Keeping Track of Blood
Challenges and advances of vein to vein blood tracking

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Why trace where blood goes?

- Because we have to – it’s the law!
- BSQR 2005 – track from donor to recipient
- Records must be kept for 30 years
The challenge

- The number of components issued last year in the UK was approximately
  - 2 million red cells
  - 300,000 doses of platelets
  - 250,000 units of FFP
  - 120,000 units of cryoprecipitate
Which results in....

Lots of paper!
And.....
The Answer?

Electronic Clinical Transfusion Management System (ECTMS)
ECTMS

- Electronically trace blood using barcode scanning technology at every stage of the transfusion process
- Blood samples, request into laboratory, blood collection from lab and bedside check
The kit
Overview

- Sample taken
- Sample booked into laboratory
- Blood collected from fridge
- Transfusion given (start and stop)
Medway's project

- Project started late 2008
- OJEU procurement (6 months)
- Project group formed
- Hardware set up
- Wristbands designed
- Fridge secured April 2011
- First bedside pilot September 2011
- Staged roll out 3-4 areas at a time
Now live in

- Haematology/ oncology day units
- 3 elderly care wards
- 8 medical wards
- MAU and SAU
- ICU, CCU, Medical HDU, Surgical HDU
- POCU
- Emergency Department
- In-patient phlebotomy
40 kits rolled out so far
4000 units transfused using system
11500 samples taken using system
Another 26 kits on order
  • Maternity
  • 4 surgical wards
  • Paeds/ neonates
  • ?outpatient phlebotomy/ community
Advantages

- Minimises biggest risk of transfusion – human error. At each stage, including laboratory
- Availability of data – who had what and when? Is blood available? Audit
- Reduces rejected samples – accurately and legibly labeled samples
- Saves time (after some practice)
More advantages

- Improves documentation – stickers at each stage
- Ensures only trained and competent staff can be involved in transfusion
- Allows inclusion/exclusion of staff by role, training status etc
Disadvantages

- **Cost**
- Can bring its own problems – new and inventive ways to get things wrong!
- Resource intensive to implement
- Staff resistance (some staff)
- Dependant on staff actually using it
- On-going system support – but staff may be freed up from other jobs
Other potential benefits

- Single nurse check
- Decision support – is transfusion appropriate?
- Remote issue – on site (e.g. fridges in theatres, Emergency Department) or on another site
- Data sharing – NHS Trusts ↔ NHSBT
- Recording of observations, alerting of abnormalities
Recommendations

• Get high level Trust support – Board, Governance or Safety Committees
• Resource project adequately - project management, change analysts, IT
• Involve all key stakeholders – lab, ward, medical
• Feel free to contact me for advice
• Don’t expect sudden results!