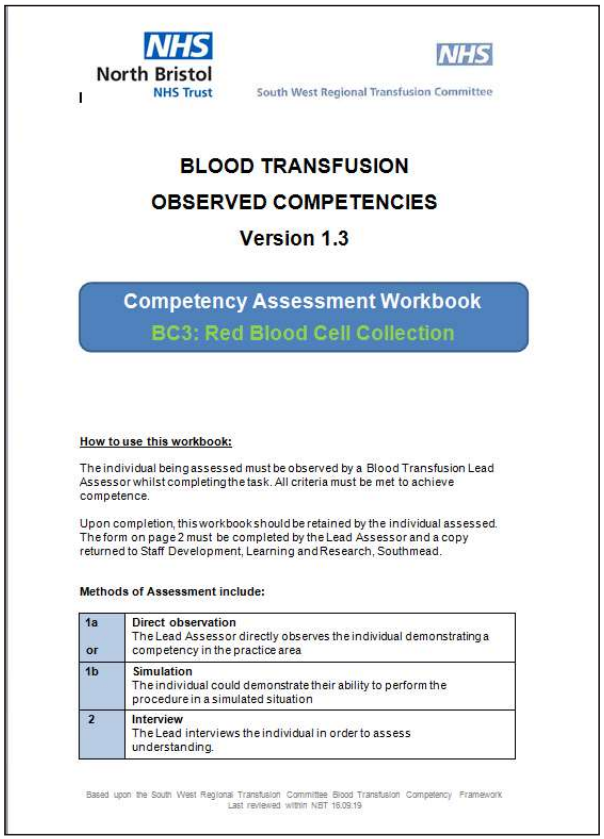
Product and amount	Date for infusion	Special requirements (see reverse of request form)	Rate	Prescribing Doctor (name, sign, date, time, bleep)

4. Transfusion-Associated Circulatory Overload (TACO) Checklist

N.B. Neonates may have different rules for TACO – calculate dose by weight and observe notes below

Checklist	RBC for non-bleeding patients	If 'yes' to any of these questions:
	- Does the patient have a diagnosis of 'heart failure' i.e. congestive cardiac failure (CCF), severe aortic stenosis or moderate / severe left ventricular dysfunction? - Is the patient on a regular diuretic?	1 •Review the need for transfusion (do the benefits outweigh the risks)?
	- Is the patient known to have pulmonary oedema? - Does the patient have respiratory symptoms of undiagnosed cause?	2 •Can the transfusion be safely deferred until the issue can be investigated, treated or resolved?
	- Is the fluid balance positive? - Is the patient on concomitant fluids (or has been in last 24 hours)? - Is there any peripheral oedema?, - Does the patient have hypoalbuminaemia or renal impairment?	3 •Consider body weight dosing for red cells (especially if low body weight) •Transfuse one unit RBC and review symptoms of anaemia •Measure the fluid balance •Consider giving a prophylactic diuretic •Monitor vital signs closely, including oxygen saturation

Page 1 of 2 January 2019 v1.4 lgd



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NHS South West Regional Transfusion Committee

BLOOD TRANSFUSION
OBSERVED COMPETENCIES
Version 1.3

Competency Assessment Workbook
BC3: Red Blood Cell Collection

How to use this workbook:

The individual being assessed must be observed by a Blood Transfusion Lead Assessor whilst completing the task. All criteria must be met to achieve competence.

Upon completion, this workbook should be retained by the individual assessed. The form on page 2 must be completed by the Lead Assessor and a copy returned to Staff Development, Learning and Research, Southmead.

Methods of Assessment include:

1a or	**Direct observation** The Lead Assessor directly observes the individual demonstrating a competency in the practice area
1b	**Simulation** The individual could demonstrate their ability to perform the procedure in a simulated situation
2	**Interview** The Lead interviews the individual in order to assess understanding.

