

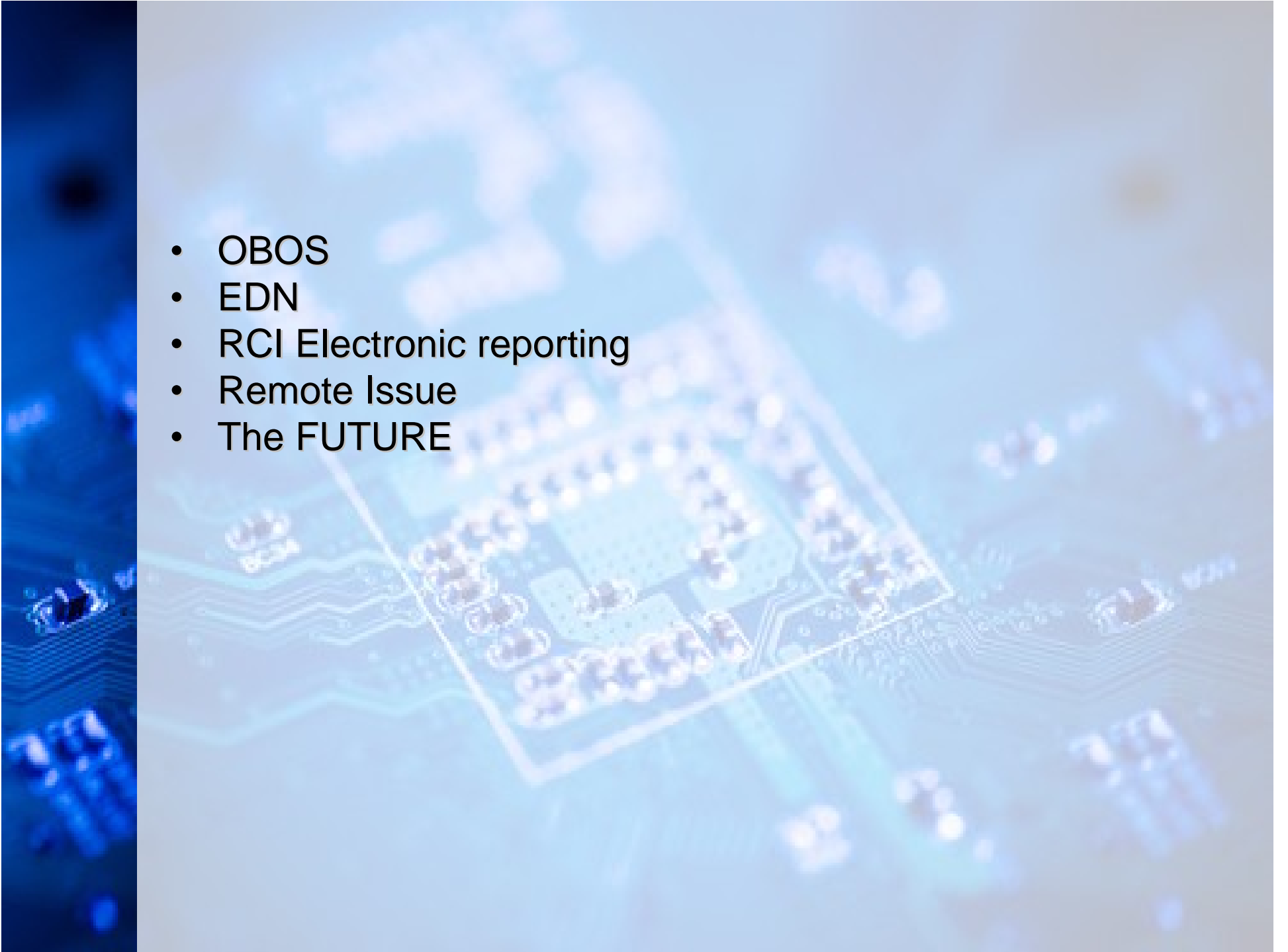


Electronic Issue and beyond

Malcolm Robinson
Chief BMS, WSHT, and Chair of SE Thames
TA(D)G

This presentation to cover.

- Requirements for Electronic Issue (E.I.)
- MSBOS
- LIMS Validation
- MHRA Guidance
- Introduction of EI and E.I. on-demand

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- OBOS
 - EDN
 - RCI Electronic reporting
 - Remote Issue
 - The FUTURE

What this presentation will **NOT** cover.

- Vein to Vein traceability
- Bedside tracking IT systems
- Transfusion networks

Maximum (Surgical) Blood Ordering Schedule.

- A List of operations routinely performed by your Trust and the “agreed” number of units which the Transfusion laboratory will usually issue to cover a patients operation having the “said” procedure.
- For operations on-site and off-site, especially if there is a significant time delay due to transportation requirements.
- MSBOS agreed by Trust HTC and regularly reviewed by HTC.
- See our MSBOS; next slide pdf embedded.

- Our MSBOS;



**Microsoft Word
Document**

BCSH Computer Guidelines

- Guidelines for blood bank computing
 - Transfusion Medicine, 2000, 10, 307-314.
- The specification and use of information technology systems in blood transfusion practice.
 - Transfusion Medicine, 2007, 17, 1–21.
- MHRA guidance on E.I.
- NEW guidelines



NOTE

- The 2 sample or 2 group “rule” was stated purely in the context of the safety of Electronic Issue (EI).
- Intended to detect laboratory errors that could lead to incorrect blood component transfused errors.

