South East Regional Transfusion Committee
Presents:

Shared Learning from the Amber Alert

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The Amber Alert

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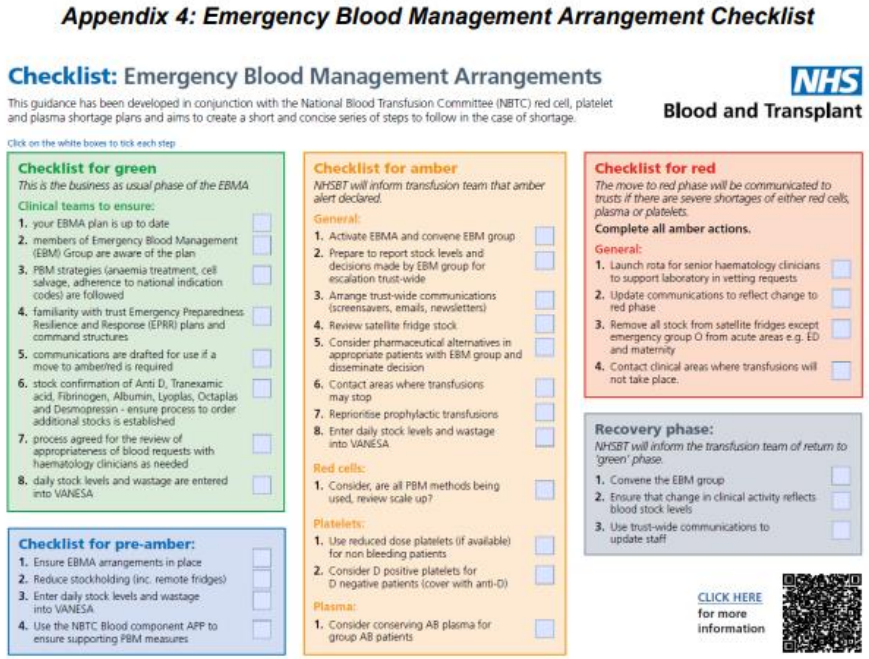
Pre planning

- Aware that an amber alert was likely
- Allowed us to look at our processes and ensure we were meeting the check list provided in the emergency shortage plans
- We considered what else we would do



Appendix 4: Emergency Blood Management Arrangement Checklist

Checklist: Emergency Blood Management Arrangements

NHS Blood and Transplant

This guidance has been developed in conjunction with the National Blood Transfusion Committee (NBTC) red cell, platelet and plasma shortage plans and aims to create a short and concise series of steps to follow in the case of shortage.

Click on the white boxes to tick each step

Checklist for green

This is the business as usual phase of the EBMA

Clinical teams to ensure:

1. your EBMA plan is up to date
2. members of Emergency Blood Management (EBM) Group are aware of the plan
3. PBM strategies (anaemia treatment, cell salvage, adherence to national indication codes) are followed
4. familiarity with trust Emergency Preparedness Resilience and Response (EPRR) plans and command structures
5. communications are drafted for use if a move to amber/red is required
6. stock confirmation of Anti D, Tranexamic acid, Fibrinogen, Albumin, Lyoplas, Octaplas and Desmopressin - ensure process to order additional stocks is established
7. process agreed for the review of appropriateness of blood requests with haematology clinicians as needed
8. daily stock levels and wastage are entered into VANESA

Checklist for pre-amber:

1. Ensure EBMA arrangements in place
2. Reduce stockholding (inc. remote fridges)
3. Enter daily stock levels and wastage into VANESA
4. Use the NBTC Blood component APP to ensure supporting PBM measures

Checklist for amber

NHSBT will inform transfusion team that amber alert declared.

General:

1. Activate EBMA and convene EBM group
2. Prepare to report stock levels and decisions made by EBM group for escalation trust-wide
3. Arrange trust-wide communications (screensavers, emails, newsletters)
4. Review satellite fridge stock
5. Consider pharmaceutical alternatives in appropriate patients with EBM group and disseminate decision
6. Contact areas where transfusions may stop
7. Reprioritise prophylactic transfusions
8. Enter daily stock levels and wastage into VANESA

Red cells:

1. Consider, are all PBM methods being used, review scale up?

Platelets:

1. Use reduced dose platelets (if available) for non bleeding patients
2. Consider D positive platelets for D negative patients (cover with anti-D)

Plasma:

1. Consider conserving AB plasma for group AB patients

Checklist for red

The move to red phase will be communicated to trusts if there are severe shortages of either red cells, plasma or platelets.

Complete all amber actions.

General:

1. Launch rota for senior haematology clinicians to support laboratory in vetting requests
2. Update communications to reflect change to red phase
3. Remove all stock from satellite fridges except emergency group O from acute areas e.g. ED and maternity
4. Contact clinical areas where transfusions will not take place.

Recovery phase:

NHSBT will inform the transfusion team of return to 'green' phase.

