The Queen Elizabeth Hospital NHS
King's Lynn
NHS Foundation Trust

Looking after a Finite Resource

Adrian Ebbs
Transfusion Laboratory Manager
Queen Elizabeth Hospital
King's Lynn

- Supply Chain
- Cold Chain
- Red Cells
- Platelets
- Blood Stocks Management Scheme

Aim of Stock Management

- To provide a supply of blood components to meet the needs of the service in both routine and emergency situations
- To be able to issue the safest and most appropriate component whenever possible
- To minimise blood component wastage

Components	Price	Shelf Life
Red Cells	£122.09	35 days
Platelets	£208.09	7 days
Fresh Frozen Plasma	£ 27.98	2 years
- Methylene Blue treated FFP	£177.01	2 years
Cryoprecipitate	£193.53	2 years

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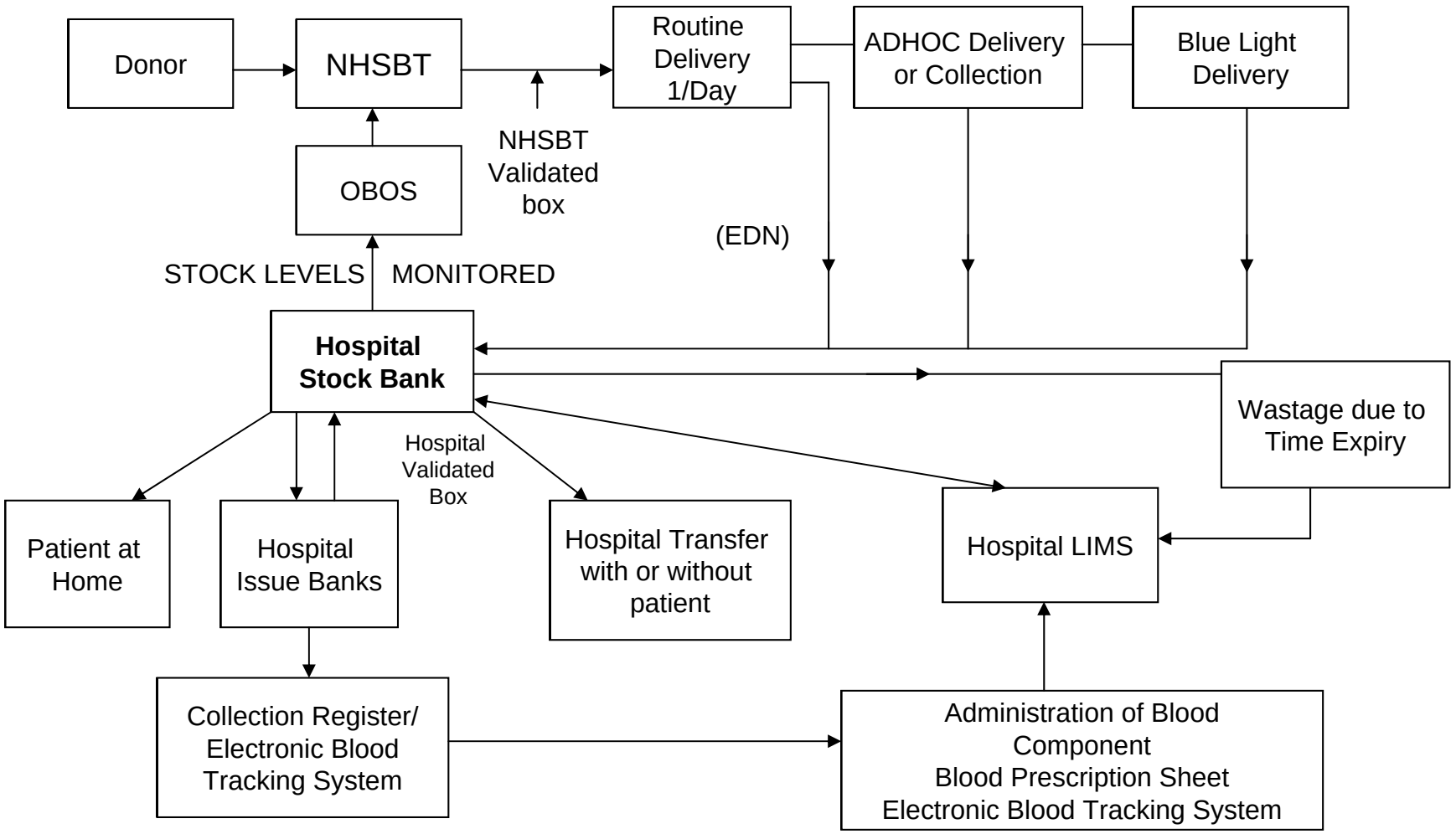
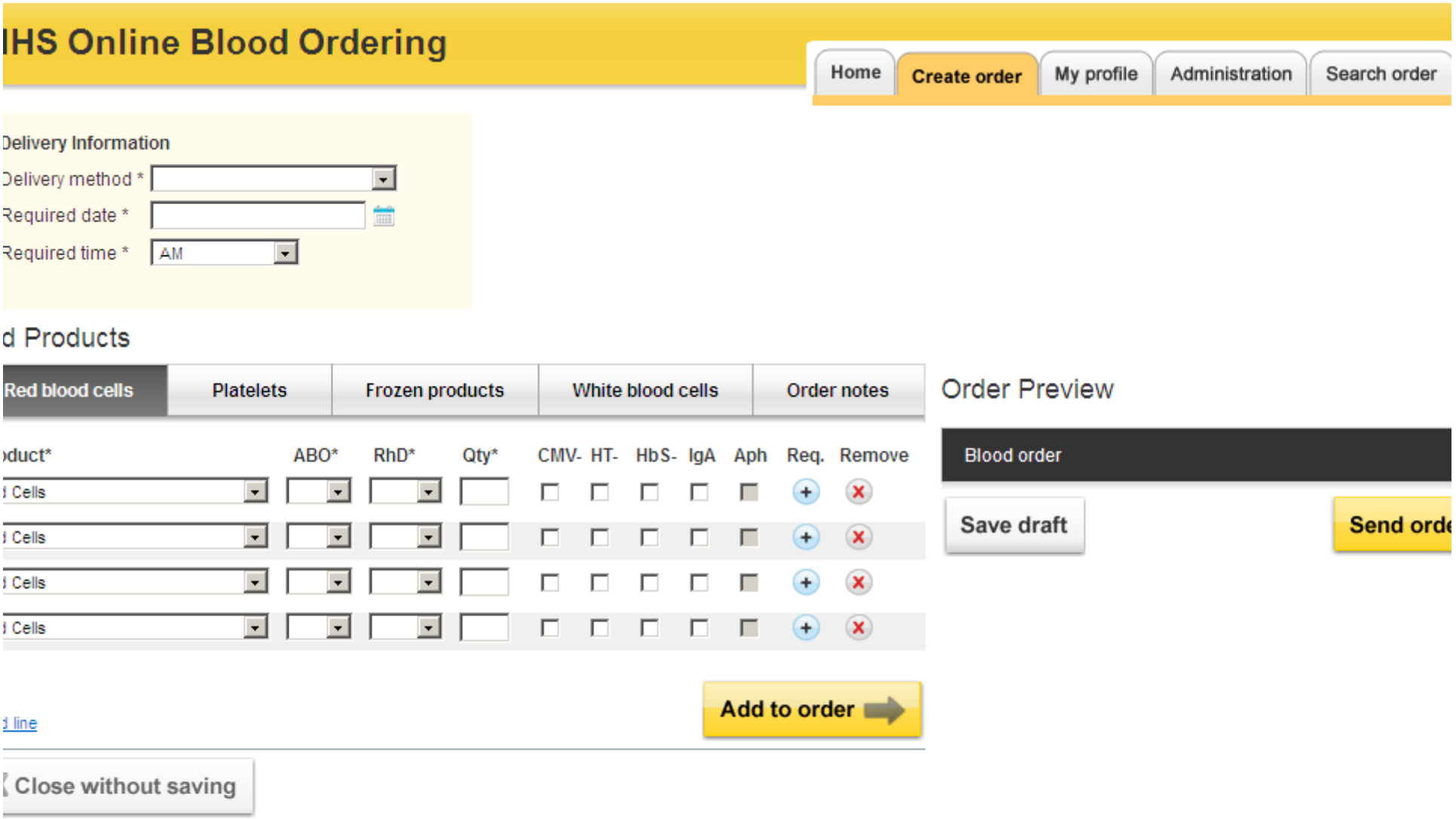
Flow Diagram




