
Resus 1
PHILIPS
FREEWAY
Medical

Assessing the Impact of Human Factors on Transfusion Safety in Trauma Medicine

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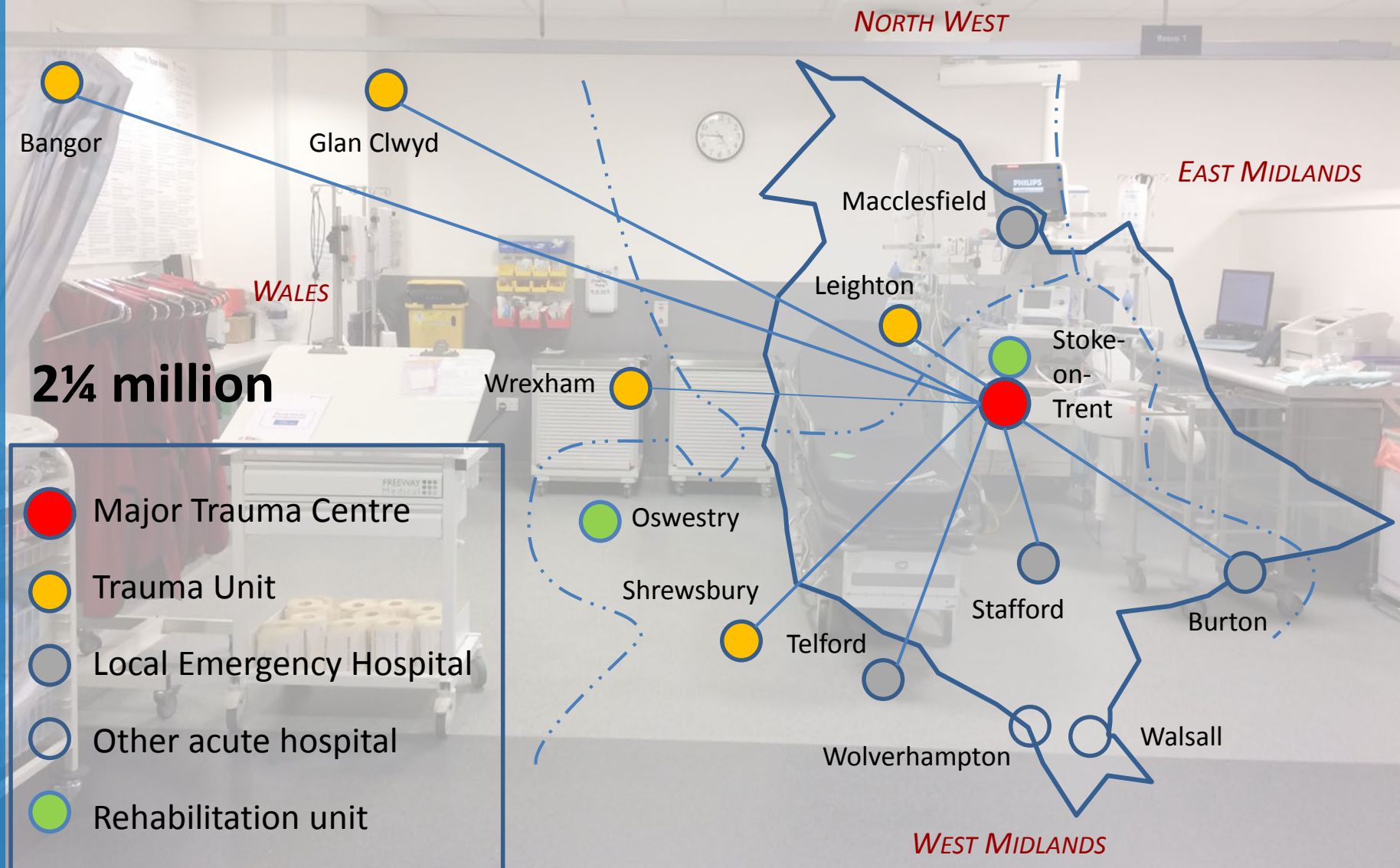
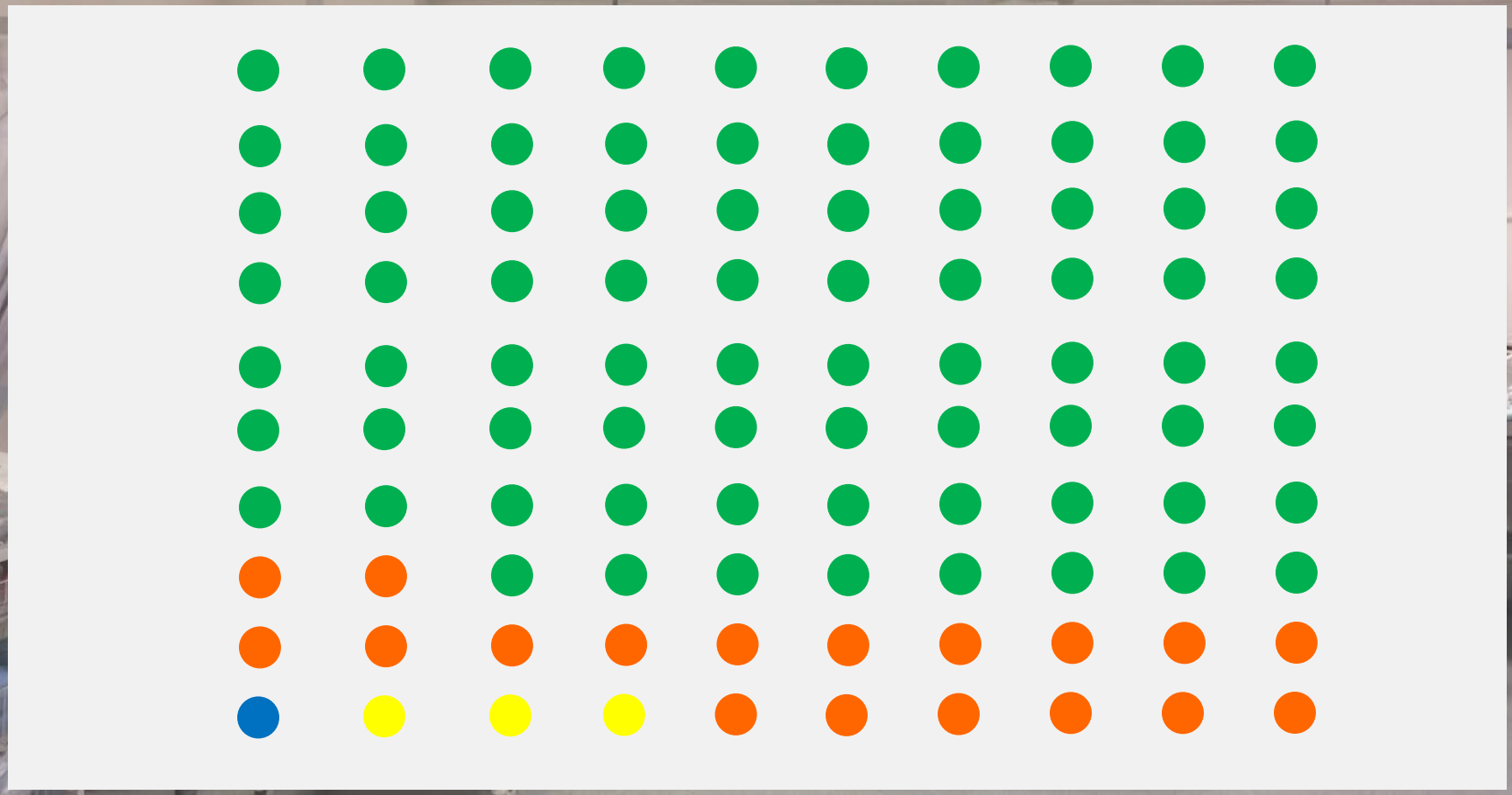
University Hospitals of North Midlands

