Implementation of NICE Guidelines on Blood Transfusion

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WHAT NOW?
SO WHAT?

NHS
National Institute for
Health and Clinical Excellence

Baseline assessment tool

Implementing NICE guidance

NICE recommendation	Guideline reference	Current activity/evidence	Complies?	Actions needed to ensure compliance
Offer oral iron before and after surgery to patients with iron-deficiency anaemia.	1.1.2	A pilot to identify and correct iron deficiency with oral and IV iron was developed in orthopaedic surgery as part of an ongoing patient blood management programme but has been cancelled. At present correction of pre op anaemia relies on the surgeon and GP taking action at the time of outpatient assessment	No	A formal anaemia screen in advance of surgery would potentially increase the number of patients having iron deficiency corrected prior to surgery
Consider intravenous iron before or after surgery for patients who: • have iron-deficiency anaemia and cannot tolerate or absorb oral iron, or are unable to adhere to oral iron treatment (see the NICE guideline on medicines adherence) • are diagnosed with functional iron deficiency • are diagnosed with iron deficiency anaemia, and the interval between the diagnosis of anaemia and surgery is predicted to be too short for oral iron to be effective.	1.1.3	Norfolk CCGs have recently agreed to commission a community based iron service. If this proceeds this will provide a direct acces facility for NNUH for any patient who needs IV iron	No	Surgeons/anaesthetists will need to take up this new service
For guidance on managing anaemia in patients with chronic kidney disease, see the NICE guideline on anaemia management in chronic kidney disease.	1.1.4	Compliance with NICE guidance for management of renal anaemia is undertaken by renal department. Not assessed as part of this review	Yes	Management of renal anaemia is already established in the trust. For a breakdown of compliance with this guideline see renal anaemia BAT.
Offer tranexamic acid to adults undergoing surgery who are expected to have at least moderate blood loss (greater than 500 ml)	1.1.5	Tranexamic is used in the perioperative period but is not routinely used in all cases wher anticipate dblood loss is greater than 0.5l	No	Could be incorporated as prompt in WHO sign in as EBL forms part of this and a value of >0.5l could trigger a reminder to consider Tranexamic acid
Use restrictive red blood cell transfusion thresholds for patients who need red blood cell transfusions and who do not: • have major haemorrhage or • have acute coronary syndrome or • need regular blood transfusions for chronic anaemia.	1.2.1	Transfusion targets in trust guideline CA2057 (Transfusion of blood and blood components in adults and children) have been updated in line with NICE. Mandatatory trainng material will be updated to highlight these changes. Current compliance not known	No	A culture change in medical practice is needed.Complian with this recommendation could be further improved by introducing guidance within the webICE requesting sysyem. The transfusion section of webICE is scheduled for a major revison in 2016. ammendments to be deferre until this is done.
When using a restrictive red blood cell transfusion threshold, consider a threshold of 70 g/litre and a haemoglobin concentration target of 70–90 g/litre after transfusion.	1.2.2	As above	No	As above
Consider a red blood cell transfusion threshold of 80 g/litre and a haemoglobin concentration target of 80–100 g/litre after transfusion for patients with acute coronary syndrome.	1.2.3	As above	No	As above
Consider setting individual thresholds and haemoglobin concentration targets for each patient who needs regular blood transfusions for chronic anaemia.	1.2.4	Difficult to assess current compliance. It is likely that most transfusion dependant patients with chronic anaemia are managed within the haematology department. There is currently a dedicated nurse transfusion clinic for these cases. Decisions to transfuse are based on both Haemoglobin and symptoms but availability of outpatient blood transfusion slots is also a major factor in determining timing of transfusions. There is not a documented haemoglobin threshold and target for each patient	No	An audit of the nurse led transfusion clinic would establis current compliance. An increase in blood transfusion capacity would helpful. It is hoped that this will happen when the Weybourne expansion project is completed
Consider single-unit red blood cell transfusions for adults (or equivalent volumes calculated based on body weight for children or adults with low body weight) who do not have active	1.2.5	As above - see 1.21. Trust guideline and mandatory training material have been updated to support this	No	Single unit transfusion is rarely used in clinical practice. Major culture change would be needed

Key priorities for implementation

- Alternatives to blood transfusion for patients having surgery
- Red blood cell transfusion
- Patient information

Alternatives to blood transfusion for patients having surgery

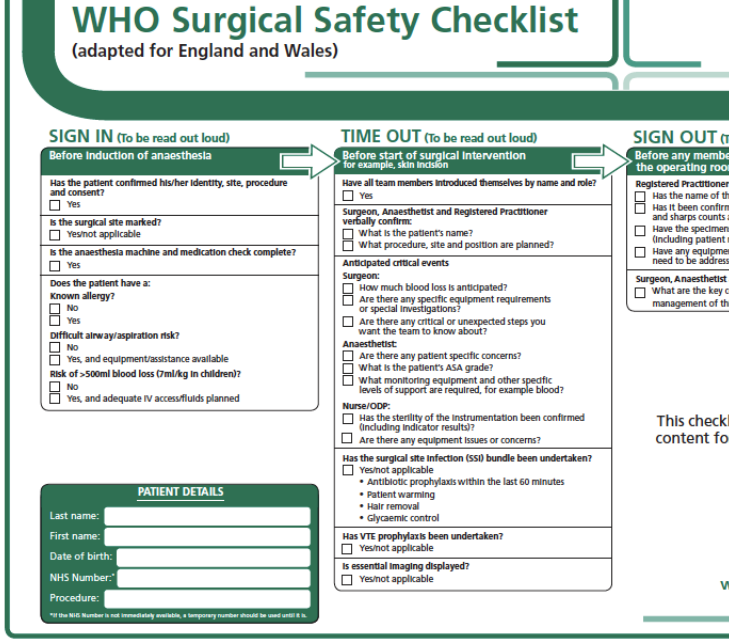
- Oral/ IV iron
- EPO
- Tranexamic Acid
- Cell salvage

Intraoperative cell salvage

- Snap shot audit of cell saver use
- Clinical lead for cell salvage

Time out ...