IHS Online Blood Ordering
Home
Create order
My profile
Administration
Search order
Delivery Information
Delivery method *
Required date *
Required time *
AM
d Products
Red blood cells
Platelets
Frozen products
White blood cells
Order notes
oduct*
ABO*
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CMV-
HT-
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IgA
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Remove
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line
Add to order
Close without saving
Order Preview
Blood order
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Help Files - OBOS User Guide | Component Portfolio | Presentation
Support - Contact your Hospital OBOS Admin | Version - Live
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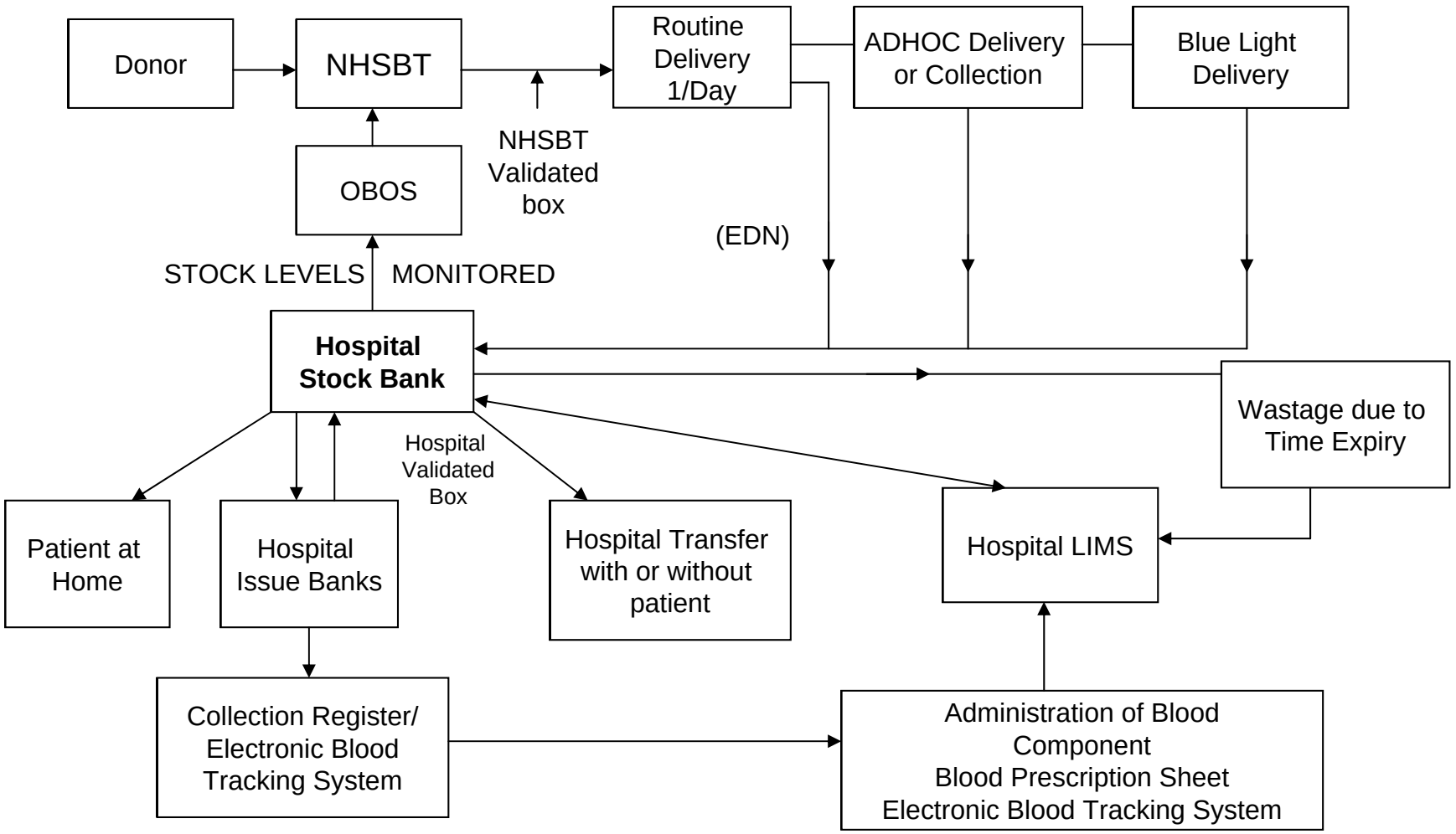

Blood Delivery Note

- Unique number
- Details of units
- Sign on receipt
- Copy retained by Laboratory
- Copy retained by NHSBT
- Sent in an NHSBT validated box

Transport of Blood

- **Internally**
  - Bags
  - Validated transport box
- **Transfer between blood banks**
  - Record
  - Validate transfer box
- **Transfer with a patient**
  - RTC policy
  - Record
  - Validated transport box
  - Regional Audit

Blood Box Validation

- What component?
- Temperature range?
- Size of box?
- Number of units?
- Packing, air space?
- Storage time?
- Will the box be opened?
- Where will it be stored (standardised)?
- Ambient temperature?

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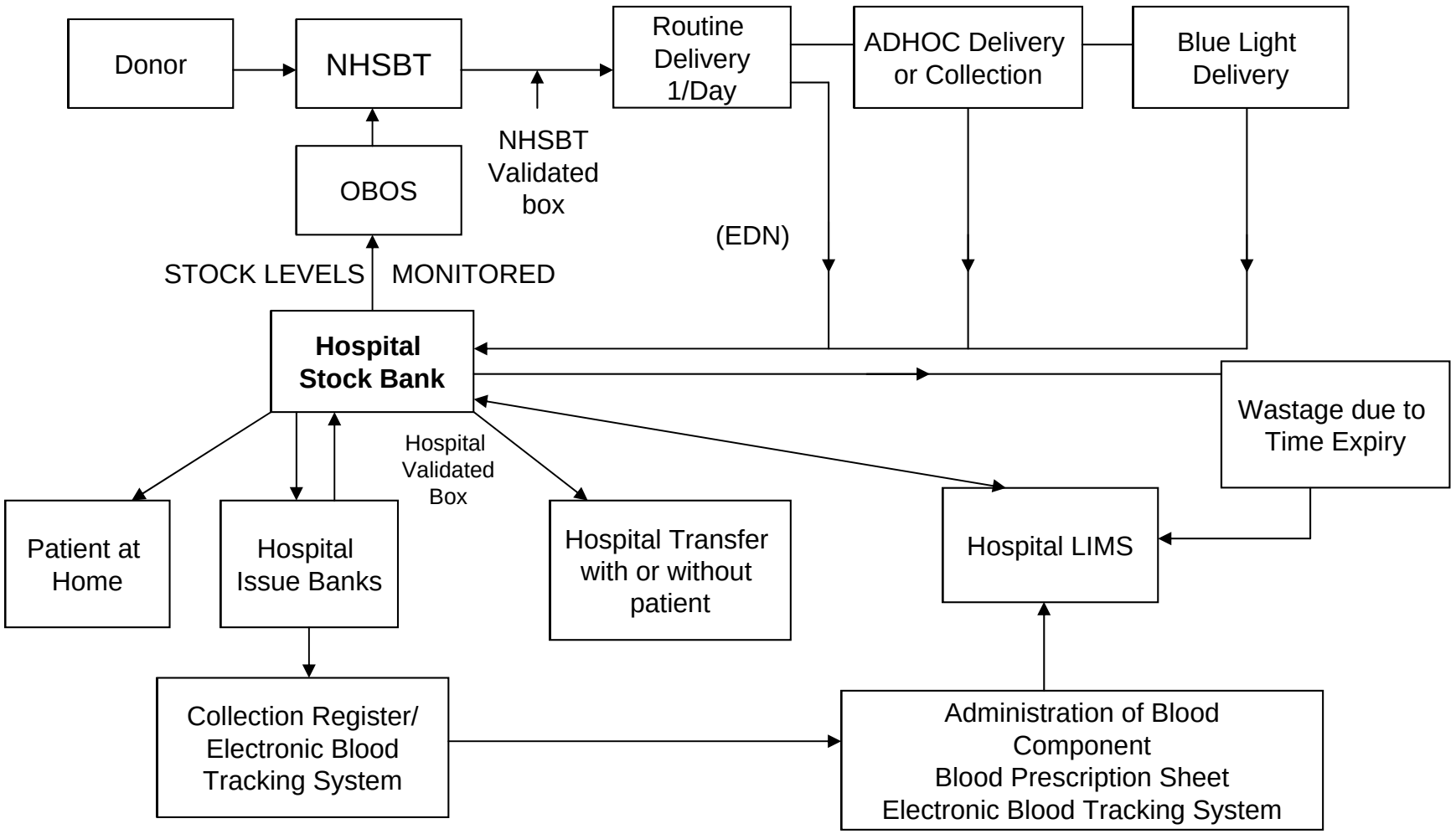

