

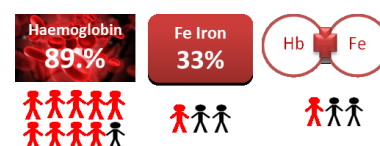


The Australian Commission on Safety and Quality in Health Care (the Commission) established the **National Patient Blood Management Collaborative** to focus on improving the management of anaemia for patients having elective surgery in the surgical areas of: gastrointestinal, gynaecological and orthopaedics. The Collaborative, funded by the Commonwealth, started in April 2015 with 12 participating health services from across Australia and will run to April 2017 to support improvements in the management of anaemia for elective surgery patients. It will encompass the scope of the patient journey, from the time that the need for surgery is identified, through inpatient care, and then subsequent care back in the community.

Overview of Collaborative Team Activity to February 2016

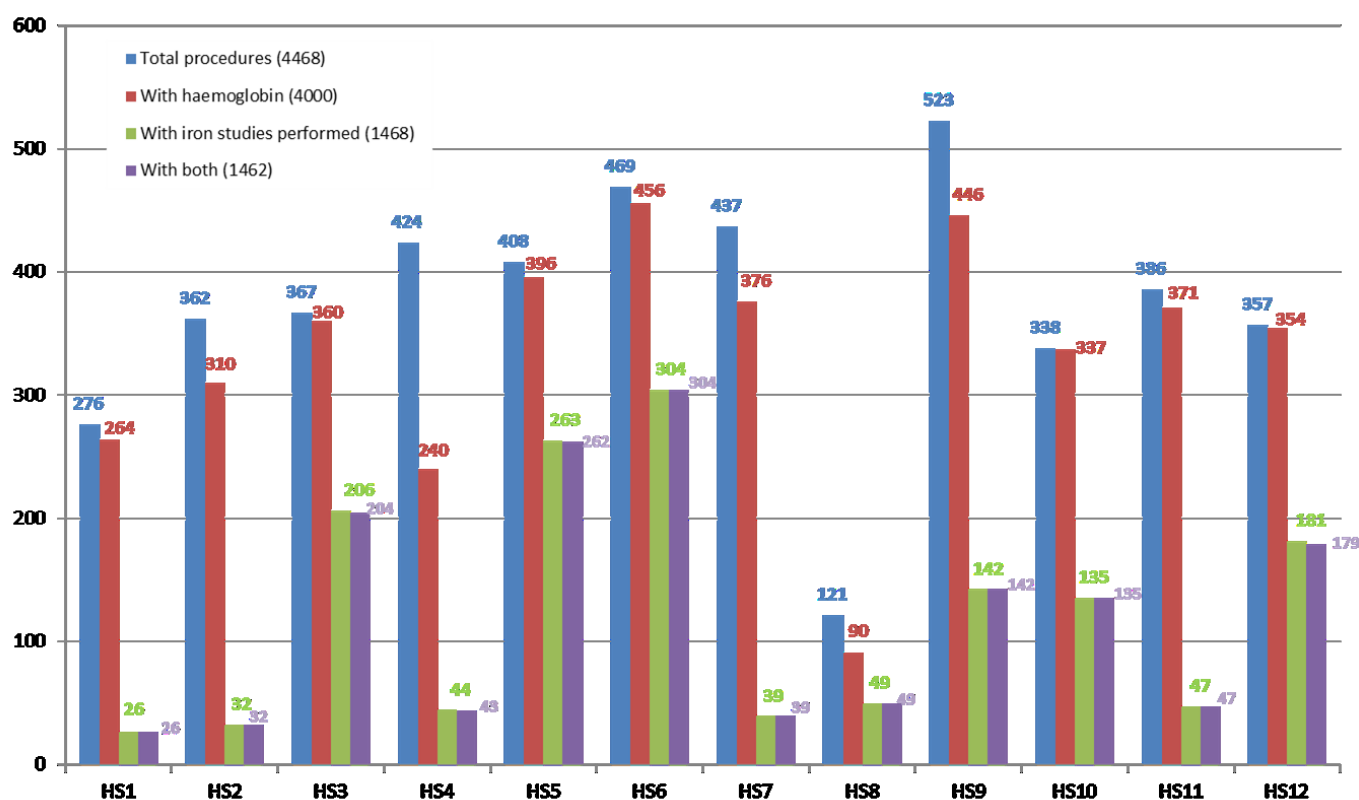
Collaborative health service teams provide data on a monthly basis via qiConnect web portal which is able to be used at the hospital level to track progress. The data is also analysed by the Commission and it is anticipated that the broad based review of the data will promote discussion and opportunities for further quality improvement.