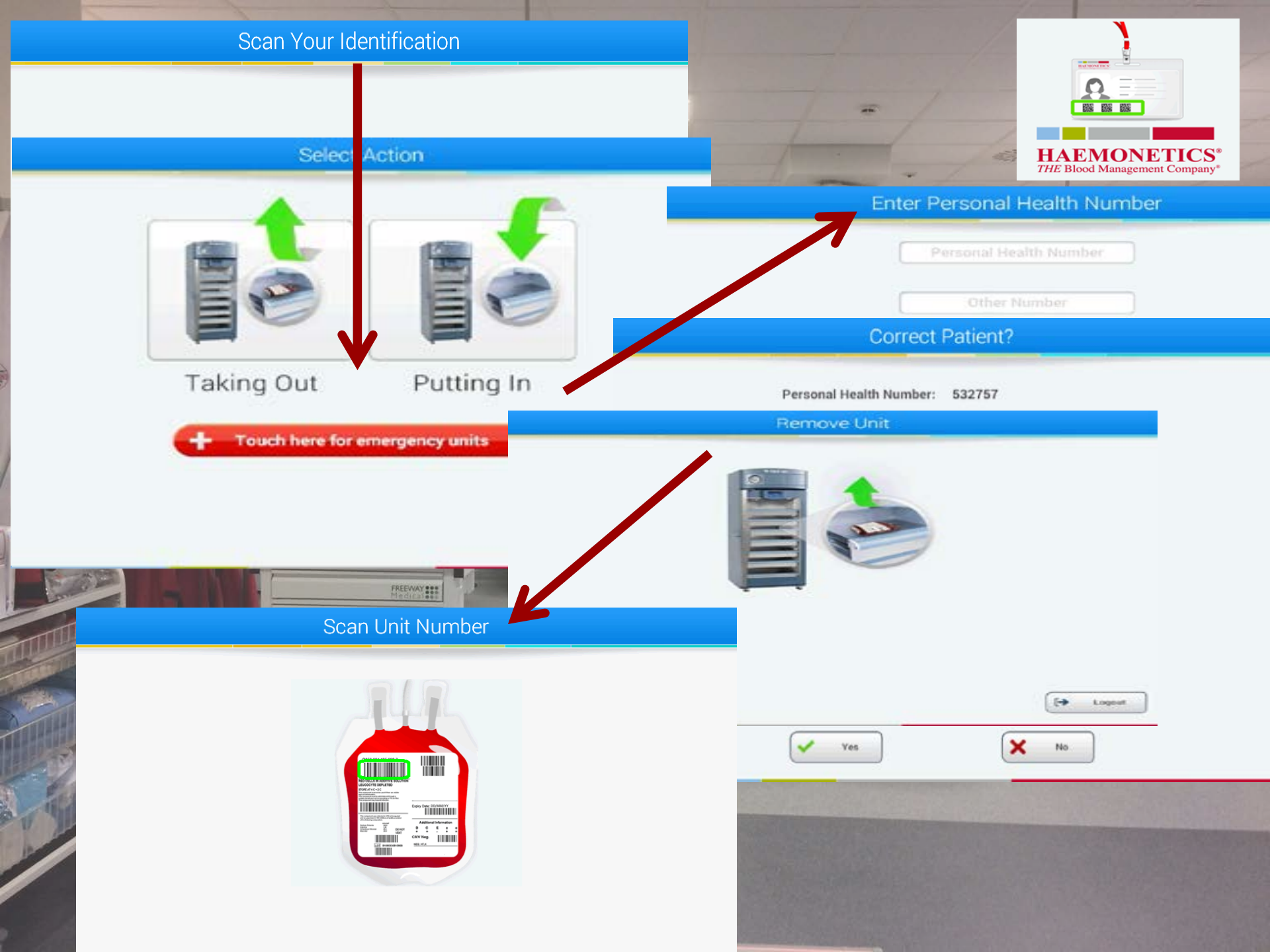
NW Midlands & N Wales Trauma Network – from Oct 2012