Blood Banks / Incubators

- Standards
  -BS4376-1:1991
  -MDD93/42/EEC
- Temperature recorded 24/7
- Core temperature
- Alarm (air temperature), tested regularly
- Maintenance records
- Mapping

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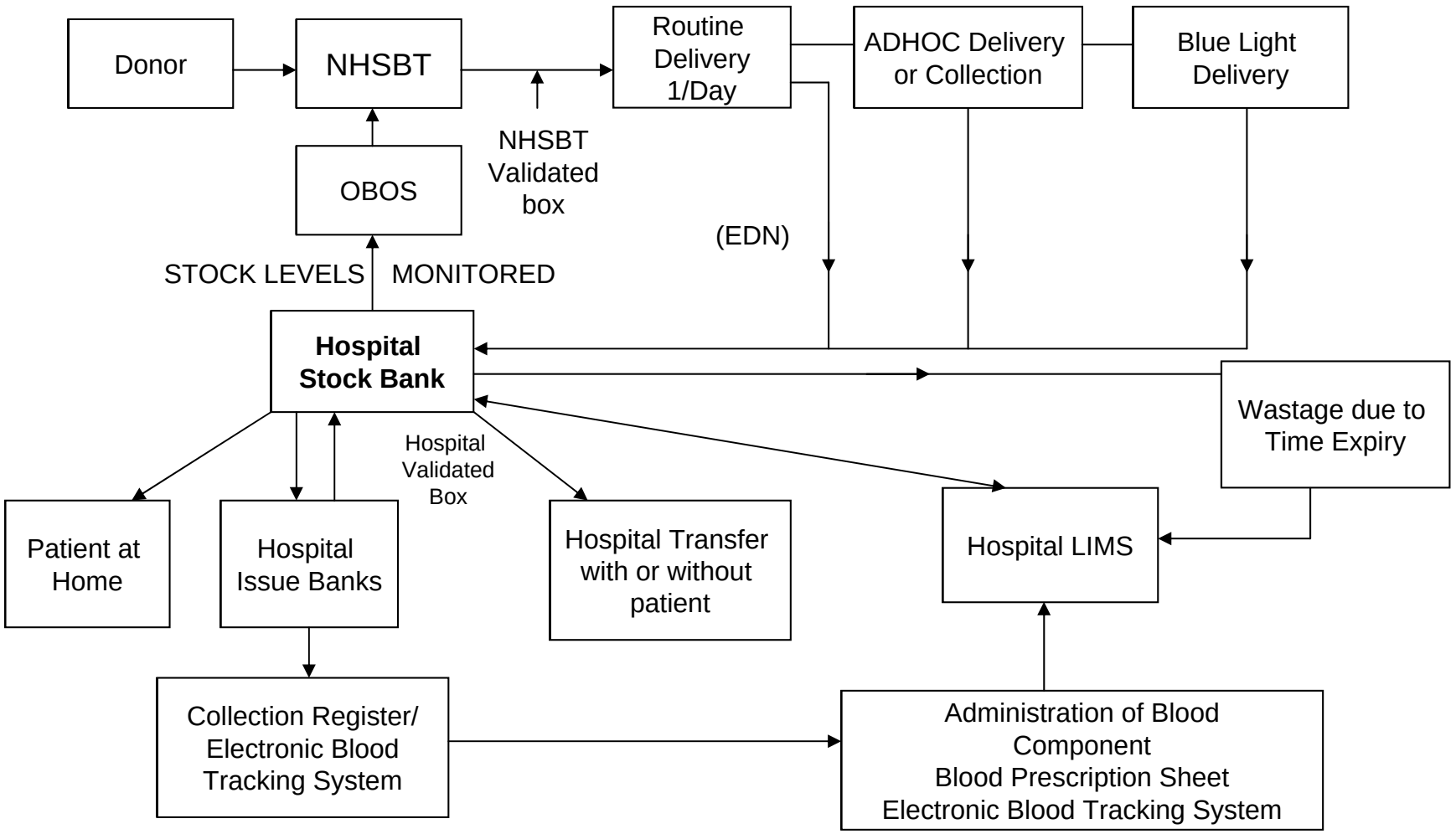

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Cold Chain

- Record of temperature of component and location from donation to fate
- Who did what? Where? When?
- Red Cells 2-6°C
- Platelets 20-24°C
- Frozen components <25 °C

Includes:

- Storage at NHSBT
- Transport to hospital
- Record of arrival
- Storage at hospital
- Movement at hospital
- Transfer to another hospital

Depends on:

- Electronic or paper records
- Delivery note
- Blood Transfer Form
- Blood bank temperature records
- Use of a validated procedure for use of blood boxes

Red Cells

- Hold stocks that match the distribution of the recipients population
- Requires adequate stock of Rh D negative blood for Rh D negative women (MAJOR CHALLENGE)
- Irradiated blood
- CMV negative blood
- Blood for babies
- Blood for exchange transfusion

Major Challenge

- Management of O Rh D negative blood stocks
- Aim – to avoid the need to transfuse Rh D positive red cells to women of child bearing age (HDFN)
- Aim – to hold sufficient stock to be able to supply in emergency cases when blood matched to the recipient is not yet available
- Problem – may require a larger stock, proportionate to the total stock held, than the distribution in the recipient population would suggest, resulting in potential for wastage

Barriers to Good Management

- O RhD Negative is the 'Universal Donor'
- Number of units issued to blood banks for emergency use
- Distance/time from replacement units
- Unpredictability of requirement
- Shelf life of units when delivered

In 2006 a policy of transfusing group A and O RhD Negative recipients aged >65 with no alloantibodies using RhD Positive Red Cells was introduced

Aims:

1. Improve blood stocks management locally
2. Assist in conservation of D negative blood stocks nationally

Audit

September 2006 – September 2008

All transfusions of RhD Positive Red Cells to RhD Negative recipients aged 65 or more

Results

- 123 RhD Negative patients transfused with RhD Positive red cells
- 233 transfusion episodes
- 681 units transfused
- Mean age = 78.6 years

But:

Because it is necessary to maintain a stock level of 10 O RhD negative to cover obstetric haemorrhage, over this period 321 units of RhD negative red cells were transfused to RhD positive recipients to avoid time expiry.