To date, health service teams have collected data on nearly **4500** patient episodes consisting of 20% gastrointestinal, 26% gynaecological and 54% orthopaedic elective surgical procedures. Of the total procedures 89.5% received a haemoglobin test, 33% had iron studies and 33% had both.



Across the sites pre-surgical assessment of patients for anaemia ranged from 57% to 100% and for iron studies the range was 9% to 65%. Figure 1 shows the total patient episodes by health service from May 2015 to February 2016.

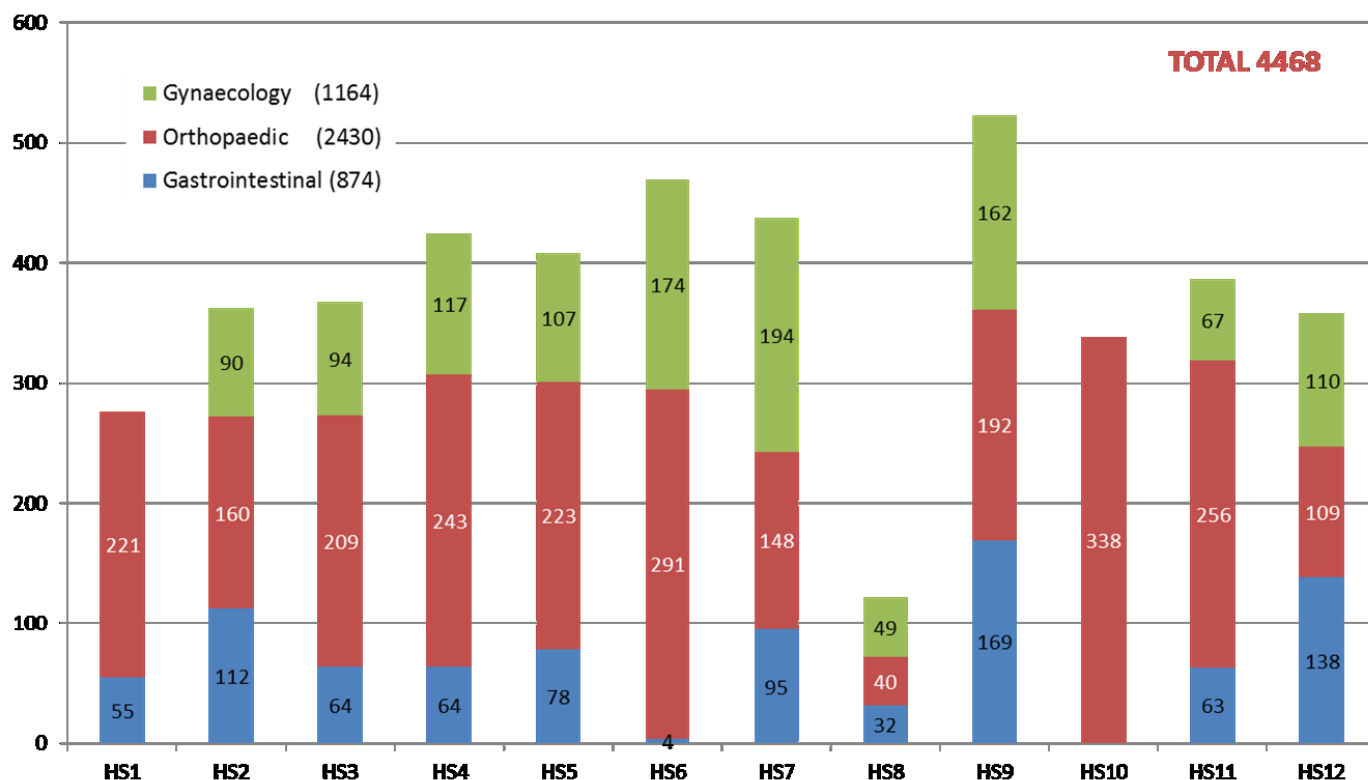
Figure 1: Total patient procedures by test by health service, May 2015 to February 2016



The Commission has facilitated seven workshops for teams to share their experiences of local quality improvement processes, learn from colleagues, consult with experts in the field, gather new information and develop ideas for improvement.

