Delivering Patient Blood Management in a Regional Programme

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ACTION: Local, practical clinical guidance:

- **Anaemia algorithm**
  - Who, when, how to refer
  - Rational pathology ordering, adding on tests (ferritin: existing non-fasting tube)

- **Iron deficiency**
  - With & without anaemia
  - (High ferritin levels!)

- **Anaemia of pre-end stage CKD**

- **Management of anti-haemostatic agents**

- **Use of blood conservation strategies**

- **Transfusion decision making AND dosage**
2: Measurement ➔ Data Linkage

- Can’t change what you can’t measure! Reduce reliance on manual data collection (takes time & staff away from coal face)
- Central data linkage, benchmarking of multiple hospitals, patient groups (3 monthly ‘run charts’ ideal for practice improvement)
- Helps with priority setting & planning resources (e.g. needed for anaemia management)
- ACTION: % transfusion rate, % single units, % pre-op anaemia (+ % with low MCH/MCV, eGFR)

Arthroplasty transfusion rate 2006-11

Pre-op anaemia rate by surgery type

![Graphs showing transfusion rates and anaemia rates by surgery type.](image)
3: Use Clinical Practice Improvement (CPI) Methodology ➔ System Change

- Champions / establish a guidance team
- Working group with fundamental knowledge of the process
- Map the process
- Measurement
- Diagnostic phase: barrier analysis, multi-voting
- Improvement tools
- Plan, Do, Study, Act (PDSA) cycles
- Use run charts, seek assistance with quality improvement stats

ACTIONS:
- Do a CPI course, +/- funding for back fill (even 1 day per week)
- Join existing pathway improvement programs (e.g. elective surgery, Hip #)
- Involve GPs, specialist nurses/practitioners, consumers
Elective arthroplasty patients undergoing surgery with anaemia

Example: Cause & Effect Diagram

RESULT MANAGEMENT

- Difficult to interpret the cause of anaemia and therefore management
- Blood results not available at clinic
- Ill defined responsibility for who is responsible for follow up and management of abnormal results

CARE PROCESSES

- No pre-op checklist for GP or hospital pre joint replacement
- No pathway on how & when to manage anaemia
- Lack of awareness of whole pathway
- Lack of awareness of the importance of pre-op anaemia
- Lack of awareness of the adverse outcomes of transfusion
- Unclear about how to manage/treat anaemia once detected

ACCESSIBILITY

- Patient access to GPs
- Lack of knowledge about importance of pre-op anaemia
- Lack of knowledge of adverse outcomes of transfusion

KNOWLEDGE

- Lack of awareness of whole pathway
- Lack of knowledge about importance of pre-op anaemia
- Lack of knowledge of adverse outcomes of transfusion

AWARENESS

- Lack of awareness of whole pathway
- Lack of awareness of the importance of pre-op anaemia
- Lack of awareness of the adverse outcomes of transfusion
- Unclear about how to manage/treat anaemia once detected
4: Improvement tools and strategies

- GP FORM letter (check for pre-op anaemia)
- PATIENT INFO: GP check-up for pre-op anaemia, taking oral iron, IV iron infusions (+ translations)
- Oral iron prescribing chart
- Easy to use IV iron protocol(s) & rapid access
- Timely access to haematology assistance: interpretation of FBE and ferritin
- IDA eLearning: www.bloodsafelearning.org.au
- IDA app for Dx, Ix & Mx
- Academic detailing visits: GPs and specialists
- ACTION: review available tools
5. Multiple approaches / safety nets
e.g. Pre-op Anaemia Management

- Care pathways
- Involve primary care
- Hospital anaemia clinic
- High risk anaesthetic clinic
- Nurse coordinator
- Nurse practitioners
- Nurse initiated oral iron
- Support for anaesthetic staff to manage anaemia when short time to surgery
- Ensure iron repletion in patients having scopes

- FBE at referral for surgery
- GP & patient letter when on waiting list
- Pre-habilitation workshops
- Review of results prior to pre-admission clinic (PAC)
- Bloods done before PAC clinic
- Review of results with haematology support
- Document plan on discharge, patient info

ACTION: look at opportunities in current system
Suggested Recommendations

1. Choose a patient group (need champions & experts) e.g. arthroplasty, colorectal, gastro/endoscopy
2. Use CPI methodology, find some protected time for a coordinator & meet weekly
3. Involve primary care & integrate pathway into other aspects of care for that patient group

Once a pathway is established: easier to extend to other patient groups, other hospitals

Continue efforts on appropriate transfusion decision making /dosage
Iron Deficiency Anaemia eLearning Program

ModuleTwo > Case studies

Case studies
Test your knowledge so far

Below are links to two case studies for you to check your understanding of the diagnosis and investigation of IDA. It is important to remember that determination and treatment of the underlying cause(s) of IDA and iron therapy are concurrent components of management.

Click on a case study to begin.

Case Study One
Mr Wakefield

Case Study Two
Mrs Florey

Use this link to open the algorithm tool in a new window to assist with the case studies.

www.bloodsafelearning.org.au