- Anticipated blood loss?
- Anticipated blood loss > 500mls?
- Has the use of tranexamic acid been considered?
- Has the use of cell salvage been considered?


WHO Surgical Safety Checklist
(adapted for England and Wales)

SIGN IN (To be read out loud)
Before induction of anaesthesia

Has the patient confirmed his/her identity, site, procedure and consent?
Yes

Is the surgical site marked?
Yes/not applicable

Is the anaesthesia machine and medication check complete?
Yes

Does the patient have a:
Known allergy?
No
Yes

Difficult airway/aspiration risk?
No
Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?
No
Yes, and adequate IV access/fluids planned

PATIENT DETAILS
Last name:
First name:
Date of birth:
NHS Number:*
Procedure:
*If the NHS Number is not immediately available, a temporary number should be used until it is

TIME OUT (To be read out loud)
Before start of surgical intervention
for example, skin incision

Have all team members introduced themselves by name and role?
Yes

Surgeon, Anaesthetist and Registered Practitioner verbally confirm:
What is the patient's name?
What procedure, site and position are planned?

Anticipated critical events
Surgeon:
How much blood loss is anticipated?
Are there any specific equipment requirements or special investigations?
Are there any critical or unexpected steps you want the team to know about?

Anaesthetist:
Are there any patient specific concerns?
What is the patient's ASA grade?
What monitoring equipment and other specific levels of support are required, for example blood?

Nurse/ODP:
Has the sterility of the instrumentation been confirmed (including indicator results)?
Are there any equipment issues or concerns?

Has the surgical site infection (SSI) bundle been undertaken?
Yes/not applicable
• Antibiotic prophylaxis within the last 60 minutes
• Patient warming
• Hair removal
• Glycaemic control

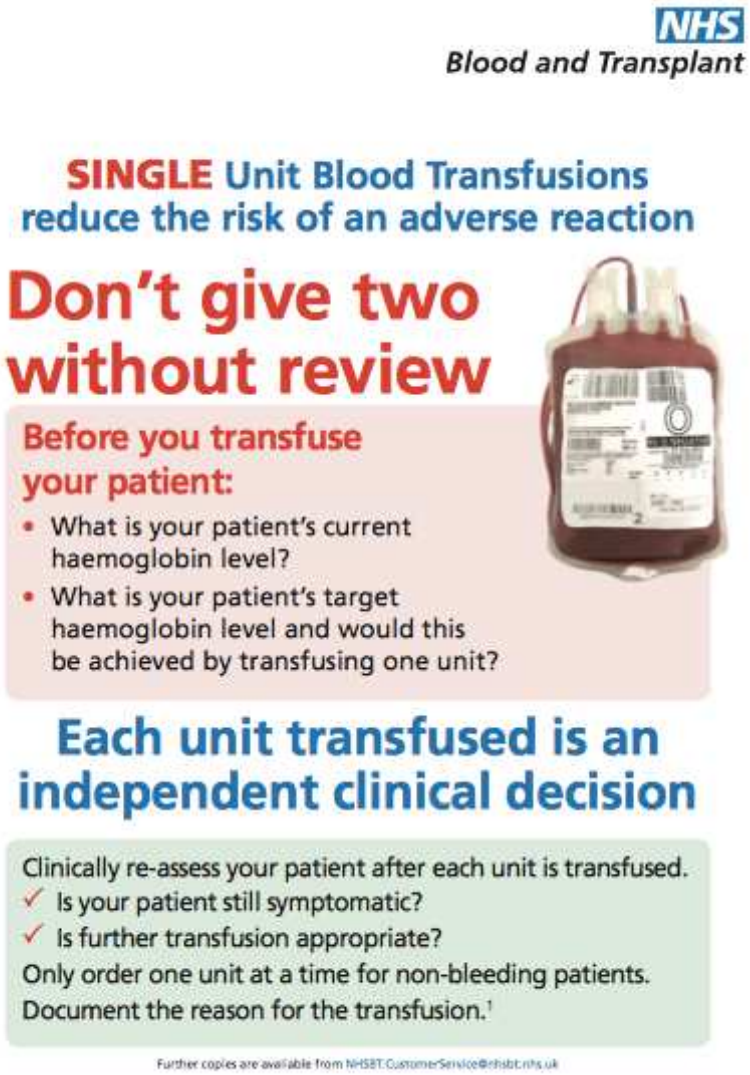
Has VTE prophylaxis been undertaken?
Yes/not applicable

Is essential imaging displayed?
Yes/not applicable

SIGN OUT (T
Before any membe
the operating roo
Registered Practitioner
Has the name of th
Has it been confirm
and sharps counts
Have the specimen
(including patient
Have any equipme
need to be address
Surgeon, Anaesthetist
What are the key c
management of th
This check
content fo

Red blood cells

- Education
- Education
- Education



Patient information

- Provision of printed information
- Informed consent
- Inclusion of transfusion in EDL