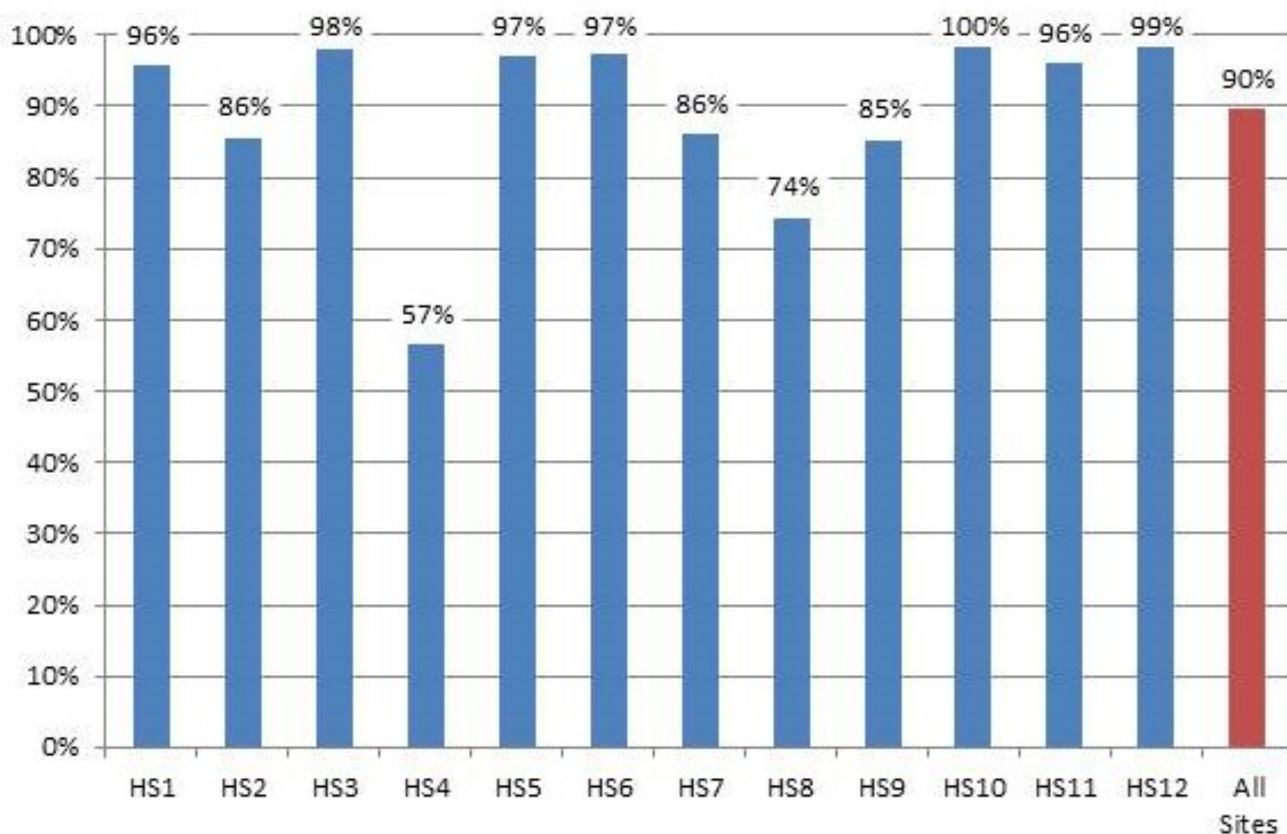
Activity Report (Cont'd)

Figure 2: Total procedures by surgical stream by health service, May 2015 to February 2016



Note: Not all Collaborative health services are participating in all three surgical areas, with some collecting data for only one or two.