Therefore:

681-321 = **360 units of RhD negative red cells 'saved'**

Results

- 54 (43.9%) patients no further samples tested. (No further blood required)
  – No impact
- 69 patients had further samples tested (at least 1)
- Latest sample 1-910 days post transfusion (Average = 111 days)

Results

In 11/69 (15.9%) of samples tested post transfusion an antibody has been detected.

All new antibodies are referred to NHSBT for blood group card and entry onto the National Database.
(So record is available should they present at another hospital)

Anti D	4
Anti C + D	2
Anti D + E	1
Anti C + D + E	1
Anti C + D + E + K	1
Anti C + D + JK^b	1
Anti D + E + K + Kp^a + Auto	1

In 2012 a total of 629 O RhD neg red cell units were delivered (percentage of total red cells = 9.2%) Of these 1% (6 units) was wasted (2 OTC, 3 exchange units ONU and 1 short date issued ONU). 54.9% (342 units) were transfused to O RhD neg recipients, in accordance with Trust policy. The remaining 45.1% (281 units) were given to patients with different blood groups and are detailed below.

	Number	% of total delivered
Emergency 'flying squad' units	56	9
Recipient had either antibodies (ABS) /special requirements (SR)	83	13.3
Units due to expire in <5 days	123	19.7
Units due to expire in >5 days	19	3

Platelets

- Limited resource
- Short shelf life
- Increasing demand
- Massive Blood Loss Protocols
- Hold platelet stock
- Less requirement for ABO and Rh D matching

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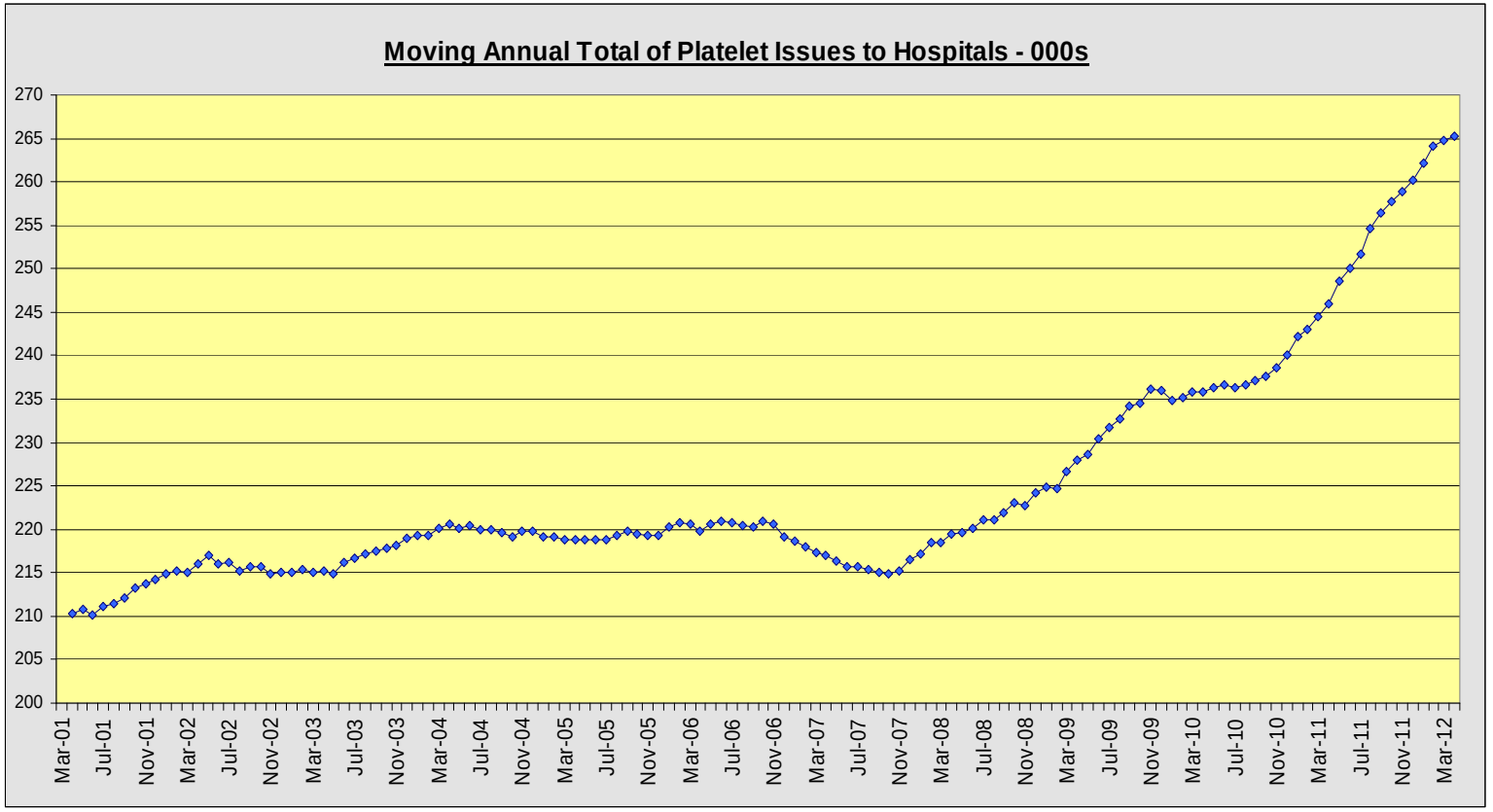
NHSBT Total Platelet Issues 2001-2012



National Comparative Audit of Platelet Transfusions 2010

- Use BCSH Guidelines as standard for assessing appropriateness
- 3296 Transfusions
- 28% considered inappropriate
- 69% were Prophylactic in patients with BM failure. Of these 40% were considered appropriate
- 10% of Prophylactic were double dose. Resent large randomised controlled trial has shown no difference in the number of patients who had significant bleeding compared with one dose
- 15% were pre-invasive procedures and 23% of these were considered inappropriate
- Local guidelines differed from those issued by BCSH

Recommendations of the audit with regard to the use of Prophylactic Platelet Transfusions

1. Local guidelines should be based on existing BCSH guidelines, and fully implemented to avoid the inappropriate use of Prophylactic platelet transfusions and those given before invasive procedures. In particular, they should specify that a platelet transfusion is not required routinely:
   - Prior to bone marrow aspiration and biopsy
   - As routine Prophylaxis in stable patients with long term bone marrow failure

2. Double-dose Prophylactic platelet transfusions should not be used routinely

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Top Tips to Reduce Platelet Usage and Wastage

1. **Should your hospital stock platelets?**
   The BSMS has produced a tool which may help you decide if that is appropriate or not.
   http://www.bloodstocks.co.uk/pdf/plateletstockholdingalgorithm.pds

2. **Could your hospital share platelets with another local hospital?**
   Some smaller hospitals successfully share with larger hospitals and some Trusts rotate platelet stocks between their hospitals to reduce wastage.

3. **Could your hospital introduce a locally defined and agreed dereservation period for platelets allocated to a named patient?**
   Hospitals where platelets are ordered to cover specific transfusion events have successfully altered clinical practice so platelets are returned to stock after a short period (4-12 hours) if they have not been transfused.

4. **Consider swapping long-dated platelets for short-dated ones**
   If you know a patient is going to be transfused, give them the shortest dated platelets.

5. **Consider using different ABO group platelets in adults who are <u>bleeding</u>**
   Although when used prophylactically ABO matched platelets service longer, in the bleeding patient a different ABO group will be just as effective at stopping the bleeding.

