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Welcome to the final edition of the CPOC Newsletter for 2022.

Thank you for subscribing and keeping up to date with all things CPOC and perioperative care.



A Note from the CPOC Director

We would like to take this opportunity to thank all of those involved in CPOC that have made our work possible and to those who have dedicated time to progress the perioperative care agenda. From the Anaemia guideline to our webinars, thank you for supporting CPOC. Transforming pathways and ways of thinking requires collaboration and trans-professional working; we require support from all areas of the pathway.

I would also like to place on record a huge thank you to Alice Simpson, our CPOC coordinator, who has been absolutely key in driving forward everything that CPOC is involved in and everything that we have achieved.

We are looking forward to seeing what CPOC can achieve in 2023 as we continue to build CPOC's name as the home of

perioperative care.

David Selwyn

CPOC Director



Publication January 2023

2022 Guidelines Guideline for the Management of Anaemia

Anaemia is common, present in over a third of patients having major surgery. It is associated with adverse outcomes of surgery. Interventions can be effective. A Patient Blood Management (PBM) approach improves postoperative outcomes (PBM), leading to reduced blood transfusion, length of stay, complications and hospital costs.

This CPOC perioperative anaemia guideline has been developed using a whole pathway approach. It contains recommendations for patients of all ages undergoing surgery and for

Guideline for the Management of Anaemia in the Perioperative Pathway

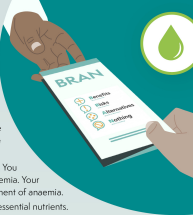
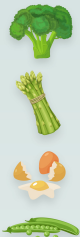


The aim of this guideline is to ensure the patient is truly at the centre of their care and that everyone involved in their care carries out their individual responsibilities to minimise the risk from anaemia. To make the best of this approach we need to make sure patients and all healthcare professionals in the multidisciplinary team work together.

- 1 All hospitals should work to develop pathways of perioperative care for surgical patients with anaemia that comply with the recommendations in these guidelines
- 2 All hospitals should establish data capture systems to allow auditing against the metrics and recommendations provided
- 3 All patients referred for surgery who fulfil the NICE preoperative testing criteria should have a full blood count (FBC) at referral to surgery or at first surgical consultation
- 4 All children and young people should be screened for anaemia before procedures associated with a 10% risk of transfusion as early as possible in the pathway
- 5 All patients undergoing surgery with a clinical finding of anaemia should have documentation of the type and likely cause of anaemia
- 6 All patients with anaemia having a major operation (with expected blood loss of >500ml or 10% blood volume) should have a documented plan for preoperative, intraoperative and postoperative management of anaemia in line with Patient Blood Management (PBM)
- 7 All patients undergoing surgery with anaemia or at risk of anaemia should be proactively provided with information (paper and/or digital) regarding causes and treatment of anaemia including options for blood transfusion
- 8 All staff working in perioperative settings should have training in anaemia, PBM and blood transfusion. This includes those working with patients receiving emergency surgical care


Download the Full Guideline

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RECOMMENDATIONS FOR PEOPLE WITH ANAEMIA AND THEIR CARERS


Iron in your diet (NHS BT)



Anaemia Patient Information (NHS BT)



BRAN leaflet (CwUK)



- Be aware that anaemia is common, treatments are possible and that addressing anaemia may reduce postoperative complications.
- Be aware that there are many causes for anaemia. You are likely to have tests to discover the type of anaemia. Your surgery may be delayed for investigation or treatment of anaemia.
- Many people have anaemia due to low intake of essential nutrients. Please try to improve this:
 - Iron is found in: red meat, beans and nuts
 - B12 is found in: meat, fish, cheese or eggs
 - Folate is found in: green leafy vegetables, broccoli, brussel sprouts, asparagus, peas, chickpeas, brown rice and liver.
- Be aware that some patients are treated with blood products and your medical team may discuss this with you.
- Prepare for surgery or other treatment in good time. This may include:
 - increasing your physical activity/exercise, stopping smoking, preparing psychologically and practically. These interventions are proven to improve outcomes from surgery. There is more information on cpcoc.org.uk/patients.

Exercise should include: fitness, strength and balance – try sit-to-stand exercises.
- There are often different ways of investigating or treating anaemia. Patients are encouraged to ask questions, eg BRAN: what are the Benefits, Risks, Alternatives and what if Nothing is done?. Work out what matters to you. This is **Shared Decision Making**.
- If you are given oral iron:
 - note that the dose for treating anaemia is several times higher than for health supplements
 - it is best to take iron tablets on an empty stomach (ie one hour before or two hours after eating). Absorption can reduce by up to 75% if taken with food
 - taking iron tablets with vitamin C does not seem to increase absorption*
 - taking iron tablets on alternate days will improve iron absorption and may minimise side effects
 - avoid taking iron with tea or with phytates (found in beans, seeds, nuts or grains) as this limits absorption
 - if you get diarrhoea or constipation, try taking iron on alternate days
 - if side effects are bad, ask the perioperative team if there is another treatment option.