Figure 3: Percentage of patients receiving pre-operative assessment for anaemia by health service as at February 2016



Note: For some teams there is a lag in receiving coded data - percentages will improve as more data becomes available.

Activity Report (Cont'd)

Figure 4: Percentage of patients receiving pre-operative assessment for anaemia per month, May 2015 to February 2016

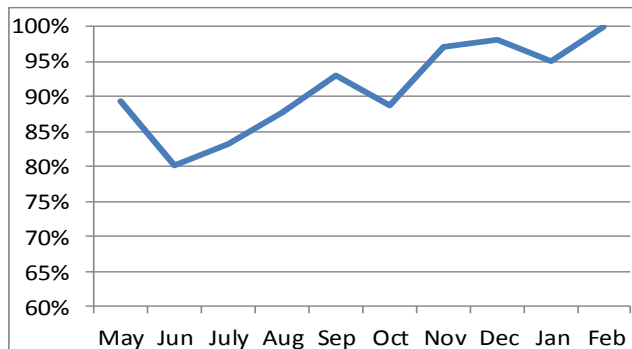
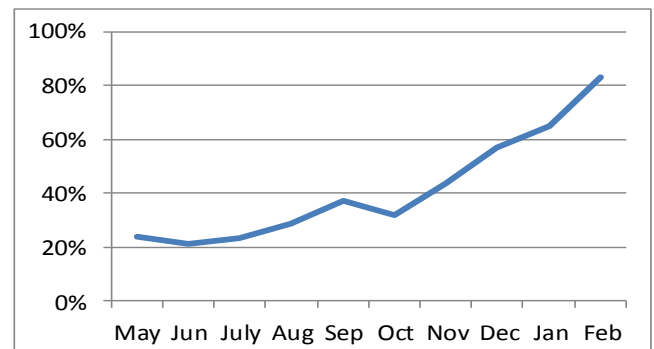


Figure 5: Percentage of patients receiving pre-operative assessment for iron deficiency per month, May 2015 to Feb 2016



Plan Do Study Act (PDSA)

The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change—by planning it, trying it, observing the results, and acting on learning. The four stages are:

- ⇒ **PLAN** - the change to be tested or implemented;
- ⇒ **DO** - carry out the test or change;
- ⇒ **STUDY** - data before and after the change and reflect on what is learned; and
- ⇒ **ACT** - plan the next cycle or full implementation.

To date, the 12 Collaborative teams have completed 193 PDSAs and a snapshot of examples are below:

- **Central Coast Local Health District** have achieved buy-in from the Integrated Business Unit, Anaesthetics and Pre-Admission Clinic for their pre-operative test clinical guideline to now include iron studies as standard for Grade 3 and Grade 4 surgeries.

Processes are being developed to ensure that tests are not only ordered, but also followed up. An additional piece of work coming from this initiative has been their Integrated Booking Unit agreeing to develop a process for educating anaesthetic staff rotating through the Pre-Admission Clinic to ensure sustainability of patient blood management practices.

The Department of Anaesthetics has also committed to develop patient letters which guide patients to an appropriate course of action depending on their test results.

- **Lismore Hospital's** Pre-Operative Clinic is identifying patients with iron deficiency, and iron deficiency anaemia, at clinic assessments and arranging timely management. They are aiming to raise current management of iron deficiency by the Pre-Op Clinic from 17% to 50% by June 2016.
- **The Canberra Hospital** published an article 'Management of Anaemia in Primary Care' in the GP Liaison Unit's What's New October 2015 newsletter which included information on the National Blood Authority (NBA) and NPS MedicineWise patient information resources. These include 'Fit for Surgery' and 'Managing my Iron' resources. It also provided valuable links to GP referral letters which the local GPs can use to correspond with specialists and hospitals.
- The Canberra Hospital in conjunction with the **Australian Red Cross Blood Service** is convening the 'Canberra Iron Symposium: From Primary to Tertiary Care' on Saturday, 30 April 2016. For more information, go to: www.transfusion.com.au/node/653. Registrations close on Friday 15 April 2016. Places are limited.
- **The Mater Hospital Sydney** held a 'Blood Day' in August 2015 to raise awareness of PBM with hospital staff. A PBM flow chart for the Pre-Admission Clinic has also been developed which has proven to a successful tool for assisting clinicians to prescribe pre-operative iron infusions.