Based upon the South West Regional Transfusion Committee Blood Transfusion Competency Framework
Last reviewed within NST 16.09.19

Kiosk Training (Haemonetics/TP)
Up to 8 attendees - 30 mins

- BloodTrack Enquiry
- Collection documentation
- Collecting unit(s)
- Ward receipt
- Returning unit(s)
- Emergency stock

Assessed following training

Collection Assessment (TP)
Up to 2 attendees - 15 mins

- Adapted RTC competency

* Also e-learning for 3,000 clinical staff re interim paper-based system (prior to PDA launch)

Communications

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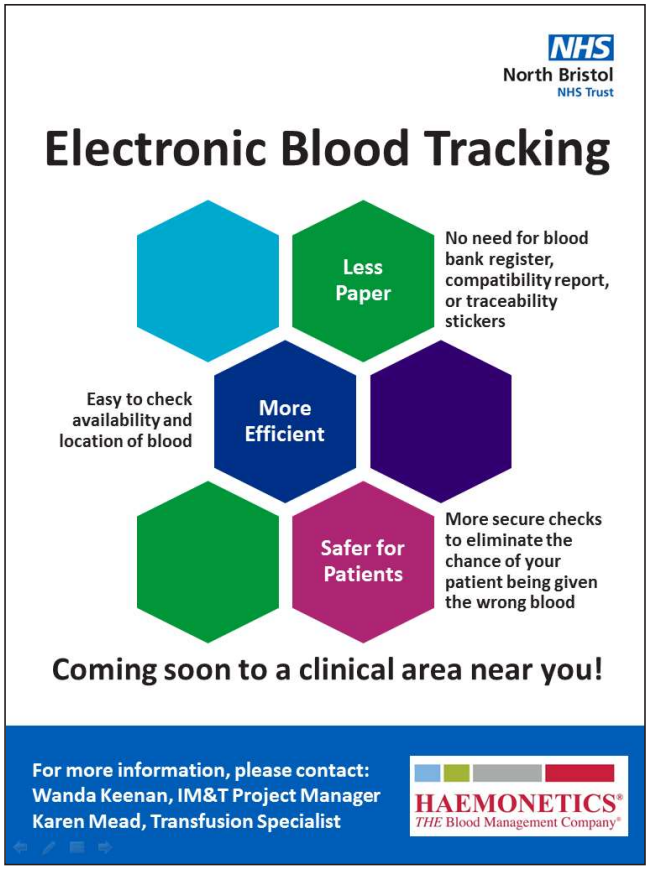
Liaison with IM&T Communications Manager

BloodTrack: Communication Plan Outline

Date	Audience	Message	Channel
Friday 13th September	NBT Management & Leadership	• BloodTrack imminent • What's happening and when • Staff/Patient benefits	CCIO Email
Tuesday 17th September	Ward Managers Staff working on Kiosks/Fridges	• BloodTrack will go live in one month • What's happening and when • Action required: (ensure relevant staff do the training)	Email
Wednesday 18th September	3000 Ward Staff	• BloodTrack will go live in one month • What's happening and when	Email (via MLE)
Mon 23/30 September	All Staff	• Complete self-serve training by x date	NBT Bulletin
w/c September 23rd	All NBT staff	• BloodTrack imminent • What's happening and when • Staff/Patient benefits • How this fits with our Digital Transformation Strategy	Byte Size (IM&T trust-facing bulletin) Via email/intranet/Bulletin
Wednesday 2nd October	All NBT Staff	• 2 weeks to go live • Have you done your training yet?	MOTD
	Ward Managers Staff working on Kiosks/Fridges 3000 Ward Staff		Email (incl. via MLE)
Wednesday 9th October	Ward Managers Staff working on Kiosks/Fridges 3000 Ward Staff	• BloodTrack will go live in one week • Have you done your training yet?	Email (incl. via MLE)
Monday 14 October	All staff	• Get ready for BloodTrack • Final reminders	Bulletin
	Ward Managers Staff working on Kiosks/Fridges 3000 Ward Staff	• BloodTrack will goes live this week • Please complete training by go-live	Email (incl. via MLE)
Wednesday 16 October	All Staff	• Blood Track live today	MOTD
	Ward Managers Staff working on Kiosks/Fridges 3000 Ward Staff		Email (incl. via MLE)
	IM&T Twitter followers	• Blood Track live – staff/patient benefits	IM&T Twitter feed
Friday 18 October	All Staff	• BloodTrack went live this week • Why we are doing this • Staff/Patient benefits • How this fits with our Digital Transformation Strategy	Friday 5
TBC	TBC	• Post go-live • Staff reaction / any common isues?	Email (incl. via MLE)