UHNM Traceability



Fated Ward 'Unfated' ED 'Unfated' Presumed transfused


Scan Your Identification
Select Action
Taking Out
Putting In
Touch here for emergency units
Enter Personal Health Number
Personal Health Number
Other Number
Correct Patient?
Personal Health Number: 532757
Remove Unit
Scan Unit Number
Logout
Yes
No
HAEMONETICS
THE Blood Management Company

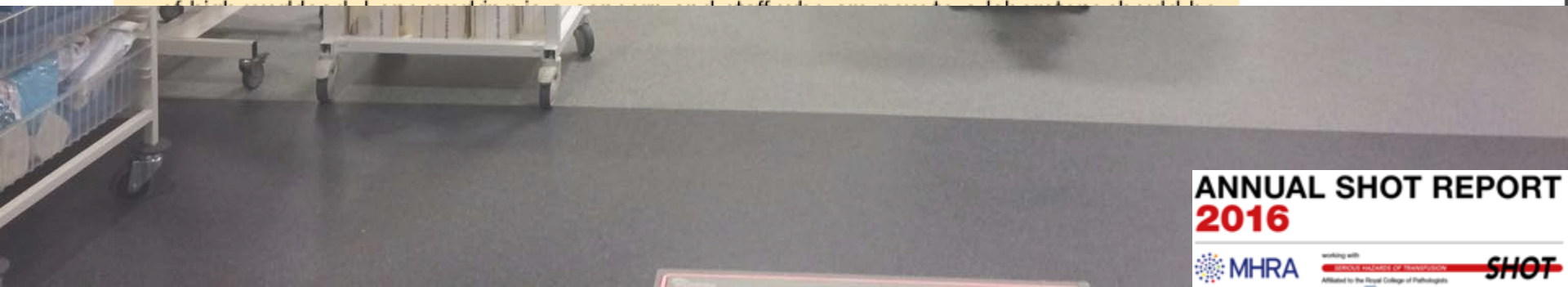
Key Messages and Recommendations

4

Authors: Paula Bolton-Maggs and Dafydd Thomas

Key SHOT messages

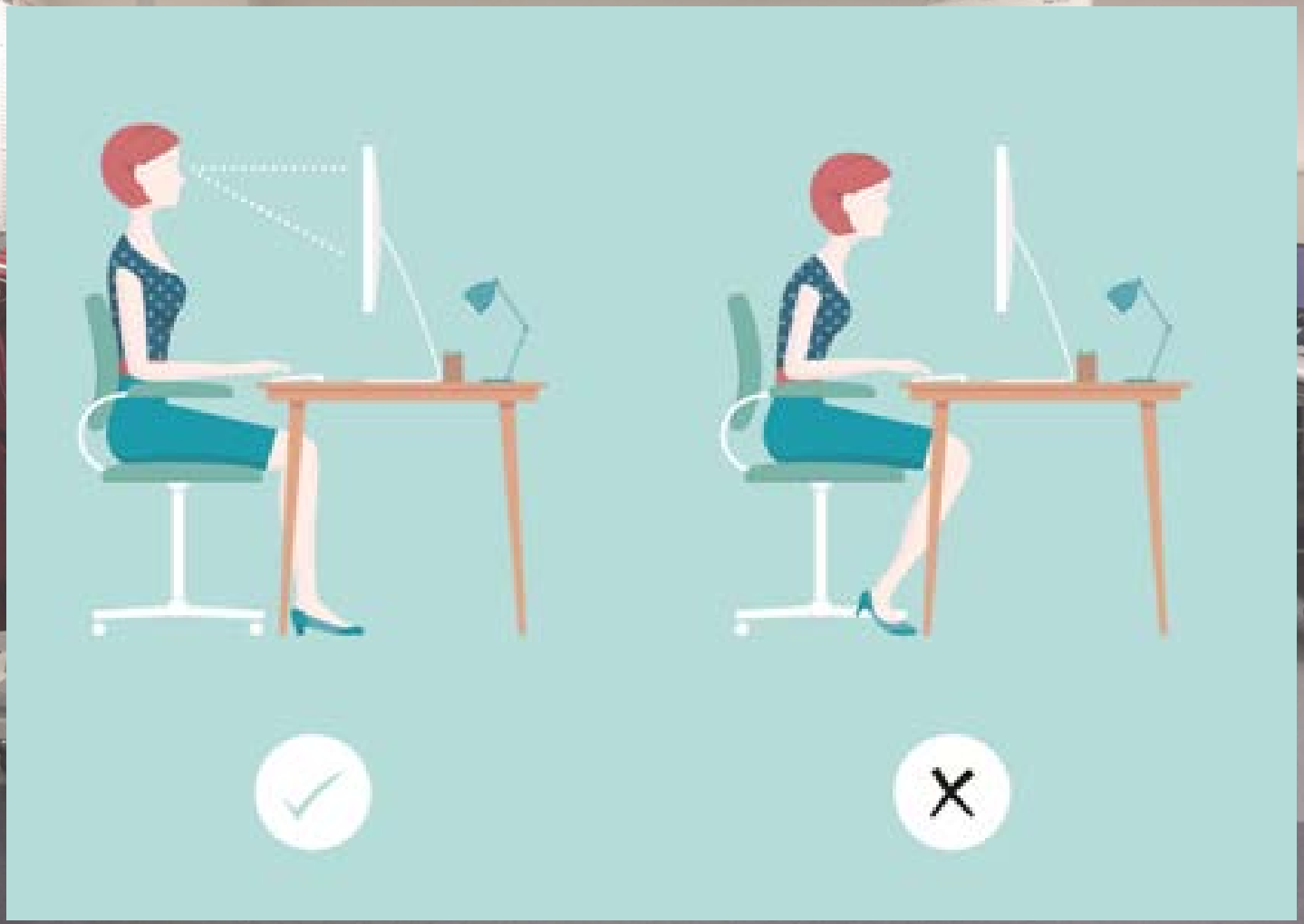
- **Errors** continue to be the source of most SHOT reports (87.0%). While component safety is very good, mistakes continue to put patients at risk. Many of these are caused by poor communication and others by distraction. A better understanding of human factors may help to reduce these
- **Training:** All staff participating in transfusion must have the knowledge and training to undertake the role. This is their personal responsibility. Information technology (IT) is not always reliable and does not replace the need for knowledge
- **Laboratory staffing** should ensure that there are adequate numbers of appropriately trained staff; there should be contingency planning for staffing levels below a minimum level and for times



Transfusion Safety in Trauma - Results

Trauma Patient	G&S taken?	Dual sample!	Wrist-band?	PPID used?	Bedside labelling	MHP?	ID entry O neg?
1	✓	✓	×	×	✓	×	n/a
2	✓	✓	×	n/a	×	✓	✓
3	✓	✓	✓	×	✓	×	n/a
4	✓	×	×	×	×	×	n/a
5	✓	✓	×	×	×	×	n/a
6	✓	✓	×	n/a	✓	✓	×
7	✓	✓	×	×	×	×	n/a
Total	7	6	1	0	3	2	1
Total	100%	86%	14%	0%	43%	29%	50%

Human Factors = Ergonomics



Human Factors = 'SHELL'

