National Patient Blood Management Collaborative

Improving anaemia management for patients having elective surgery

Kathy Meleady[1], Dr Kelly Shaw[2], Ruth Daniels[3], Ros Evenett[4]

1 Director, Commonwealth Programs, Australian Commission on Safety and Quality in Health Care, Sydney
2 Collaborative Lead, KP Health
3 Senior Project Officer, Commonwealth Programs, Australian Commission on Safety and Quality in Health Care, Sydney
4 Project Officer, Commonwealth Programs, Australian Commission on Safety and Quality in Health Care, Sydney

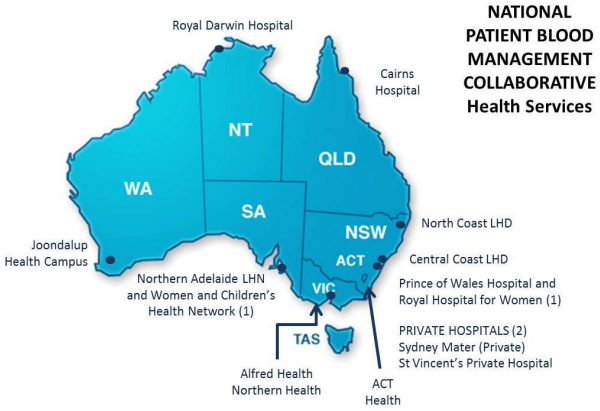
Website: www.safetyandquality.gov.au | Email: pbmcollaborative@safetyandquality.gov.au

INTRODUCTION

While blood and blood products can be lifesaving, their administration may also be hazardous for patients. Patients undergoing major elective surgery are at increased risk of needing a transfusion.

Blood transfusions can be avoided in many patients through better patient blood management (PBM). PBM involves optimising blood volume and red cell mass, minimising blood loss and optimising the patient's tolerance of anaemia. The National Blood Authority's PBM Guidelines, and the Australian Commission on Safety and Quality in Health Care (the Commission) National Safety and Quality Health Service Standard 7: Blood and Blood Products assist clinicians to improve PBM. For elective surgical patients pre-operative anaemia management reduces the likelihood a transfusion will be required.

The Commission is leading a National Patient Blood Management Collaborative to support improvements in the management of anaemia for patients having selected elective gastrointestinal, gynaecological and orthopaedic surgery procedures. Twelve sites nationally will participate between April 2015 and April 2017.



AIM

To improve patient care by optimising haemoglobin and iron stores by the time of elective surgery.

METHODS

This Collaborative applies the model for improvement to improve PBM across the patient journey, from the time the need for surgery is identified through to when surgery is performed. Change Principles are key components of the collaborative methodology and are a pathway for the participating health services to follow and guide improvement.

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: Enhanced knowledge of evidence-based best practice in PBM.

PLAN DO STUDY ACT CYCLES

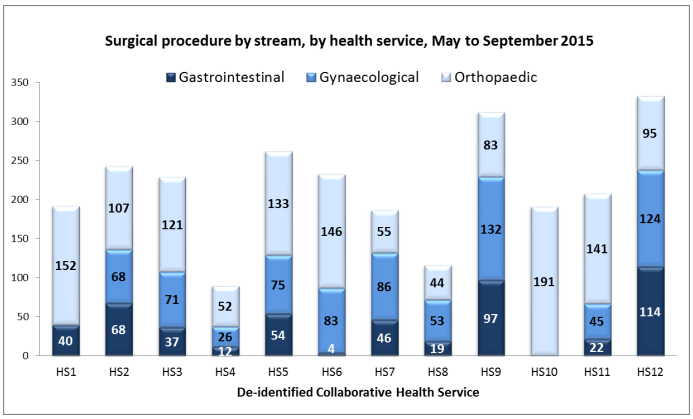
Through a series of learning cycles, Collaborative health service teams will implement changes in small manageable stages and will:

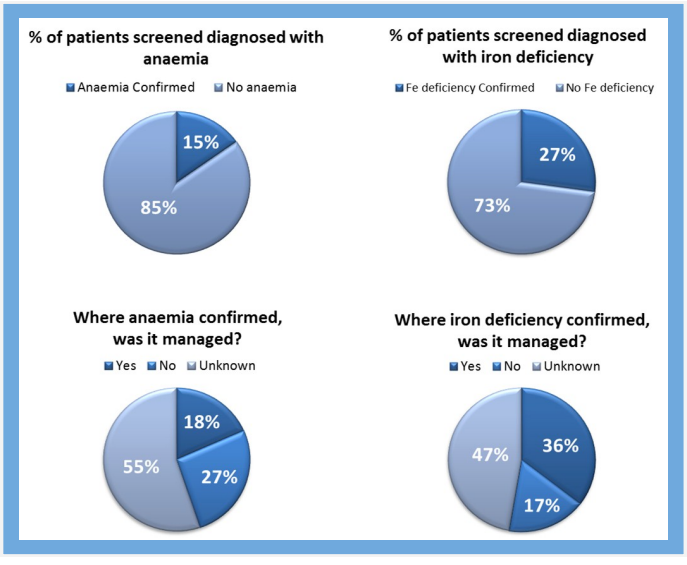
- Share information on actions and processes used to make change
- Share knowledge on current quality improvement processes
- Test practice changes against a series of measures
- Consult with experts on the Collaborative methodology, quality improvement, and PBM, and
- Discuss outcomes and impacts on patients to identify practice changes and increase the number of pre-operative patients with optimised haemoglobin and iron stores.

ACTIVITY TO DATE

Collaborative health service teams provide data on a monthly basis via the qiConnect web portal which was developed for the Collaborative. The measures include:

- Which procedure was performed from an agreed range of diagnostic related groups
- Indication of whether the patient received a pre-operative assessment for anaemia or iron deficiency
- Where the assessment occurred, ie. in hospital, specialist rooms, primary care setting
- Was the anaemia or iron deficiency confirmed?
- Where was it managed?
- Was there evidence of improvement?
- Units of red blood cells transfused (pre-, intra- and post- operatively).





INTENDED OUTCOMES

By improving anaemia management for patients in the pre-operative phase of care, the Collaborative may help to:

- reduce the risk of post-operative infections and adverse reactions from blood products
- reduce the risk of transfusion related inflammatory events
- reduce hospital length of stay
- reduce the risk of readmission from infectious complications of transfusion, and
- reduce elective surgery cancellations.

AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

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