Phase 1 Go Live 16.10.19

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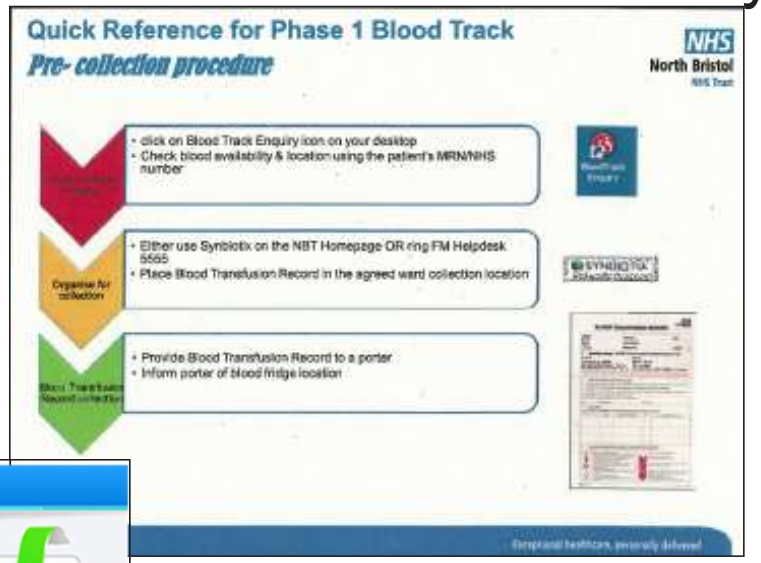
Support for clinical areas on the launch day



Brunel

- Karen to support portering
- Elmarie to support theatres
- Wanda to hold IM&T mobile
- IM&T second contact
- Quick reference guides

CDS

- Mooi to support W&CH staff
- Quick reference guides

Overnight support

- FM Team Leader
- Quick reference guides

Phase 2 Considerations

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Staff ID barcodes

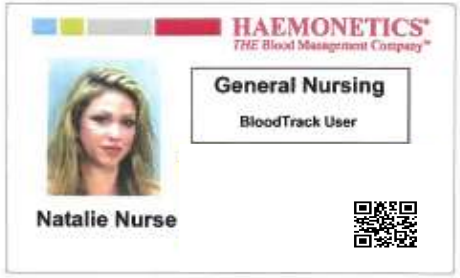
- POCT pre-printed stickers
- Linear barcode / 2D barcode
- Testing / collection of badges

Admin for ASK Manager

- Update POCT with 2D code
- Add on new users
- Input training dates
- Data extracts
- When to set training rules?

Wristbands

- Addition of 2 QR barcodes
- Many different templates
- Tribands / Neonatal wristbands



Z-Band UltraSoft Wristbands

PDA IT issues

- WiFi upgrade (delayed PDA launch)
- Initial IT ‘build’ i.e. pincode for PDAs
- New MDM introduced
- Wandering WiFi connectivity