Concept

To hold one dose of stock platelets

Ideally A Rh Negative, Irradiated, CMV Negative, HT Negative, 2 day shelf life
(A Rh Pos or O HT Negative used if ideal unavailable)

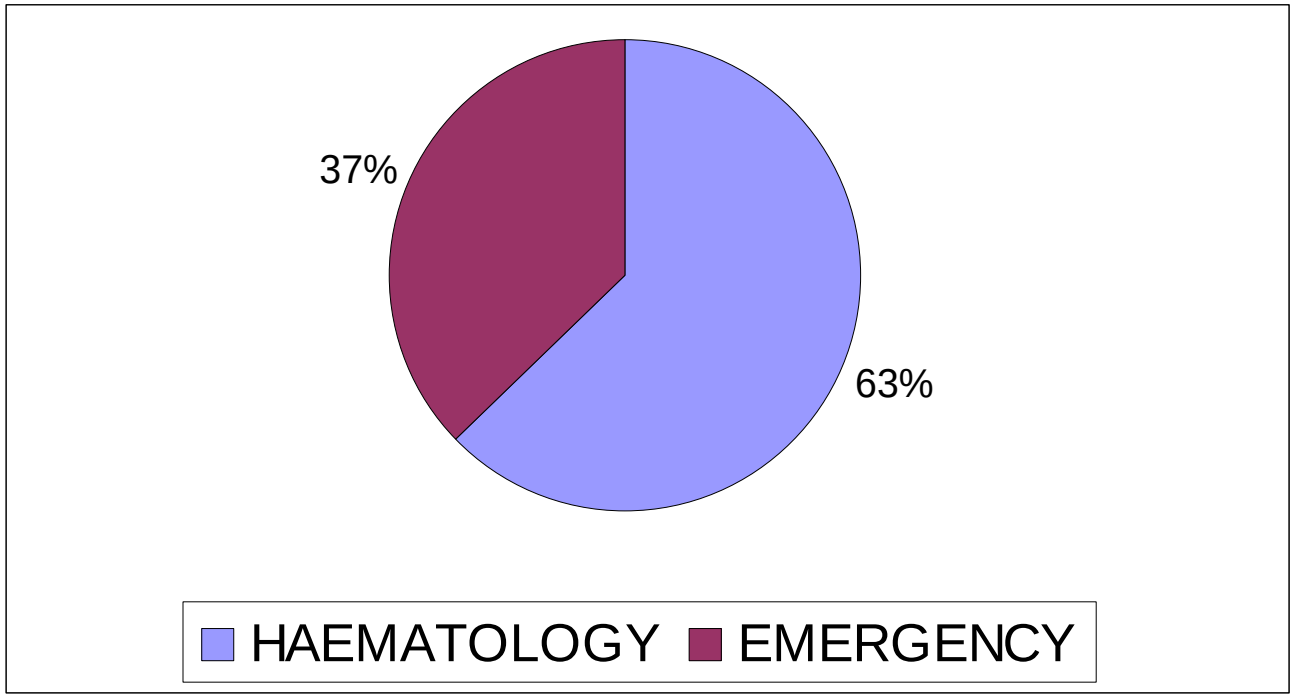
- Reduce extra deliveries
- Improve platelet availability
- No additional wastage

Who holds Stock Platelets?

BSMS Platelet Inventory Survey

- 2003 10% (3% sometimes)
- 2009 23% (4% sometimes)

Transfused Stock Platelets



Both preliminaries and the final study have shown the transfused patient category as approximately 60% Haematology & 40% Emergency

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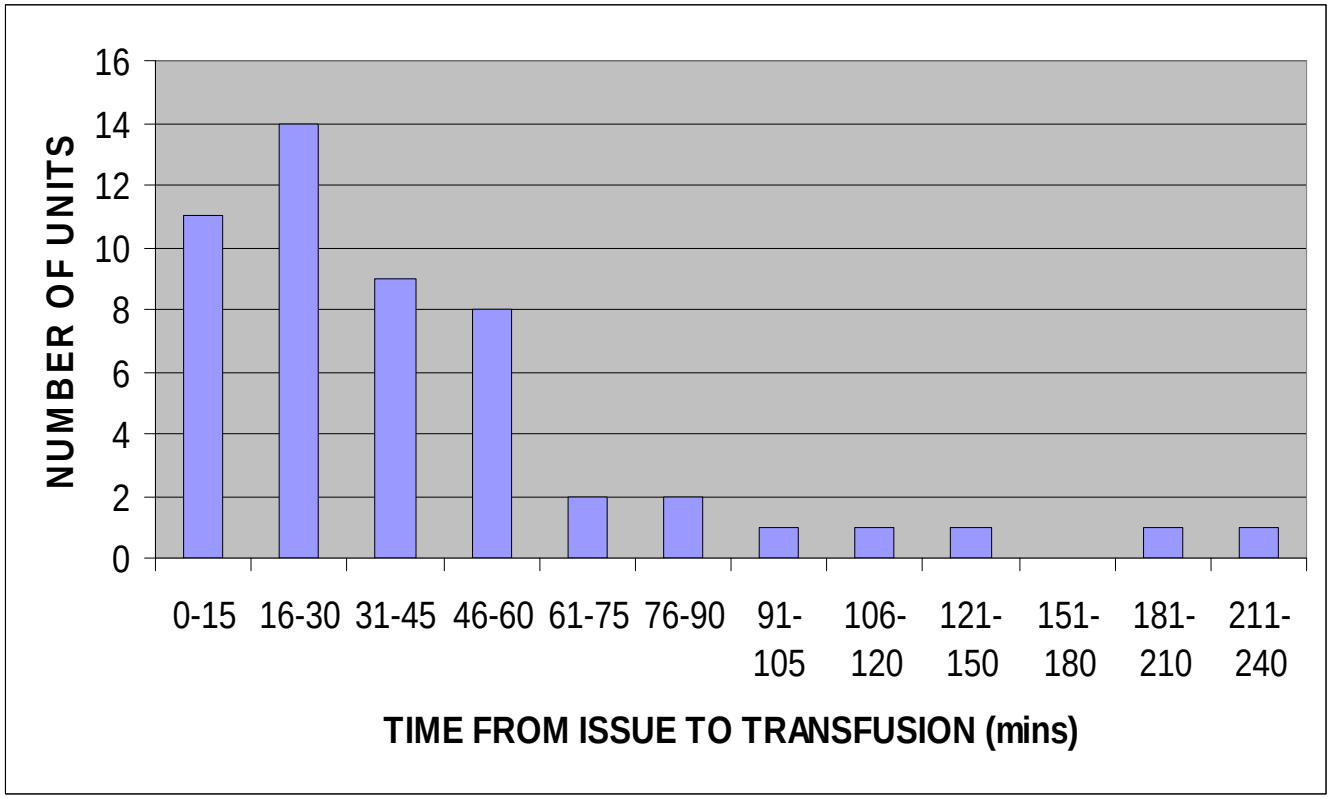
Transfusion Time - in Emergency Cases



90% before guaranteed delivery time (115 mins)

~80% before usual delivery time
(60+ mins)

