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with thanks to Dr J. Waiting for a part of the data collection

Background

- Pre-operative anaemia is an independent predictor for poorer outcomes following surgery. Alongside this, blood transfusion is also associated with increased complications and length of stay.
- Iron deficiency anaemia (IDA) is common in patients undergoing major gynaecological surgery. The national transfusion rate for hysterectomy is 8%.
- We have successfully introduced a new service – increasing screening and treatment of pre-operative iron deficiency anaemia, with a reduction in donor transfusion rate from 12% to 8% (QIP cycle 1). This is inline with the relevant national **patient safety CQUIN indicator released in April 2020**.

Aim

- QIP cycle 2:** to further reduce the transfusion rate of all 100% women planned for major gynaecological surgery from 8% to 5%, over 8-months (Apr 2020 to Dec 2020), following QIP Cycle 1.
- QIP cycle 3:** to sustain a reduced transfusion rate of 6%, over 8-months (Jan 2021 to Aug 2021).

Methodology

Building on the initial set-up of our service, to realise our aim we planned to:

- Increase awareness of our clinic within the multi-disciplinary team and disseminate promising initial data from Cycle 1, as well as patient satisfaction scores.
- Further increase the screening for IDA (pre-operative iron studies) from 40% to >90%.
- Increase the clinic frequency to weekly from Apr 2020 to allow timely management of patients and cope with increased capacity.
- Start an oral iron telephone clinic from Jan 2021 (Cycle 3)

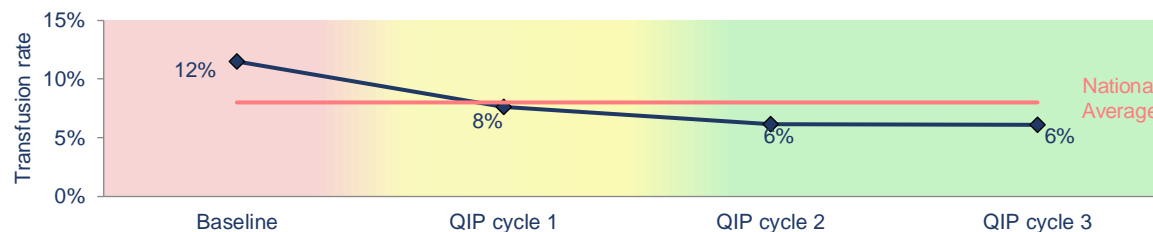
Results

147 patients were assessed by our service for the time periods studied (QIP Cycles 2 & 3). The data were compared to that of patients prior to the initiation of this clinic, and to those from Cycle 1 of this project. We achieved:

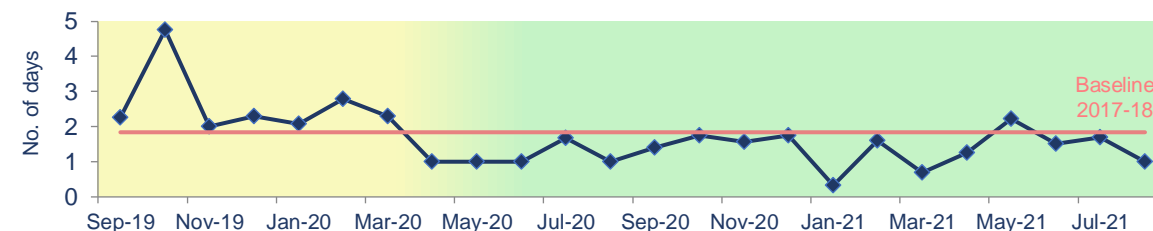
- A **doubling** in the completion of pre-operative iron studies (46% to >92%), sustained in QIP Cycle 3.

Baseline (2017-18)	QIP cycle 1	QIP cycle 2	QIP cycle 3
3%	46%	98%	93%

- With increased recognition of IDA - 47 patients received pre-operative intravenous iron infusions.
- A further **25% reduction** in transfusion rate from 8% to 6%, sustained in QIP cycle 3.



- 0.5 days reduction** in the average length of stay: baseline (1.86 days), QIP Cycle 3 (1.33 days).



Conclusion

- Further increase in recognition and management of IDA has led to a **sustained reduction in donor blood transfusion**. This represents both reduced prevalence of IDA pre-operatively, but also increased ability to recover.
- This correlates with a **reduction in length of stay** over the cycles studied, with a multitude of beneficial knock-on effects, including rehabilitation n from major surgery.

Reflection

- Our service has provided an extremely worthy intervention inline with the Trust's values and strategic aims – especially **service integration**.
- These promising data act as a platform for service expansion to other surgical groups.

Driver Diagram – QIP Cycle 2