Phase 2 Training

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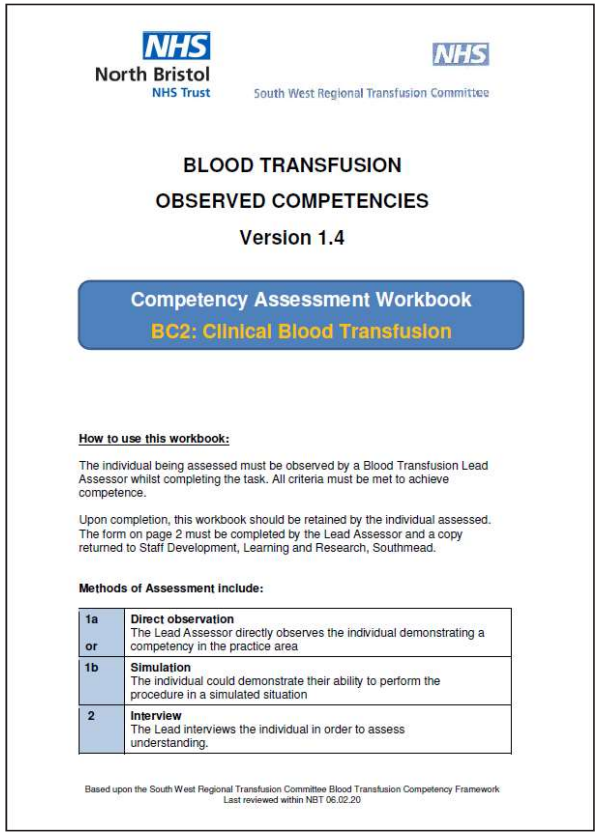
Training & Competency for PDA use

~1,850 clinical staff



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BLOOD TRANSFUSION
OBSERVED COMPETENCIES
Version 1.4

Competency Assessment Workbook
BC2: Clinical Blood Transfusion

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Based upon the South West Regional Transfusion Committee Blood Transfusion Competency Framework
Last reviewed within NBT 06.02.20

PDA Training (Haemonetics/IT Trainers)
Target Transfusion Leads first
Up to 4 attendees - 30 mins
- Begin Transfusion - End transfusion - Emergency transfusion
Assessed following training

Administration Assessment (TP)
Up to 2 attendees - 30 mins
- Adapted RTC competency

Original Go-Live Plan
Outpatients – w/c 9th March 2020
Levels 4/5 – w/c 23rd March 2020
Levels 2/3 – w/c 18th May 2020
Level 0 – w/c 8th June 2020
Retained Estate – w/c 6th July 2020

Post-COVID – all face-to-face training suspended
PDA training videos available online
Assessment carried out by Lead Nurse
65% compliance required for go live in each ward / area

The Future…

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- Replace all current fridges with Haemobanks
- Remote issue from selected locations
- Electronic tracking of batch products
- Connectivity with cell salvage machines
- Electronic phlebotomy

Gloucestershire Hospitals
NHS Foundation Trust

Gloucestershire Hospitals NHS Foundation Trust

Electronic blood tracking ‘upgrade’

Stuart Lord, Transfusion Practitioner

Overview

- Went live with Blood360 (MSoft) in September 2020
- Previously had Bloodhound (Msoft)
- ‘Package’ includes Blood Fridge tracking for the laboratory and the 6 satellite fridges (cold chain) and traceability (electronic fating)
- Electronic sampling and administration not part of project / package