50% by 30 minutes

NOTE : Guaranteed delivery time for blue light is 115 minutes

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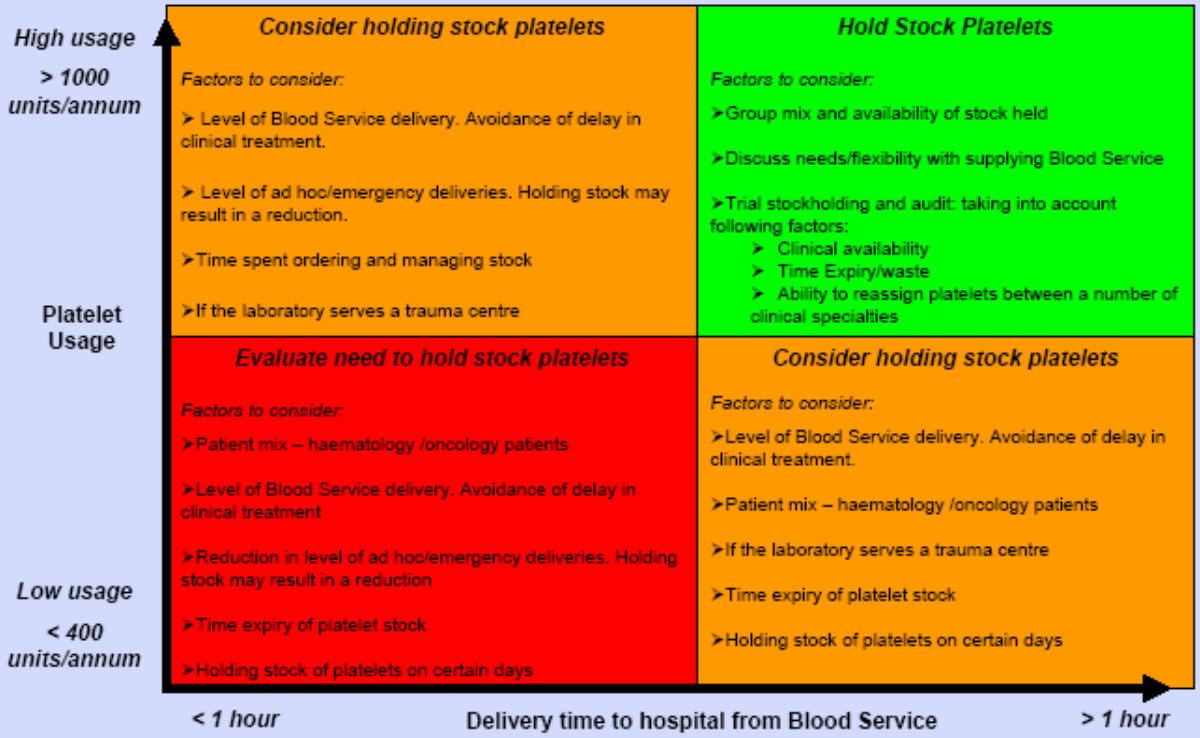
Algorithm to aid hospital decision making for holding stock platelets

The number of hospitals routinely holding a stock of platelets has increased from 10% in 2003 to 22% in 2009 (from 23 hospitals to 51 hospitals). There is anecdotal evidence that the number of hospitals holding stocks of platelets continues to increase.

The objective of the algorithm is to aid hospital decision making for holding platelet stock and has been collated using output from hospital participants at the BSMS regional meetings which took place in May 2011.



NHS
Blood Stocks Management Scheme

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   Although when used prophylactically ABO matched platelets service longer, in the bleeding patient a different ABO group will be just as effective at stopping the bleeding.

Platelet Selection by Recipient ABO Group:

Recipient's ABO Group	ABO Group of Platelets	
O	First choice	O
	Second choice	A or B
A	First choice	A
	Second choice	AB *(if readily available)*
	Third choice	B* or O*
B	First choice	B
	Second choice	AB *(if readily available)*
	Third choice	A* or O*
AB	First choice	AB
	Second choice	A* or B*
	Third choice	O*

Top Tips to Reduce Platelet Usage and Wastage – continued/

6. **Consider using RhD positive platelets in adult males who are <u>bleeding</u>**
   Give RhD negative platelets for RhD negative patients where anti-D would be a problem but in adult males who are actively bleeding, use RhD positive platelets if you have them available.

7. **Introduce the National Blood Transfusion Committee Indication Codes for platelets so that any requests outside the accepted criteria can be reviewed if appropriate**
   This could be done to empower the BMS staff or used as a way of deciding when to get the haematology medical staff to intervene.

8. **Double-dose platelets are not necessary in most prophylactic situations – 'why use two when one will do?'**
   The PLADO clinical trial (N Engl J Med 2010; 362:600-613) has shown that standard dose prophylactic platelets are just as effective as high dose prophylactic platelets.

9. **Review the timeliness of platelet counts or other tests used to inform the decision to prescribe platelets**
   Often platelet orders are made in anticipation of a low platelet count and sometimes platelets are transfused before the count is available. Where possible use of point of care testing and rapid turnaround of laboratory tests to support active clinical decision making.

10. **Work at it – share practice with colleagues in other hospitals – and celebrate success!**

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Indication Codes for Transfusion - An Audit Tool

NHS Blood and Transplant

Issued 06/09

The indications for transfusion provided below are taken from UK national guidelines for the use of blood components.
Each indication has been assigned a number, which may be used by clinicians when requesting blood or for documentation purposes. Specific details regarding the patient's diagnosis and any relevant procedures to be undertaken should also be provided.
These are current guidelines and may change depending on new evidence.

recently updated indication codes

Red cell concentrates

R1. ***Acute blood loss***

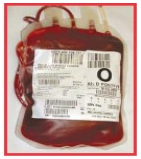
In patients with massive haemorrhage, the haemoglobin concentration (Hb) is a poor indicator of acute blood loss and empirical decisions about the immediate use of red cell transfusion are required by clinicians experienced in resuscitation. The following is a guide to the likelihood of the need for blood transfusion, although estimation of blood losses may be difficult:-

- < 30% loss of blood volume (< 1500ml in an adult): transfuse crystalloids. Red cell transfusion is unlikely to be necessary.
- 30-40% loss of blood volume (1500-2000ml in an adult): rapid volume replacement is required with crystalloids. Red cell transfusion will probably be required to maintain recommended Hb levels.
- >40% loss of blood volume (>2000ml in an adult): rapid volume replacement including red cell transfusion is required.

When normovolaemia has been achieved/maintained, frequent measurement of Hb (for example, by near patient testing) can be used to guide the use of red cell transfusion. Where future blood loss is unpredictable (e.g. gastrointestinal haemorrhage), a Hb threshold of 10g/dl to guide transfusion is recommended; otherwise the objective is to maintain circulating blood volume and Hb >7 g/dl in otherwise fit patients, and >8g/dl in elderly patients and those with known cardiovascular disease.

Peri-operative transfusion

Many patients undergoing elective surgical operations will not require transfusion support if their Hb is normal before surgery. Assuming normovolaemia has been maintained, the Hb can be used to guide the use of red cell transfusion.



R2. Hb < 7g/dl.

R3. Hb < 8 g/dl in a patient with known cardiovascular disease, or those with significant risk factors for cardiovascular disease (e.g. elderly patients, and those with hypertension, diabetes mellitus, peripheral vascular disease).

Critical Care

R4. Transfuse to maintain the Hb >7g/dl, and >8g/dl in elderly patients and those with known cardiovascular disease.

Post-chemotherapy

R5. There is no evidence-base to guide practice. Most hospitals use a transfusion threshold of a Hb of 8 or 9g/dl.

Radiotherapy

R6. There is little evidence-base to guide practice. Suggest transfuse to maintain the Hb >10g/dl.

Chronic anaemia

R7. Transfuse to maintain the haemoglobin concentration to prevent symptoms of anaemia. Many patients with chronic anaemia may be asymptomatic with a Hb >8g/dl.

Fresh frozen plasma

(Dose - 12-15 ml/kg body weight equivalent to 4 units for an adult)

F1. Replacement of single coagulation factor deficiencies, where a specific or combined factor concentrate is unavailable e.g. factor V.

F2. Immediate reversal of warfarin effect, in the presence of life-threatening bleeding. FFP only has a partial effect and is not the optimal treatment; prothrombin complex concentrates are preferred.

F3. Acute disseminated intravascular coagulation (DIC) in the presence of bleeding and abnormal coagulation results.

F4. Thrombotic thrombocytopenic purpura (TTP), usually in conjunction with plasma exchange.

F5. Massive transfusion; local protocols for serious bleeding should be followed and may recommend empirical use of FFP and a specific ratio of FFP to red cells.

F6. Liver disease; patients with a PT within 4 seconds of the control value are unlikely to benefit from the use of FFP.

Cryoprecipitate

Dose - 2 pooled packs, equivalent to 10 single units, for an adult).