1. Convene the EBM group
2. Ensure that change in clinical activity reflects blood stock levels
3. Use trust-wide communications to update staff

CLICK HERE for more information

Emergency Blood Management team

- Medical director passed chair of the team to 1 of the deputy Medical directors
- We called our initial meeting the day before the amber alert was called
- We did this because we were aware an alert was likely and we wanted good engagement within the team
- At the meeting – it was clear, that theatre leads were missing and we needed their engagement
- So we reviewed EMBT membership to include more operational staff

Stock Levels

- Already reduced stock considerably across all labs
- Reviewed monthly since 2018
- Reviewed weekly during the amber alert
- We didn’t actually reduce the stock kept in the laboratory fridges
- Remote issue fridges – some reduction but we didn’t empty the fridges (lab impact would have been too great)

Emergency stock

- We have 2 fridges which are primarily used for emergency stock
- We closed both these fridges
- Some reluctance from the clinical areas involved
- Easier message to close the fridges entirely rather then just remove the emergency stock

Daily stock report to EBMT

- I calculated how many red cells each site transfused daily (on a yearly average)
- Then reported on stock levels each day to EBMT
- Colour coded the levels as to if these were a concern or not

JR Site:

Ideal Stock	Ideal -20%	Current levels	Comments
82	66	83	A pos 14 O pos 22 O neg 30

JR and NOC Site:

Ideal stock	Current levels	Units Transfused per day	Days stock available
82	83	32	2.6

PBM

- Reviewed our PBM actions
- We did some increase in communication regarding the importance of PBM
- The laboratory staff checked on appropriateness of requests
- Txa already standard but it did help with the decision to add this onto the WOW checklist (now in place)
- Changed the threshold for transfusion for clinical haematology

Clinical Haematology

- Resistance from the consultants for the transfusion threshold to be 7g/l
- So the threshold was officially 8 g/l
- We reapproached the consultants when we were in pre amber to ask them to consider a reduction
- We did get agreement on the reduction – this went live in Sept 2022
- As clinical haem use 25-30% of red cells this has shown a reduction in usage

Sickle Cell Exchanges

- Regional Hbopathy centre – performing many red cell exchanges each month
- We looked at the recommendations which were circulated from the RCP
- Discussed the recommendations with the Hbopathy teams
- Didn’t immediately drop the requirement for blood <7 days old but we did implement in October 202
- The next MDT reviewed the number of units used for each patient and the frequency of exchange.

Surgery

- Impact on the surgical services was a worry
- We have services which have considerable blood product requirements
- Concern considerable regarding cancelling patients who had already had a considerable wait due to the covid pandemic
- We worked with the surgical wait operational lead to determine the extent of patients who would have to be postponed
- We also encourage services to look at their usage and consider what they could implement to reduce this

Pathway

- Reliable data on upcoming elective surgery is sent to TLM
- Colour code for chance of requiring blood (categories as to the likelihood to red cells being required)
- Green / yellow to proceed
- Check blood groups for orange and red
- Blood group low in stock – no (Don't proceed with surgery)
- Blood stock low but:
  - Patient on cancer pathway
  - P1-P2
  - >78w

Proceed with surgery

- The procedures that are not falling in above groups to be discuss with operating team as these may be delayed

Surgical issues

- Some surgical procedures are low risk for red cell requirements but
  - Clinical staff want red cells on standby just in case!
- This is mainly related to the distance from the lab
- Despite having remote issue – some clinical teams insist on having a minimum of 2 units for each patient
- Those procedures on a site with a lab – group and save done and blood only issued when required.
- Orthopaedic centre is the biggest problem – remote site with no lab

Addressing this issue

- We worked with 1 of the lead Orthopaedic surgeons
- He is an active member of the PBM
- Considerable work on looking at the risk of transfusion for some of the less complex orthopaedic ops
- Risk of transfusion for a knee replacement
- Hb >8 - 1.04% (all the transfusions were post operative)
- Therefore we have changed to only group and save a patient who is having a knee replacement if their HB is >8g/l
- Currently working on the data for THR too

Communication

- Communication of the issue is key:
  - To all clinical staff
    - This is especially important for the junior medical staff (who do the ordering)
    - We had a some medical staff who tripled their blood request for a cardiac procedure as they heard there was a blood shortage and felt they should be a priority. We had the deputy medical director talk to them!
  - Trust Management
    - Mainly via EBMT
    - Important that any decisions to cancel procedures/treatment are agreed at a trust management level
    - Reassurance of the complex stock situation is important

Laboratory communication

- Need to ensure the laboratory staff are aware of the situation
- Don’t forget you need to ensure staff are kept in the loop
- Out of hours/lone workers are especially important
- Number of aspects:
  - Stock – following agreed changes is important.
  - Issue requests
  - Who to talk to if get problems

What happened at the OUH

- We came close to cancelling surgery because of the blood shortage. The number of P3 and P4 patients is considerable
- Thankfully we didn't have to cancel anyone because of this reason (being at OPEL 4 meant some surgery was cancelled due to bed shortages)
- The lab staff followed the SOPs on stocking and no one went off piste and over ordered
- It was considerable additional work but overall the process worked well

What did we learn?

- The EMBT needed operational input
  - We've changed our terms of reference
- Communication to all staff remains difficult
- Knowing who is due for surgery when changes constantly
  - But most patients who are slotted in are urgent so less likely to be a candidate to cancel surgery
- The Trust Management are now more aware of the importance of blood transfusion.

Questions?