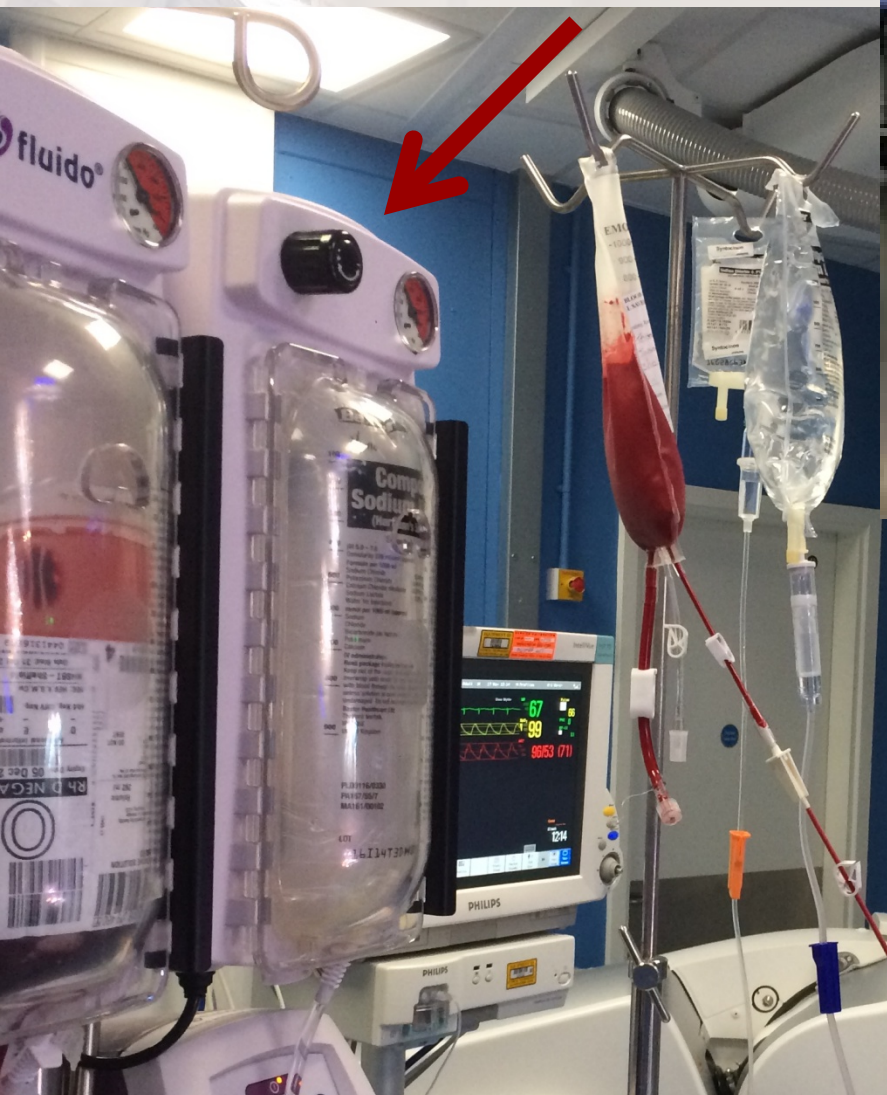
- **S**oftware
- **H**ardware
- **E**nvironment
- **L**iveware
- **L**iveware (central)