Cryoprecipitate should be used in combination with FFP unless there is an isolated deficiency of fibrinogen.

C1. Acute disseminated intravascular coagulation (DIC), where there is bleeding and a fibrinogen level <1g/l.

C2. Advanced liver disease, to correct bleeding or as prophylaxis before surgery, when the fibrinogen level <1g/l.

C3. Bleeding associated with thrombolytic therapy causing hypofibrinogenaemia.

C4. Hypofibrinogenaemia (fibrinogen level <1g/l) secondary to massive transfusion.

C5. Renal failure or liver failure associated with abnormal bleeding where DDAVP is contraindicated or ineffective.

C6. Inherited hypofibrinogenaemia, where fibrinogen concentrate is not readily available.

Platelet concentrates

(Dose - 15 ml/kg body weight for children <20kg; 1 adult therapeutic dose for adults and older children)

Bone marrow failure

P1. To prevent spontaneous bleeding when the platelet count <10 x 10^9/l.

P2. To prevent spontaneous bleeding when the platelet count <20 x 10^9/l in the presence of additional risk factors for bleeding such as sepsis or haemostatic abnormalities.

P3. To prevent bleeding associated with invasive procedures. The platelet count should be raised to >50 x 10^9/l before lumbar puncture, epidural anaesthesia, insertion of intravascular lines, transbronchial and liver biopsy, and laparotomy, and to >100 x 10^9/L before surgery in critical sites such as the brain or the eyes.

Critical care/surgery

P4. Massive blood transfusion. The platelet count can be anticipated to be <50 x 10^9/l after 2 x blood volume replacement. Aim to maintain platelet count >75 x 10^9/l, which allows a margin of safety to ensure platelet count >50 x 10^9/l. Keep the platelet count >100 x 10^9/l if multiple, eye or CNS trauma.

P5. Bleeding, not surgically correctable, and with associated acquired platelet dysfunction e.g. post-cardiopulmonary bypass, possibly combined with the use of potent anti-platelet agents such as clopidigrel.

P6. Acute disseminated intravascular coagulation (DIC) in the presence of bleeding and severe thrombocytopenia.

P7. Inherited platelet dysfunction disorders e.g. Glanzmanns thrombasthenia with bleeding or as prophylaxis before surgery.

Immune thrombocytopenia

P8. Autoimmune thrombocytopenia, in the presence of major haemorrhage.

P9. Post-transfusion purpura, in the presence of major haemorrhage.

P10. Neonatal alloimmune thrombocytopenia, to treat bleeding or as prophylaxis to maintain the platelet count >50 x 10^9/l.

References

Association of Anaesthetists of Great Britain and Ireland (2008). Blood transfusion and the anaesthetist: red cell transfusion (www.aagbi.org).
British Committee for Standards in Haematology (2001). Guidelines for the clinical use of red cell transfusion. *British Journal of Haematology*, 113, 24-31.
British Committee for Standards in Haematology (2006). Guidelines on the management of massive blood loss. *British Journal of Haematology*, 135, 634-641.
British Society of Gastroenterology Endoscopy Committee (2002). Non-variceal upper gastrointestinal haemorrhage: guidelines. *Gut*, 51 (suppl IV), iv1-iv6.
Scottish Intercollegiate Guidelines Network (2001). Perioperative blood transfusion for elective surgery (www.sign.ac.uk).
Scottish Intercollegiate Guidelines Network (2008). Management of upper and lower gastrointestinal bleeding (www.sign.ac.uk).
British Committee for Standards in Haematology (2003). Guidelines for the use of platelet transfusions. *British Journal of Haematology*, 122, 10-23.
British Committee for Standards in Haematology (2004). Guidelines for the use of fresh-frozen plasma, cryoprecipitate and cryosupernatant. *British Journal of Haematology*, 126, 11-28.
Schiffer CA *et al* for the American Society of Clinical Oncology (2001). Platelet transfusion for patients with cancer: clinical practice guidelines. *Journal of Clinical Oncology*, 19, 1519-1538.

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Top Tips to Reduce Platelet Usage and Wastage – continued/

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Purpose of the Scheme

- Collect from and provide information to blood services and hospitals
- Act as a data repository
- Lead best practice in blood inventory management
- Provide guidelines on blood inventory management
- Benchmark UK blood service and hospital performance

How does the BSMS fulfill its purpose?

- Use of a web based data management system (VANESA) for collecting data
- Effective communication with participants through the BSMS website, VANESA, regular reports and participant meetings
- Surveys of blood inventory management practice
- VANESA training days

Hospital: **Queen Elizabeth Hospital, (Kings Lynn)** (Regular) Assign

Centre: **Cambridge** Assign

Activity Log

6 Jun 2013 9:32:15 : Allocated stock data (Red Cells) for 6 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

6 Jun 2013 9:32:04 : Stock data (Red Cells) for 6 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

5 Jun 2013 9:12:21 : Allocated stock data (Red Cells) for 5 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

5 Jun 2013 9:12:11 : Stock data (Red Cells) for 5 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

5 Jun 2013 9:12:01 : Wastage data (Red Cells) for 5 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) by BSMS0080

4 Jun 2013 9:10:15 : Wastage data (Red Cells) for 4 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) by BSMS0080

4 Jun 2013 9:09:52 : Allocated stock data (Red Cells) for 4 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

4 Jun 2013 9:09:40 : Stock data (Red Cells) for 4 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

3 Jun 2013 9:21:04 : Allocated stock data (Red Cells) for 3 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) (P254) by BSMS0080

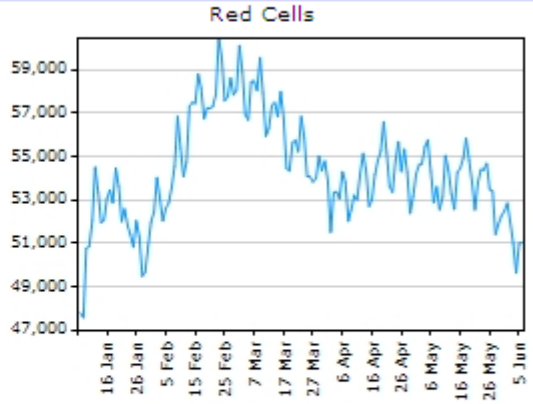
3 Jun 2013 9:20:54 : Wastage data (Red Cells) for 3 Jun 2013 inserted for Queen Elizabeth Hospital, (Kings Lynn) by BSMS0080

