London Regional Transfusion Committee

Olympics 2012 Planning

Good Practice Guidance I - Transfer of Blood Stocks between Hospitals

Why may transfer of blood stocks be needed between hospitals?

- Planning for large scale events such as the Olympics 2012 has raised several potential challenges in ensuring that all hospitals have adequate blood stocks firstly to support routine work ('Business as Usual') and secondly as part of Emergency Planning.

- NHSBT is currently working in partnership with hospitals to review routine delivery arrangements with a shift to night-time and late afternoon deliveries to obviate likely problems from increased pressures on the transport network during the period of the Olympics and para Olympics (27/7-12/8/2012 and 29/8-9/9/2012). NHSBT is also engaging with hospitals in reviewing ad hoc deliveries with a view to reducing these as far as possible.

- In the event of unforeseen blood and component shortages which may potentially arise at local hospital level firstly due to transport difficulties and secondly in the event of an unprecedented increase in demand in the event of a mass casualty setting, hospital blood banks (HBB) are being advised to explore and develop arrangements to share and transfer stock between Trusts. This may particularly be required for platelets since even large trauma centres or haemato-oncology units have very limited on-going stocks of platelets.

MHRA guidance

Clarification and guidance has also been sought from the MHRA regarding BSQR requirements and compliance with summary responses to the following key questions as stated below:
http://www.transfusionguidelines.org.uk/index.aspx?pageid=7722&section=23&publication=REGS&Highlight=transfer

Q. Is it possible to transfer components i.e. red cells, FFP and platelets between hospitals?

A. There is no reason why this cannot be undertaken providing the transport boxes are used and have been validated for use for:

- Each component type ensuring core temperature is maintained
- Specifically for the number of components to be transferred
- The time taken to transfer

Q. What documentation do I need to provide?

A. The following information should be provided by the supplying hospital:

- Guarantee that the units have been appropriately stored prior to dispatch
- The time the transport box is validated for - by component
- The time of dispatch from the sending hospital

It is necessary to ensure the Traceability requirements of the BSQR 2005 (as amended) are met. It is important that the following traceability requirements are covered:

- The supplying HBB has a record of supply to the receiving HBB, as 'close-out' of their traceability obligation

- There should also be assurance that the 'pick-up' of the traceability chain continues at the site of receipt, and for that reason it is preferable that transferred units be booked in to the receiving hospitals transfusion system, so that they can continue with the final fate record. This should not be a barrier to patients receiving timely transfusions.

Blood Stocks Management scheme

The Blood Stocks Management Scheme has encouraged the sharing of stock between hospitals to provide benefits across the blood supply chain with key issues summarised in Appendix 1. A facility is provided through the data management system, VANESA, to enable the capture of the stock movement data from one hospital to another.

Sharing experience from other parts of the country

Hospitals currently developing an SOP/policy may find it helpful to look at documents available and already in use as follows:

North East RTC http://www.transfusionguidelines.org.uk/docs/pdfs/rtc-ne_policy_transfer_blood%20components_2010.pdf

East of England
http://www.transfusionguidelines.org.uk/Index.aspx?Publication=RTC&Section=28&pageid=1081

Transfer of Blood with Patients between Hospitals

Hospitals can refer to the 'Guidance for the Emergency Transfer of Blood and Components with Patients between Hospitals' developed jointly by the NHSBT Appropriate Use of Blood Group and the National Laboratory Managers' Group of the CMO's National Blood Transfusion Committee available at
http://www.transfusionguidelines.org.uk/index.aspx?Publication=BBT&Section=22&pageid=1271

Transfer of blood to scene for trauma by HEMS

The Helicopter Emergency Medical Service (HEMS) based at the Royal London Hospital has recently commenced an initiative to transfer blood to the scene for trauma patients being attended to by a senior HEMS clinician. The blood units are transported in validated boxes with full input from the transfusion laboratory with appropriate training, documentation, traceability, adverse event monitoring etc to ensure necessary compliance. This initiative has been discussed at the London Haematology and Trauma Group with agreement from the Hospital Transfusion Teams of all four London major Trauma centres.

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Appendix 1
Blood Stocks Management Scheme (BSMS) –Transfer blood stocks between hospitals

Recent research undertaken by BSMS has shown that stock sharing can result in a reduction in time expiry wastage and improvement in the effective use of blood.

Practical considerations:

- Validation and management of the cold chain via a transparent audit trail is essential.
- Hospitals within the same legal entity find it easier to facilitate stock sharing than hospitals in different legal entities.
- Hospitals need to consider the use of Service Level Agreements (SLA) and Standard Operating Procedures to define the roles, responsibilities and process.
    - Define minimum remaining shelf life of shared units
    - Cut off times for stock movements are defined
- Communication in advance of stock movement is essential to allow for adjustment of orders placed with NHSBT.
- Transportation links need to be established. This may be easier for hospitals in the same legal entity.

Category	Hospitals sharing stock	Hospitals not sharing stock
Motivation for stock sharing	• Reduce and minimize wastage of blood and blood components • Efficient use of blood • Appropriate use of blood, available where it is needed	N/A
Benefits	• Allows more flexible allocation of stock. • Reduces risk of outdating. • Allows higher stock levels at smaller sites, hence increasing availability without jeopardizing wastage levels. • Financial benefit due to reduced wastage. • Increases availability in case of emergencies.	• Could lead to reduced time expiry • Would increase flexibility in managing stock • Stock sharing with another hospital could be seen as a backup in case of emergencies.
Drivers / Success factors /Barriers	• The critical requirement is cold chain validation: tracking units and ensuring a fully visible audit trail is essential. • Mutual trust between hospitals is critical to ensure quality of blood units. • Initial set-up of relationship is a huge effort.	• Receiving older units could increase the risk of time expiry • Cold Chain validation is the key inhibitor stressed by all hospitals. • Scarcity of staff for managing stock sharing activities. • Economic benefits are not achievable due to low volumes. • Stock sharing activities between two legal entities are too complex. • Would require fair and equal sharing of benefits.
Operations, Financials & / Transportation	• When sharing within a legal entity, no invoicing is required. • Some hospitals exchange units like with like and therefore omit invoicing.	• Invoicing and tracking of stock sharing units is too complex. • Very low volumes do not justify administrative overheads.

	• Depending on contracts, discounted price on stock sharing units to compensate for risk of expiry. • Scheduled transportation links or ad-hoc taxi couriers are used for transport. • Stock sharing relationships work on an ad-hoc basis.	• Transportation links would have to be set-up or adjusted.
Cold chain validation	• Trust in cold chain validation at the other hospitals is required. • Validated transport boxes with special seals used to ensure validation. • Documentation of processes • Clear transfer of responsibilities. • Full control and transparency is essential.	• Requires 100% trust in stock sharing partner. • Too critical: quality and safety cannot be 100% guaranteed • Confidence that cold chain was maintained properly not given.
Best practice	• Use of SLAs and SOPs • Cut-off times for stock movements and minimum remaining shelf life are defined in SOPs and SLAs. • Transfers are announced in advance to allow adjustment of inventory processes and daily orders. • Stock sharing partners should be assessed by the authorities.	N/A
Miscellaneous	• Different IT system increase complexity and require manual operations in inventory control – however not problematic due to low volumes shared. • Information on wastage must be used correctly in order to prevent skewed and distorted wastage figures.	• Effort to set-up a stock sharing agreement outweighs benefits from an economic point of view.