Software

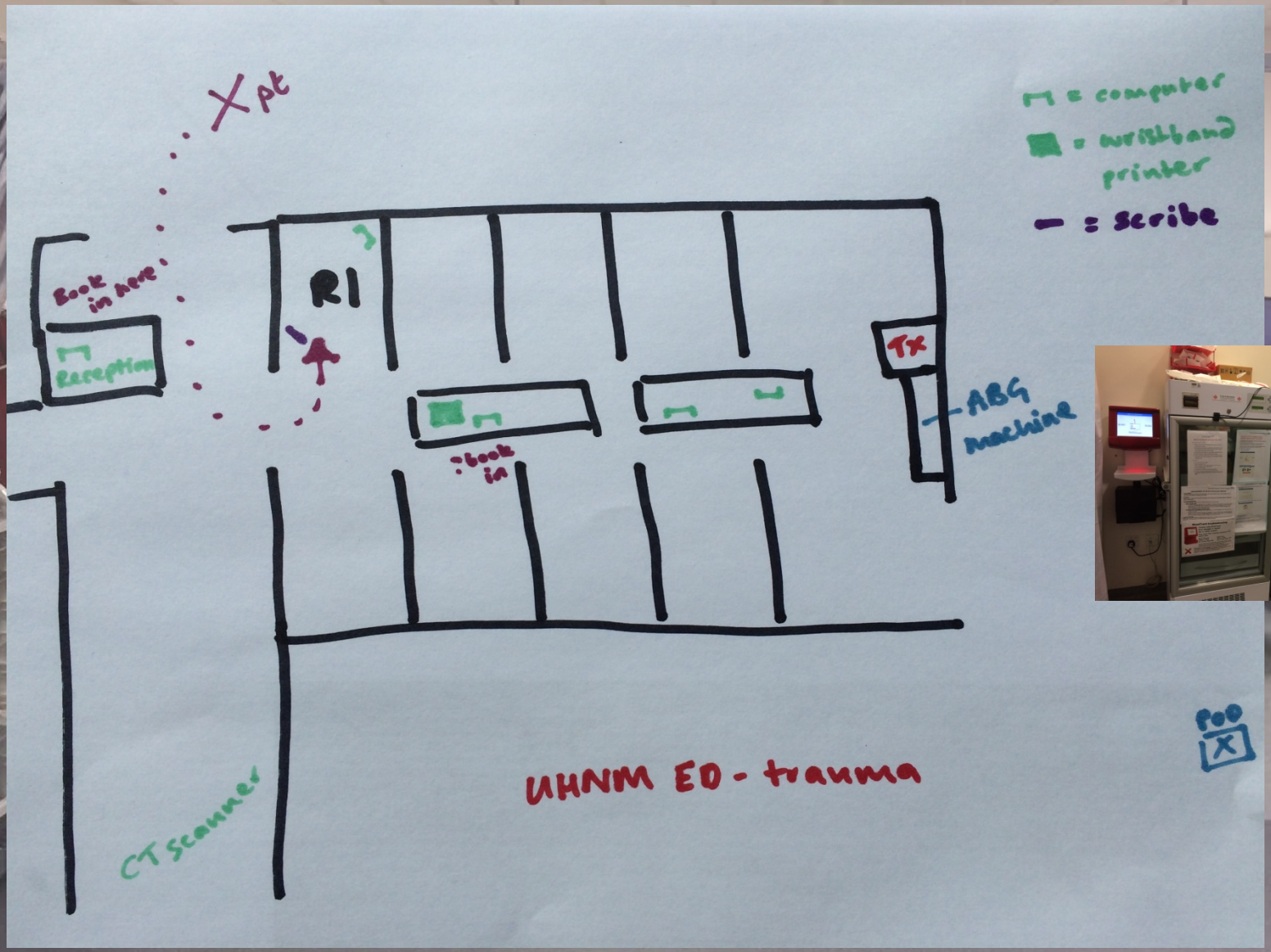
2012 BCSH Guidelines for pre-transfusion compatibility

Ensure you send one *pre-transfusion* sample of blood to the lab ASAP in order for group-specific blood to be issued early.
Ensure the patient has an ID band attached to them.

Hardware



Environment



Liveware & Central Liveware

Patient Identification

E: Look at safe use of space and build into education/training

H: Adapt to issues with ID printers

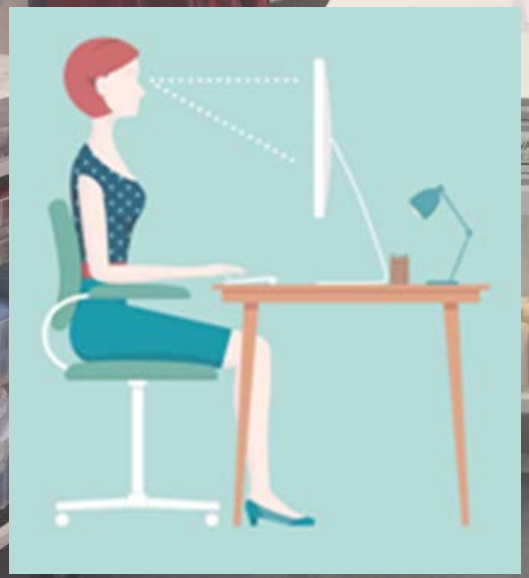
L: Incorporate PPID into mind-set of all staff & communicate about it