NEW BCSH Guidelines

As presented by our BBTS president this morning;

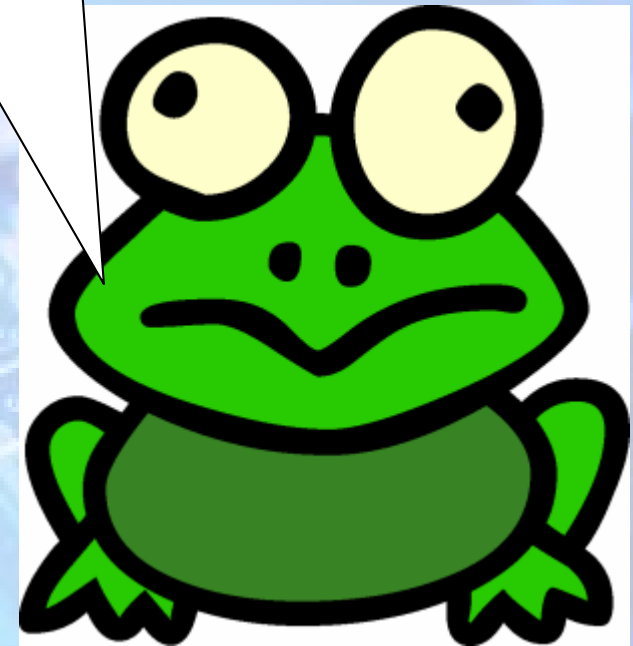
New BSCH Guidelines for Compatibility Testing

- In the **absence of secure bedside electronic patient identification systems**, it is highly recommended that a **second sample** is requested for **confirmation of the ABO group of a first time patient**, where this does not impede the delivery of urgent red cells or components.

**Most common problem and
MOST Difficult to eradicate**

**WRONG
BLOOD IN
TUBE
(WBIT)**

WBIT, WBIT...



2010 SHOT Report: IBCT Category

- Phlebotomy errors resulting in **WRONG BLOOD IN TUBE.**
 - 3 cases in which the patient was transfused.
 - One of these was ABO incompatible.
 - No fatalities in that reporting year.

New BSCH Guidelines for Compatibility Testing

- 2 samples (giving the same group result) give greater confidence that the correct blood is in the tube.
- Recognise that an IAT crossmatch will **NOT** detect WBIT errors.
- Recognise that the 2 sample-rule is **NOT** directly concerned with electronic issue.

2010 SHOT Report: Near Miss Category

- 386/863 (45%) near miss reports relate to **wrong blood in tube.**
- “This remains the most common potential weakness in the process.”

However Actual WBT%:

- 2 very large users **without** computer assisted bedside monitoring systems; **0.02%** relate to **wrong blood in tube**.
- Still a weakness in the process.”
- **Crossmatching will NOT pick these up!**

What is Electronic Issue. (E.I)

- Computer matching of Blood v Patient.
- NHSBT guarantee the blood that is in a labelled unit is the Blood Group that is written on their label.
- With two separate venepuncture samples tested, latest of which should be by fully automated validated system; We have a confidence in the Blood Group and Antibody screen of the blood in the tube, patient.

What is Electronic Issue. (E.I)

- The validated Computer System, LIMS, matches the two together to E.I.
- However if as in our hospital you get a call from theatre to say, “My Anaesthetist wants real blood not electronic blood please”, you know you have failed in Training or Education!

Introduce E.I.

- Change Control
- Computer LIMS validated
- Training
- Savings! Time and Stress

What is E.I. on demand

- E.I on demand; moves away from MSBOS for patients that are suitable for E.I.
- No more issuing blood just to cover procedures.
- No more Routine Return to Stock/Dereservation of numerous unneeded units for numerous patients.
- There must be **trust** between Theatre and Blood Transfusion that we can issue blood to a patient, pack that blood, all within 10 minutes of a call from Theatre.

Introduce E.I. on demand

- TRAINING
- Introduce E.I. on demand to Trust
- Savings! 15 – 20% of Trust Blood Budget;
circa >£ 150 K/ annum
- More Time to Transfusion department
- Stress? Good Major Haemorrhage protocols & system.

Online Blood Ordering system; OBOS

- Introduce OBOS
- Change Control
- Training
- SOP's
- Use

Electronic Delivery Notes; EDN

- LIMS communicates and downloads NHSBT delivery notes including all Rh. and K phenotypes.
- Change Control and validation
- Training
- SOP's
- Use

NHSBT RCI Laboratories to report Electronically

- We are in the 21st century and RCI Labs and Transfusion Laboratories have digital recording system and so we should not be far away!
- Change Control
- Validation SOP's
- Use

Remote Issue

- Again remember we are in the 21st Century
- Both, or a number of, hospitals linked and all samples processed by MHRA compliant laboratory.
- Transfusion Laboratories have digital recording system and so we should be able to issue blood to near and far away using secure Remote Issue Blood banks!

Remote Issue

- Change Control
- Validation SOP's
- TRAINING
- Use

The FUTURE!!!!!!

- Therefore can we extend our systems and knowledge using validated digital recording systems (LIMS etc) to issue blood safely when patients in our current practices would not be E.I?
- (providing we have a digital vein to vein traceability system, digital phlebotomy and bedside checking system).

The FUTURE!!!!!!

- A patient with a previous history of a clinically insignificant antibody that now has a Negative antibody screen, could we E.I. I would like to say, yes, therefore...
- A patient with a previous history of a clinically SIGNIFICANT antibody that now has a Negative antibody screen, could we E.I. I would like to say, yes, again, therefore...
- Could we then say also, remote issue?

The FUTURE!!!!!!

- Thank you for your time, the future **IS** in **YOUR** hands.