

## **Avoidable Transfusions and the Risks – The Importance of Anaemia Management: Frequently Asked Questions**

### **What is the preoperative anaemia project?**

The Blood Health National Oversight Group (BHNOG) issued the All Wales Perioperative Anaemia Pathway, which aims to support a standardised approach to the preoperative anaemia management across Wales. Prior to this, Health Boards (HBs) within Wales had their own pathways to provide staff with guidance on the optimisation of patients with anaemia ahead of surgery. These pathways may have been established within different specialities, leading to variation in practice not only across Wales but also within single HBs. The aim of this project is to help HBs implement the All Wales Pathway or align their existing pathway to the All Wales pathway.

### **Why is this project so important?**

*“Anaemia should be viewed as a serious and treatable medical condition rather than simply an abnormal laboratory value”<sup>(1)</sup>*

Approximately 35% of preoperative patients will be anaemic at the time of surgery and become more anaemic after surgery due to blood loss. Additionally, anaemia as a standalone risk is responsible for 20% of surgical complications. This risk increases when the patient has existing conditions alongside anaemia<sup>(2)</sup>.

These risks include:

- Poor wound healing
- Slow recovery
- Slower mobilisation
- Increased risk of death

Many patients are diagnosed with anaemia late into the perioperative pathway, resulting in insufficient time to treat the anaemia prior to surgery. Consequently, these patients are often transfused in preparation for surgery. However, while transfusion is life saving for many, it carries its own set of risks, namely<sup>(2)</sup>:

- Transfusion reactions
  - Adverse cardiovascular events
  - Recurrence of cancer
  - Financial costs
  - Increased mortality
- Creation of antibodies in females who may become pregnant in future, with these antibodies being implicated in haemolytic disease of the foetus and newborn, or recurrent miscarriages.

**Avoidable and inappropriate transfusions, including those to treat haematinic deficiencies, are reportable to the Serious Hazards of Transfusion (SHOT) UK Haemovigilance scheme<sup>(3)</sup>. Appropriate management of anaemia and safe transfusion decision making are key recommendations from SHOT 2022 report.**

## How will the project will be supported?

The project is being facilitated by the anaemia project team, who are based within the Welsh Blood Service. (WBS). This team is funded by the Value in Health Care (VBHC) programme support by Welsh Government.

To date, the team have:

- Conducted site visits or teams meetings across Wales to preoperative clinics and facilities where IV iron is administered, to speak with those working within the areas. This provided an opportunity for the team to introduce themselves as points of contact, but also for HB colleagues to give their opinions on the barriers and challenges they face when working to optimise anaemic patients prior to surgery.
- Completed feedback reports outlining the main challenges identified during site visits
- Requested baseline data from Digital Health Care Wales (DHCW) as a means of highlighting current practice towards identification, treatment and management of anaemic patients in the perioperative pathway.
- Held a National Stakeholder Meeting on 15<sup>th</sup> June 2023, where the baseline data was presented. During the session a number of decisions were made and actions agreed between the Preoperative Anaemia team and Health Board representatives. Please click the picture below for a copy of the presentation:



- Developed a process to release health board recurring funding that has been secured as part of this project. A business case template was issued to demonstrate how funding would be utilised and the 'value added' of that money to the HB service for preoperative anaemia management.
- Developed individualised compliance reports for each HB and circulated to Medical Directors and Directors of Nursing. Each report contains the agreed actions from the Stakeholder meeting, as well as individualised recommendations and actions that aim to help overcome the barriers reported previously.

## What is the 'preoperative anaemia screen' test set?

The 'preop anaemia screen' test set has been developed for use within the Welsh Clinical Portal to allow ordering of the anaemia screen for preoperative patients. The test set includes all the tests identified in the All Wales Perioperative Anaemia Pathway as being the gold standard set of tests

required to confirm whether a patient has iron deficiency anaemia, with the benefit of reflex testing. The aim of developing the test set was to standardise testing across HBs in Wales as well as simplifying the process of ordering multiple tests for preoperative colleagues. Currently implementation of the All Wales Test Set is in various stages and is being managed locally within each HB.

If you would like more information regarding the preoperative anaemia programme or implementing the test set within your HB please contact: [WBS.BloodHealthTeam@wales.nhs.uk](mailto:WBS.BloodHealthTeam@wales.nhs.uk)

**For more information and resources, use this QR code and link:**



[BHNOC Anaemia management](#)

## References

1. *Network for the Advancement of Patient Blood Management, Haemostasis and Thrombosis (NATA)*
2. *Anaemia in the Perioperative Pathway, Centre for perioperative Care (CPOC)*
3. *S Narayan (Ed) D Poles et al. on behalf of the Serious Hazards of Transfusion (SHOT) Steering Group. The 2022 Annual SHOT Report (2023). <https://doi.org/10.57911/WZ85-3885>.*