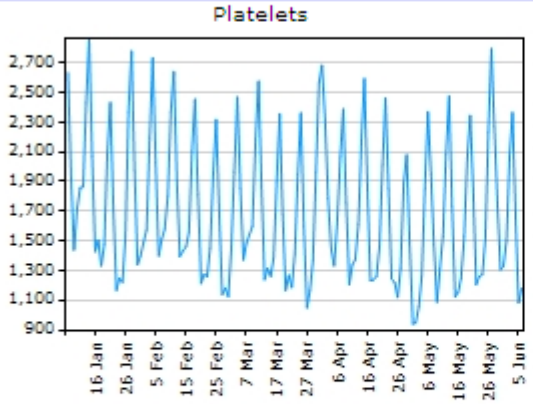
Messages

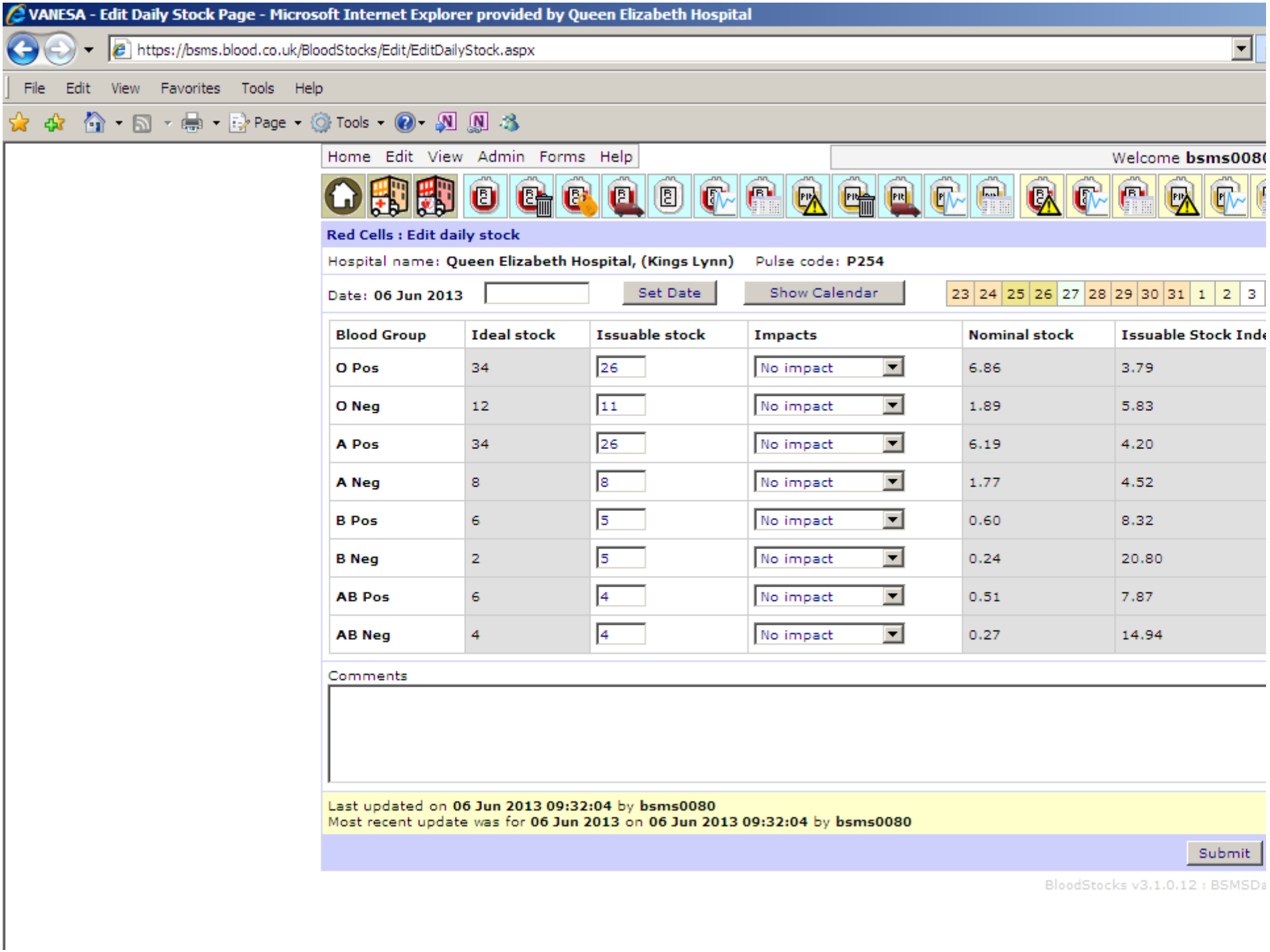
No messages

NHSBT Stock Figures Thursday, 06 June 2013

	Red Cells	Platelets
O Pos	20,246	353
O Neg	3,676	113
A Pos	16,647	487
A Neg	3,897	87
B Pos	4,217	102
B Neg	651	14
AB Pos	1,342	20
AB Neg	357	05
Total	51,033	1,181






VANESA - Edit Daily Stock Page - Microsoft Internet Explorer provided by Queen Elizabeth Hospital
https://bsms.blood.co.uk/BloodStocks/Edit/EditDailyStock.aspx
File Edit View Favorites Tools Help
Page Tools
Home Edit View Admin Forms Help
Welcome bsms008
Red Cells : Edit daily stock
Hospital name: Queen Elizabeth Hospital, (Kings Lynn) Pulse code: P254
Date: 06 Jun 2013
Set Date
Show Calendar
23 24 25 26 27 28 29 30 31 1 2 3
Blood Group | Ideal stock | Issuable stock | Impacts | Nominal stock | Issuable Stock Inde
O Pos | 34 | 26 | No impact | 6.86 | 3.79
O Neg | 12 | 11 | No impact | 1.89 | 5.83
A Pos | 34 | 26 | No impact | 6.19 | 4.20
A Neg | 8 | 8 | No impact | 1.77 | 4.52
B Pos | 6 | 5 | No impact | 0.60 | 8.32
B Neg | 2 | 5 | No impact | 0.24 | 20.80
AB Pos | 6 | 4 | No impact | 0.51 | 7.87
AB Neg | 4 | 4 | No impact | 0.27 | 14.94
Comments
Last updated on 06 Jun 2013 09:32:04 by bsms0080
Most recent update was for 06 Jun 2013 on 06 Jun 2013 09:32:04 by bsms0080
Submit
BloodStocks v3.1.0.12 : BSMSDa

Use of BSMS Data

NBS

- Demand forecasting
- Determining appropriate inventory levels
- Contingency planning
- Supply chain management

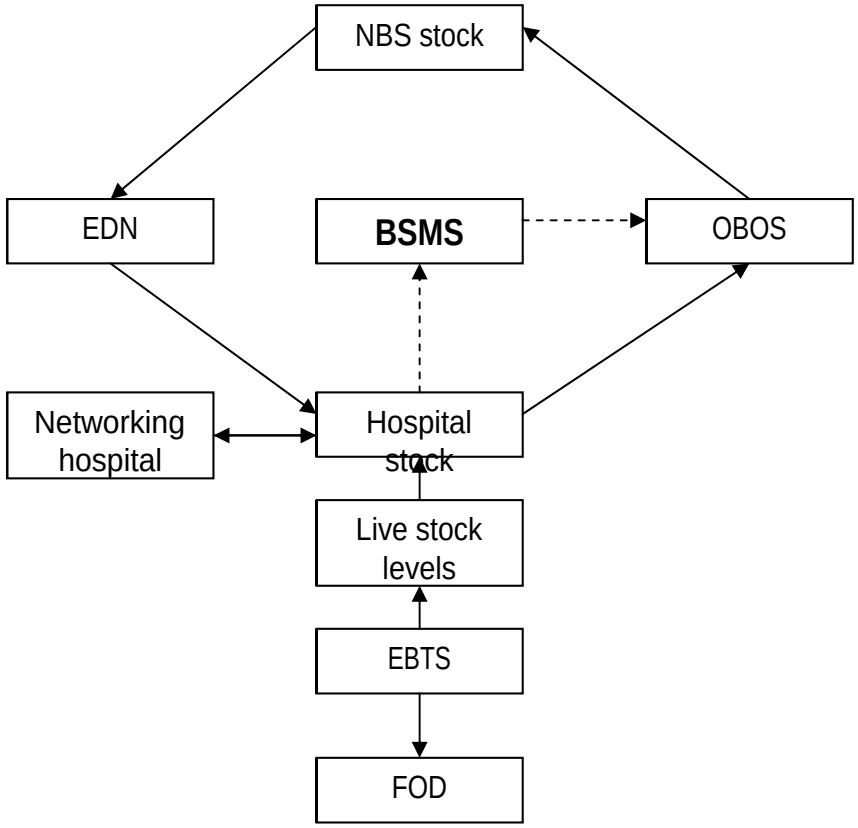
Hospitals

- Monitoring
  - Issues from NBS
  - Wastage
- Benchmarking
- Reporting to Hospital Transfusion Committee
- Changes to practice
- Contingency planning

The Benefits of the Blood Stocks Management Scheme

- Ensures proper monitoring of a freely given resource
- Improves the interface between supply and demand
- Increases awareness of blood inventory management
- Facilitates a better understanding between hospitals and blood services

Blood Stocks Management in an ideal world

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