PDSAs (continued)

- The Learning and Development team at **The Mater Hospital, Sydney**, also developed the Six Minute Intensive Training (SMIT) poster to promote their participation in the Collaborative:

Six Minute Intensive Training (SMIT) – Patient Blood Management

What is Patient Blood Management?

Patient Blood Management (PBM) aims to optimise blood volume and red cell mass, minimise blood loss and optimise the patient's tolerance of anaemia.

PBM is not an alternative to blood transfusion but good clinical practice. A reduction in unnecessary blood transfusions minimise transfusion associated complications and supports appropriate use of blood products

PILLAR ONE Pre-Op	PILLAR TWO Intra-Op	PILLAR THREE Post Op
Optimise Hb and Iron stores	Minimise Blood Loss	Manage anaemia / tolerance of anaemia

What is the Collaborative about?

The Collaborative embodies Pillar One: to increase the percentage of patients who have had their haemoglobin and iron stores optimised prior to elective surgery. The three pillars underpin PBM and highlight:

- Risks associated with blood transfusion – infection, length of stay
- Rising costs with provision and transfusion of blood
- Challenges of maintaining an adequate blood supply due to increased demand and ageing population
- Use of blood and blood products are not always in accordance with clinical guidelines.

Historically blood transfusion has been used indiscriminately without considering real clinical need. Blood is a vital resource that should be used when clinically indicated based on individual patient parameters.

Who started the National Patient Blood Management Collaborative?

The Australian Commission on Safety and Quality in Health Care established the National Patient Blood Management Collaborative to address the use of blood in **elective surgery**.

What surgeries are being focused on in the Collaborative?

- ✓ Gastrointestinal
- ✓ Gynaecological
- ✓ Orthopaedic

Who is participating in the Collaborative?

WE ARE!!

Along with 11 health services which are a mix of public, private and not-for-profit hospitals.

Change Principles

Between 2015 and 2017 health services will develop and trial strategies to enhance PBM and the effective use of the National Blood Authority (NBA) Guidelines. Three change principles will be used when developing strategies:

Change Principle 1: Implement a systematic and proactive approach to pre-operative optimisation of haemoglobin and iron stores for patients undergoing elective surgery.

Change Principle 2: Ensure patients receive integrated and coordinated PBM pre-operatively.

Change Principle 3: Enhance knowledge of evidence-based best practice in PBM.

How will the impact and success be measured?

By reviewing the patient's journey and looking at:

Step in clinical pathway	Indicator description
Assessment	<ul style="list-style-type: none"> • Assessed for anaemia • Assessed for iron deficiency
Diagnosis made	<ul style="list-style-type: none"> • Anaemia confirmed • Fe deficiency confirmed
Condition managed	<ul style="list-style-type: none"> • Anaemia managed • Fe deficiency managed
Outcome	<ul style="list-style-type: none"> • Anaemia improved • Fe deficiency improved
Transfusion	<ul style="list-style-type: none"> • Pre-operatively • Intra-operatively • Post-operatively

Outcomes of the Collaborative

By addressing low Hb and Fe deficiency prior to elective surgery the Collaborative hopes to reduce:

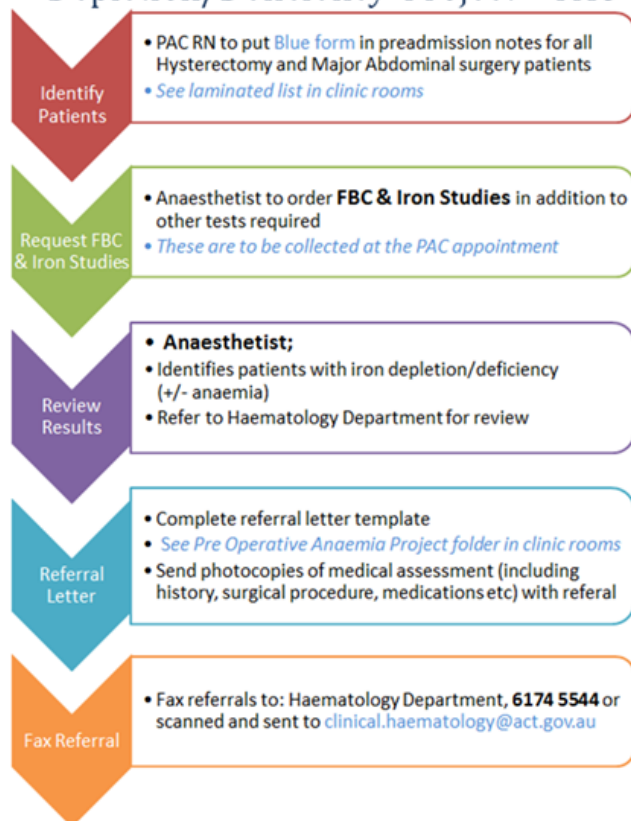
- ✓ **Avoidable blood transfusions**
- ✓ **Post-operative infections and adverse reactions to blood products**

