



The benefits of the system are not only in meeting regulatory requirements, cost saving and ensuring components are available on demand, but also allowing a more effective use of Biomedical Scientists' time in line with Modernising Scientific Careers."

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Barts and The London NHS Trust saves over £50,000 a year using BloodTrack[®] HemoSafe

Background

Barts and The London NHS Trust comprises of three hospitals in the London area including the oldest hospital in Britain, St Bartholomew's, which was founded in 1123. The Trust manages over 700,000 patient admissions each year and is the base for the London Air Ambulance Service (HEMS).

Challenge

Barts and The London's Blood Transfusion Service is faced with the challenge of providing three separate sites (The London Chest Hospital, St Bartholomew's Hospital and The Royal London Hospital) the *right* blood for the *right* patient at the *right* time. For St Bartholomew's Hospital, a tertiary referral centre with a busy cardio-thoracic service, intensive care unit and haematology oncology service it

was critical for blood to be available quickly at all times. Unfortunately, as a result of cost pressures, they were forced to provide blood during the night from the central Royal London transfusion service site 2.5 miles away.

If blood was needed at St Bartholomew's between the hours of 8am and 8pm, the staff had to make the 5 mile return trip by taxi or tube through busy London.

RxOnly

Solution

Barts and The London NHS Trust selected the Haemonetics BloodTrack Remote Blood Inventory Management System to automate the decentralised dispensing of blood across all three hospital sites.

Hospital Site	Locations	HemoSafe	HemoNine
St. Bartholomew's	Cardiothoracic Theatres		X
	ITU		X
	Haematology Day Clinic		X
	Main Theatres	X	
	General Wards	X	
Royal London	Wards and Theatres	X	
	ED Resus		X
	ITU		X
London Chest	All Locations		X

Each of the automated dispensing refrigerators is remotely monitored in real-time by the central BloodTrack Manager software in the Royal London transfusion department.

Using the BloodTrack system, unallocated ABO stock blood is stored in each refrigerator instead of cross-matching blood for specific patients ahead of time. When a patient requires a transfusion, trained hospital staff identify themselves at the computer controlled refrigerator and then identify the patient by scanning a barcoded request form. The Haemonetics BloodTrack system communicates with the blood bank information system at the Royal London Hospital and identifies the most appropriate unit for the patient. In real time, the cross-match is performed electronically, the smart refrigerator unlocks only the most appropriate unit for the patient. The caregiver then removes the unit, scans it, applies the printed compatibility label, and is asked to verify that the process has been completed successfully by scanning both the blood unit and the compatibility label barcodes in quick succession.

The process is capable of taking less seconds and the blood is immediately available for transfusion. The system is able to dispense blood automatically for more than 95% of patients. (Note: Only when a valid Group & Screen is not available, or the results show antibodies, is a traditional cross-match required). In Emergencies, each dispensing refrigerator also doubles as a source of group O blood for computer controlled release.

Results

Consolidating the St. Bartholomew's night service with the Royal London enable the Trust to save £50,000 while allowing them to continue meeting the requirements of the strategic plan for transfusion.



Additional benefits seen by the Trust include:

- Reduced blood unit inventory
- Fully MHRA compliant blood supply chain
- Faster clinical access to blood increasing patient safety
- Reduced transportation costs
- Decreased blood wastage
- Reduced emergency blood usage because cross-matched blood is available more quickly.