Blood360

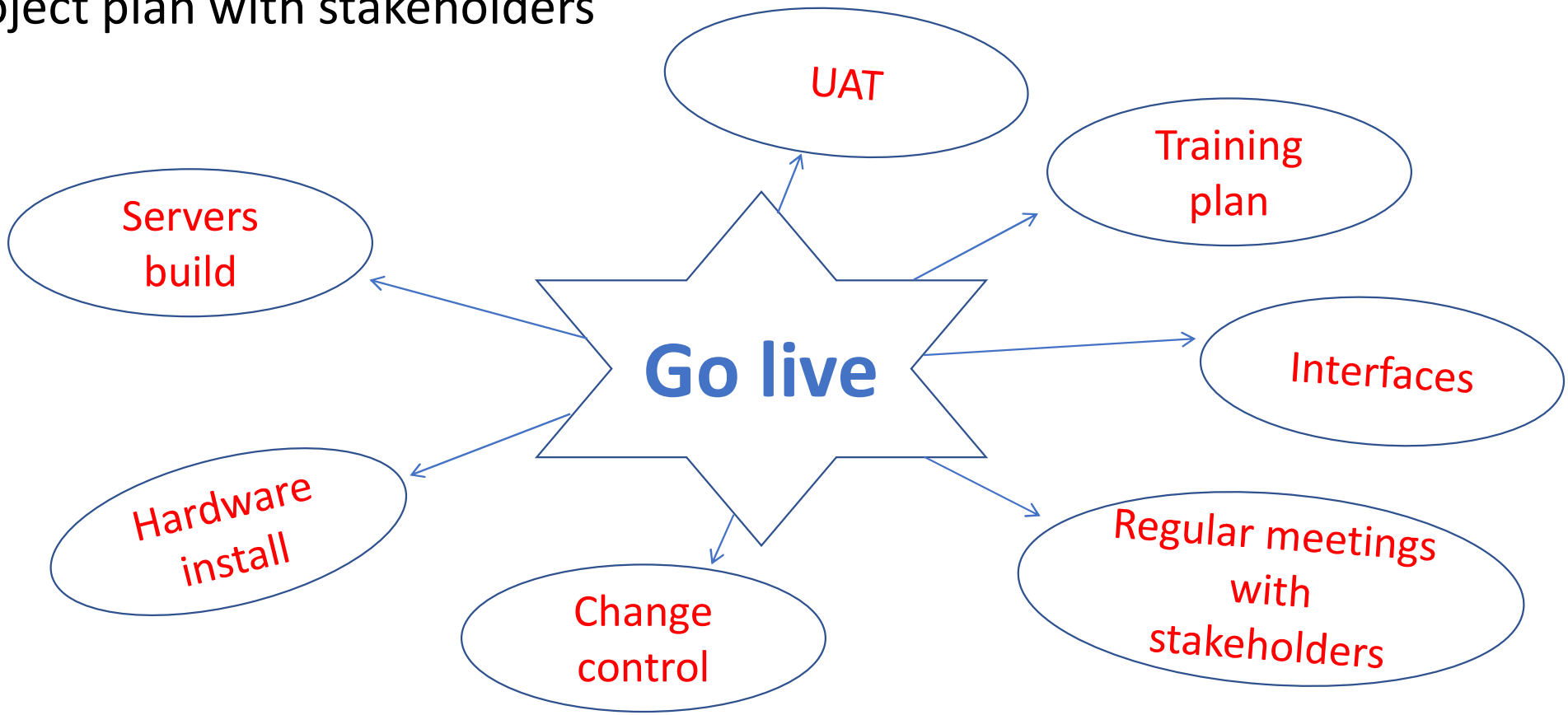
Blood360®

The Leading Blood Tracking System

Pre-go live

2018/2019 tender process and Blood360 chosen

Project plan with stakeholders



Go live

- Go live criteria outlined with stakeholders
- Cheltenham General Hospital went live 23rd September 2021
- Gloucester Royal Hospital went live 24th September 2021
- Switchover to Blood360 went well

Challenges

- Training
- IT
- COVID-19
- Resources
- Post go live issues

Positives

- Biometric / fingerprint recognition for blood fridge access trust wide
- Improved traceability figures
- Emergency O blood (D Pos and D Neg) removed electronically in A&E and Theatre fridges
- Similarities to previous system helped with change
- Positive feedback with users (lab and clinical)
- Clinical ‘nurse/midwife/ODP champions’ trained – good engagement with clinical staff
- User access controlled – deactivating staff who are outside of training requirements, on mat leave, long term sick, leavers

8 months on…

- 650+ staff trained on blood collection using Blood360
- Majority of feedback is positive and improvement on previous system
- Still have challenges – mainly IT / interface related
- Much improved traceability rates

Thank you ☺