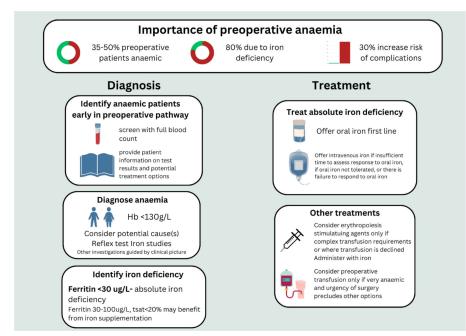
PREFACE

Updates in this new edition, May 2025

This is version 2.1 of this guidance document. The authors and others have reviewed the Anaemia guideline and confirm that it is up to date, with only minor changes. More evidence has emerged reinforcing the concepts within the guideline. The following new items are highlighted:

- 1 There is now a greater focus on Tranexamic acid to reduce blood loss during surgery. This should become standard practice. It is estimated^{P1} that 500,000 patients in the UK are missing out on this cheap, easy, low risk option (typically 1 gram for adults). Children have specific dosing and are also missing out. There is a video available.^{P2}
- 2 The infected blood inquiry^{P3} has confirmed that blood transfusion is not without risk and every effort should be made to avoid it, which includes optimising anaemia prior to surgery and using Tranexamic acid for most major surgery.
- 3 The message about Patient Blood Management is still insufficiently understood.
- 4 There has been insufficient progress. The PQIP^{P4} (Perioperative Quality Improvement Programme) Report 5 showed that 67% of anaemic patients had no treatment for preoperative anaemia, including 31% of patients with severe anaemia.
- 5 A recent systematic review^{P5} and meta-analysis of randomized controlled trials of preoperative intravenous iron in patients with colorectal cancer found a significant decrease in the need for blood transfusion. However, there was no significant difference in duration of hospital stay or incidence of major postoperative complications with IV iron.
- 6 A secondary analysis^{P6} of the PREVENTT trial data found intravenous iron was not associated with reductions in blood transfusions or death. 82% of participants had iron deficiency at inclusion, therefore the trial was adequately powered for these outcomes.
- 7 The World Health Organization^{P7} has concluded its reviewing of the definition of anaemia and has not made an expected change. The definition of anaemia in non-pregnant women remains at Hb 120g/l and is not the same as men at 130g/l.
- 8 The British Society of Haematology^{P8} have published new guidelines. This aligns with CPOC's anaemia guideline. The graphical abstract is below: ^{P8}



- 9 The British National Formulary (BNF) and BNF for children now recommend a dosing frequency for oral iron of once a day, or alternate days if not tolerated (or based on the preparation and age of a child). This follows our suggestion to them in 2022 (because frequent dosing stimulates Hepcidin reducing iron absorption and recycling).
- 10 There is a new audit tool^{P9} to assess NICE quality standards 138 including TXA use and Iron treatment for iron deficiency in surgical patients.
- 11 There is increasing wider interest in the waiting list being a 'preparation list', with some nations having initiatives to embed health and activity screening with optimisation early in the pathway. For example, some surgical clinics have electronic tablets to collect health and activity information, staff with skills in motivational interviewing and patient information resources. The Welsh Government's 'Promote, Prevent and Prepare'^{P10} and NHS England's 'Early optimisation and screening'^{P11} initiatives include examples of these. CPOC has seven new webpages on preparing for surgery.
- 12 There should be greater awareness of the UKCPA Handbook of perioperative medicines^{P12} and its search facility to plan management of patients' drugs that may increase bleeding, including antiplatelet and anticoagulant drugs.

With special thanks for help with the first edition

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Guideline review

This is version 2.1 of this guidance document, published in 2025. Any updates made to this guidance will be reflected in the table below and included in subsequent versions.

Version	Change	Date
1.0	First publication	7 September 2022
2.0	Second publication	24 March 2025
2.1	Minor amendments to version 2.0 regarding PREVENTT outcomes and children's oral iron frequency	8 May 2025

Date of review: September 2027

Scope of guideline

This guidance includes elective (planned) surgery and emergency (urgent) surgery. It applies to people of all ages, but specifically to two main groups of patients:

- people planned to have major surgery, with expected blood loss of over 500ml or 10% of their blood volume, who are anaemic or at risk of becoming anaemic
- people having less major surgery, who have been identified as having anaemia.

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