Detailed explanations about blood reducing the reliance on blood transfusion

Iron deficiency in pregnancy – a matter of public health

For patients: High Spec Blood

RECOMMENDATIONS FOR STAFF INVOLVED WITH CHILDREN WITH ANAEMIA UNDERGOING SURGERY

Guidelines specific to the perioperative management of paediatric patients undergoing surgery at risk of bleeding and transfusion are available, as are specific paediatric blood management strategies.^{15,16,17,18}

Specific perioperative recommendations:

- Preoperative Hb should be optimised by treating iron deficiency anaemia (see Figure 13)
- Tranexamic acid should be considered in all children undergoing surgery where there is risk of significant bleeding (see detailed paediatric section for dosing)
- Red cell salvage should be considered in all children at risk of significant bleeding undergoing surgery; children undergoing cardiac surgery with cardiopulmonary bypass (CPB) and where transfusion may be required
- A postoperative Hb transfusion threshold of 70g/L should be used in stable patients without major comorbidity or bleeding
- For surgery in neonates, use the same transfusion triggers used for non-surgical neonates, but adjust according to level of respiratory support and post-natal age (see Figure 12)
- Transfusion volumes for non-bleeding infants and children should be calculated to take the post-transfusion Hb to no more than 20g/L above the transfusion threshold. The following calculation may be used:

$$\text{Volume to transfuse (ml)} = \frac{\text{Desired Hb (g/L)} - \text{Actual Hb (g/L)} \times \text{Weight (kg)} \times \text{Factor}}{10}$$

It is reasonable to use a factor of 4 to avoid over-transfusion, but this should be assessed on an individual patient basis. 4ml/kg approximates to a one unit transfusion for a 70–80kg adult; typically giving an Hb increment of 10g/L¹⁹

- When using a restrictive red blood cell transfusion threshold, consider a threshold of 70g/L and a haemoglobin concentration target of 70–90g/L after transfusion
- There is insufficient evidence to make a recommendation regarding an appropriate transfusion threshold during cardiopulmonary bypass (CPB) for non-cyanotic or cyanotic patients
- For stable children with non-cyanotic heart disease, a restrictive transfusion threshold of 70g/L following CPB is recommended. There is insufficient evidence to make a recommendation for children with cyanotic heart disease
- In neonates (both cyanotic and non-cyanotic) or actively bleeding or unstable children following CPB, a higher Hb threshold may be appropriate, and signs of inadequate oxygen delivery can provide additional information to support transfusion
- Patients should be reassessed clinically and Hb checked after each unit of red blood cell they receive unless they are bleeding
- Where Hb monitoring is feasible and available, via point of care sampling or non-invasively, this should be used to ensure the smallest necessary volume is transfused over three to four hours, although more rapid rates should be used in hypovolaemia
- It is recommended that recipients under one year of age be transfused with components with neonatal/infant specification, eg Paedpacks
- Hospitals should develop policies to minimize exposure of infants to multiple donors.



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Anaemia Pathway

Steps to consider for each patient

If the patient anticipated to lose over 500ml blood or 10% of blood volume?

Can a test to identify anaemia (low Hb) be performed as early as possible?

If anaemia is identified, consider further tests to identify type of anaemia?

After results are available, ensure there is access to a senior clinician to undergo Shared Decision Making with the patient, eg whether to undergo further tests or treatment:

- When to treat someone if it's not clear?
- When to defer specialist?
- What iron oral?
- What other drug would?

Can techniques reduce blood loss in theatre?

Is there a plan to monitor, assess and manage anaemia postoperatively?

Does the patient have a discharge and follow up plan? (This is especially important if the patient might be discharged anaemic! Can that plan be followed through [with communication if transfer of care, or named responsible clinical team])?

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3/7

involvement from key stakeholders.

Primary and Secondary Care Interface

CPOC will be working to understand what resources are missing to support clinicians with the interface between primary and secondary care. Seamless perioperative care requires a smooth pathway for patients and the transfer of information.

Pathway Guideline 'lights'

CPOC will be developing a number of guideline 'lights' for key perioperative topics where resources and material exists across the pathway but are not easily collated in one place. The aim of the pathways is to signpost all resources and information for each section of the patient journey for that particular pathway from referral to recovery.



Watch Peter's Journey



HQIP Publication: Cornerstone 2022

The [Healthcare Quality Improvement Partnership \(HQIP\)](#) was established in April 2008 to increase the impact of clinical audit on healthcare quality improvement, and support improved outcomes for patients. HQIP are an independent organisation led by the Academy of Medical Royal Colleges, The Royal College of Nursing and National Voices. Currently HQIP commission circa 40 audits and programmes on behalf of NHS England, the Welsh Government and others, to collect and analyse healthcare data in order

to provide a national benchmarked picture of care standards for a wide range of conditions.

[View HQIP Cornerstone 2022](#)



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Join the CPOC Board

CPOC are looking for a Patient Representative to help transform the patient surgical journey and experience.

CPOC Vacancies

Wound Care Information Standard

There are more than 2 million people living with non-healing wounds in the UK. The Professional Record Standards Body and the NHS [National Wound Care Strategy Programme](#) consulted widely with health and care professionals and people to identify what information is needed to improve wound care, and we developed a draft information standard to support improving practice and outcomes in wound care. We have now launched [a wound care survey](#) to test its usability.

Please [take 10 minutes to fill it out](#). The deadline is 3 January at 9am.



Professional
Record
Standards
Body



CPOC is a partnership between:



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