S: Build use of wristbands and PPID into pathways

L-central: Specify responsibility of PPID to ?scribe + add time line

+ Role for multi-professional MHP simulation training to address HF

Transfusion Safety in Trauma Medicine
Impact of Human Factors



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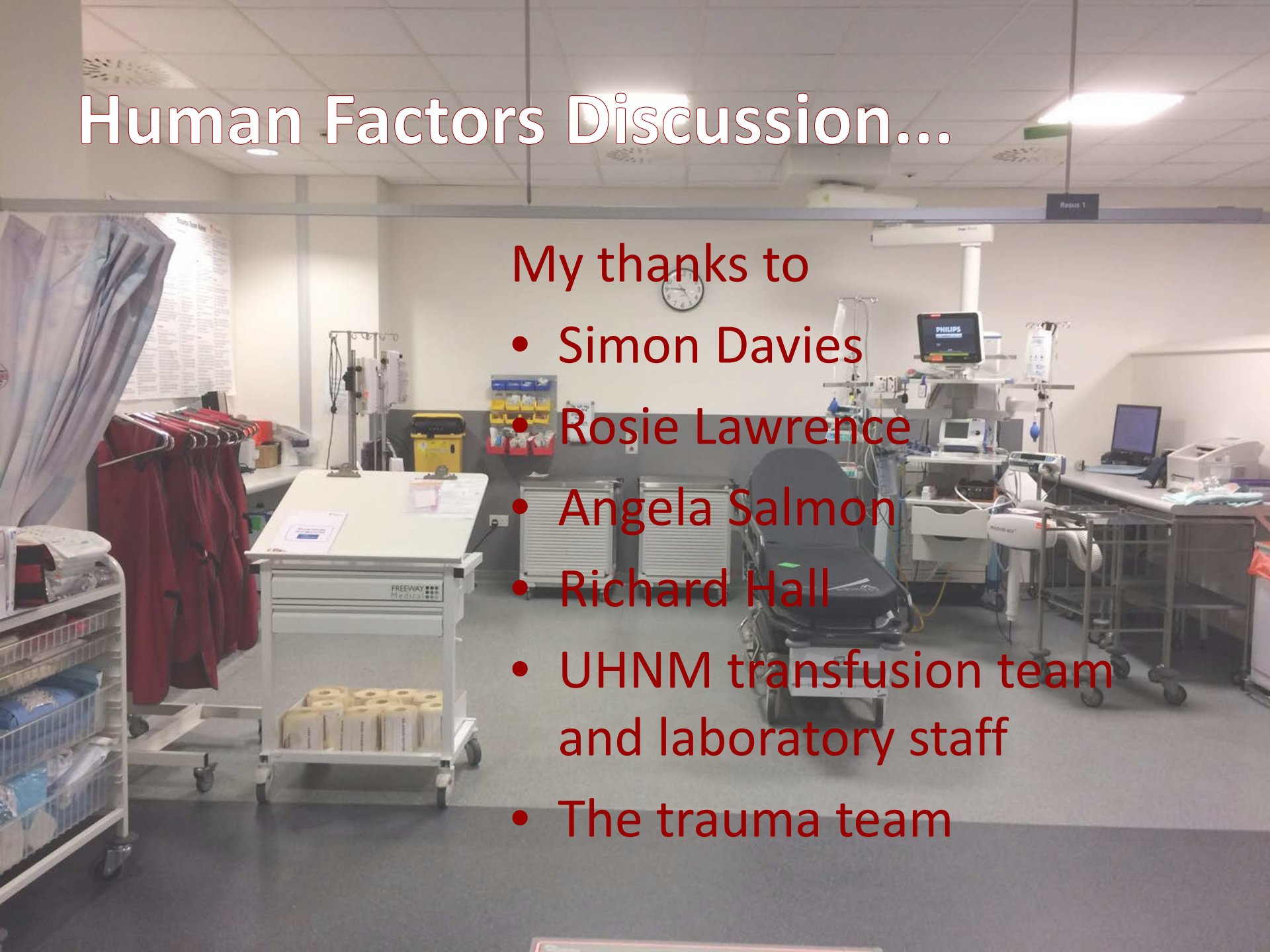
Human Factors Discussion…



My thanks to

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- Rosie Lawrence
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- UHNM transfusion team and laboratory staff
- The trauma team