Shared Resources

The Collaborative teams are sharing resources they have prepared and which are being trialled and tested, for example:

- Two posters developed by Royal Darwin Hospital, one for patients (top right) and another for clinicians (below right) to encourage pre-operative screening at the time of being placed on the waiting list so as to reduce the need for patients to make multiple trips to hospital.
- ACT Health's process for iron infusions which is included in Information Packs for GPs (below).

Pre-Operative Anaemia and Iron Depletion/Deficiency Project – PAC



Over the next few months the Commission will work with the National Blood Authority to examine how to share, more broadly, the resources which have been developed by the Collaborative teams. This information will be provided to non participating hospitals supporting them to adopt quality improvement approaches and improve PBM practices.

For further information:

Website: www.safetyandquality.gov.au/national-priorities/pbm-collaborative/
Email: pbmcollaborative@safetyandquality.gov.au
Twitter: @ACSQHC
Phone: 02 9126 3600



Royal Darwin Hospital



Fit for Surgery

Have you got your Preoperative Screening Pack?

If you have been placed on the elective surgery waiting list it is important to make sure you are as fit as possible. This will help you achieve the best outcomes from the surgery and help in your recovery.

One of the most important factors to screen for is whether you have anaemia and/or iron deficiency.

Anaemia occurs when there are not enough red blood cells in your body, or the red blood cells do not have enough haemoglobin to carry oxygen to your tissues (caused by iron deficiency).

If you are anaemic and/or iron deficient at the time of your surgery it may increase your risk of having a blood transfusion, heart attacks, infection and delayed wound healing.

When the surgical clinic doctor places you on the waiting list for major surgery they will give you a Preoperative Screening Pack. The pack includes a blood test request form.

Please go to the Pathology Collection Room between 9:00 am and 3:00 pm Monday-Fri to have your blood tests taken.

The good news is anaemia can easily be treated but it takes time so the sooner you find out if you are anaemic the sooner you can start treatment.



Further information can be found in your Preoperative Screening Pack including a copy of the Fit for Surgery factsheet



Royal Darwin Hospital



Fit for Surgery

Preoperative Optimisation for Major Surgery

Have you placed a patient on the waitlist for major surgery? You will need to give them a Preoperative Screening Pack.

The RDH Department of Anaesthesia, in partnership with the RDH National Patient Blood Management Collaborative (NPBMC) Team, has introduced a screening program aimed at optimising patient health in the period leading up to their elective surgery.

Performing tests at the time of waitlisting rather than at pre-admission for procedure will allow time for assessment and optimisation of identified issues.

In order to optimise as many patients as possible we are asking that you request the following tests at the time of waitlisting a patient for major surgery:

- FBC
- CRP
- Blood urea and electrolytes
- Creatinine
- Hb A1C
- Iron Studies

An anaesthetist or NPBMC project officer will follow up the results and take appropriate action if any issues are identified.

Preoperative screening packs are available in RDH Surgical Outpatients clinics. The packs include:

- Pathology request form with pre-printed tests
- Patient letter and questionnaire
- Fit for Surgery factsheet
- Pre-paid envelope



For further information on the Preoperative Screening Program please contact the NPBMC Team:

- Dr Richard Bradbury, Consultant Surgeon
- Dr Dan Holmes, Anaesthetics and Intensive Care Specialist

