

# PBM- North Bristol

## 2 year review

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# Aims & Objectives

- How has the service grown in the past 2 years?
- Limitations/ challenges we have faced.
- Hopes for the future.
- Summary.
- Questions?

# Growth of the Service

- Appointment of Blood Conservation Administrator.
- Implementation of outpatient anaemia screening at booking for Major MSK patients.
- Increase of 63% I.V iron service at Pre-Op. 148 patients 2016-17 compared to 91 in the previous year.
- Increased use of intra-operative PBM, including cell salvage, thromboelastography and Tranexamic acid.
- Reduction in surgical blood transfusion.
- Advances in multi-disciplinary training.

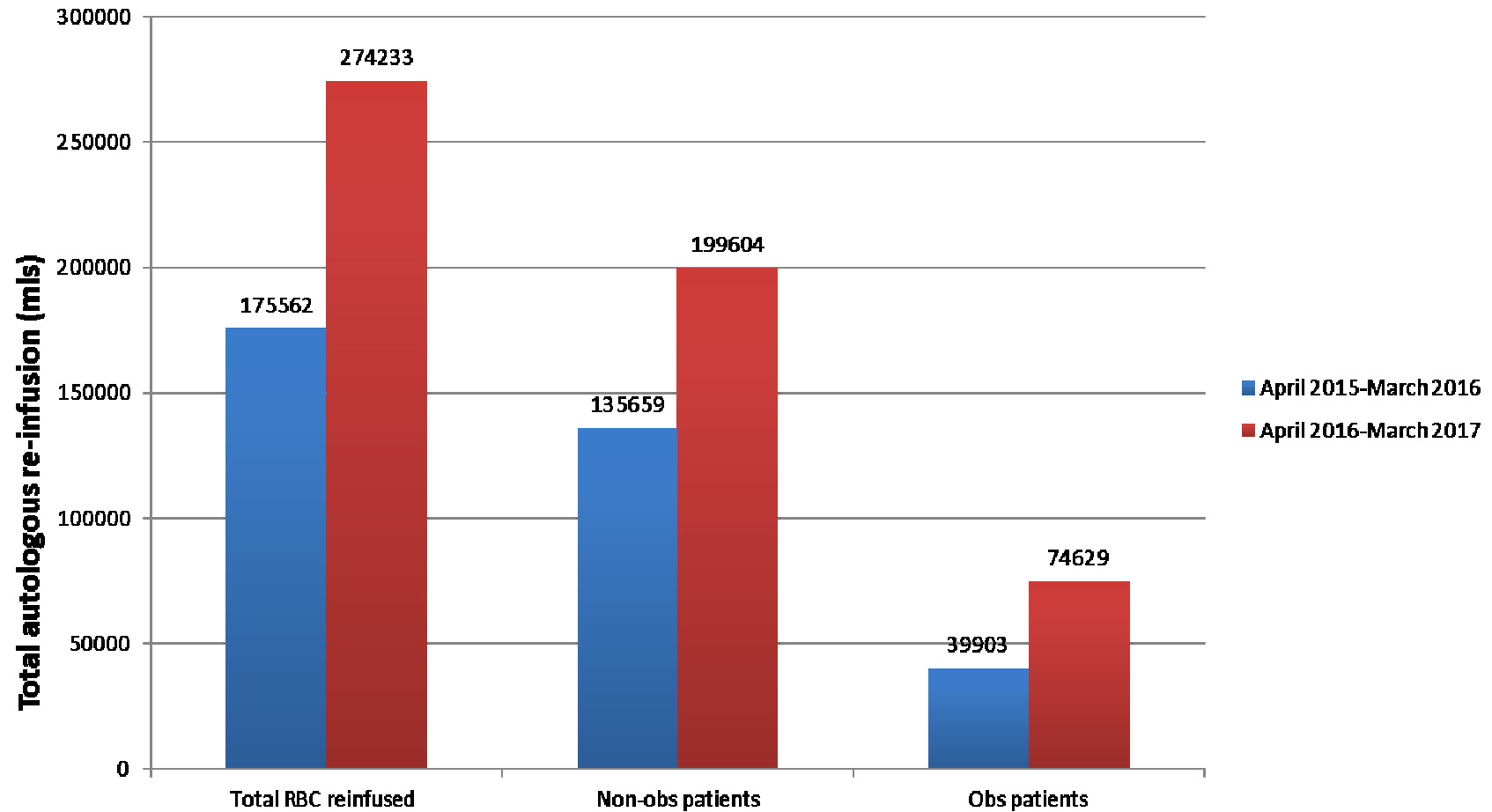
# Specialities of patients receiving I.V iron pre-operatively

Speciality of patient	Number of pre-op IV iron patients 2015-2016	Number of pre-op IV iron patients 2016-2017
Bariatric	1	0
Breast	2	3
Colorectal	10	3
General	6	12
Gynae	2	16
Neuro	0	5
Orthopaedic	50	66
Plastics	0	1
Spinal	4	3
Urology	15	29
Vascular	1	10
	<b>TOTAL: 91</b>	<b>TOTAL: 148</b>

# Table of Savings

Intervention	Estimated savings	Time frame	Saving	Limitations	Recommendations
Administration of I.V iron – blood product reduction.	£15,700	12 months 01/04/16-31/03/17	131/148 patients did not require RBC TX during this episode of care. Based on average I.V iron patient having an Hb 107 pre iron and a 30g/L loss. Indicating I.V iron = 1 unit RBC saved. Cost of I.V iron is included in tariff. These savings have not been included.	Not all 148 I.V iron patients had had surgery prior to 31/3/17. Works on the assumption that if patient did not have I.V Iron they would require 1unit RBC. Not all patients had had surgery and been discharged within this date.	Improvement in anaemia screening at outpatients gate 12 (Ortho/Spinal) Anaemia screening at outpatient level for all relevant surgical patients.
Increased and improved usage of ICS	£40,572	12 months 01/04/16-31/03/17	Autologous transfusion saving calculated to represent equivalent of allogeneic blood. 1 autologous unit = 1/3 <sup>rd</sup> allogeneic unit.	Lower transfusion threshold for allogeneic blood to cell salvage. Therefore not equivalent correlation.	Continued growth of the service and availability of skilled operators.
Administration of I.V iron – length of stay	£58,800	12 months 01/04/16-31/03/17	Based on: 1 day inpatient stay cost £300. 28/148 patients Ortho and average length of stay 8 days. Prior historic group of Ortho patients with no I.V Iron 15 day LOS.	Sample represents only Ortho patients, effect on other patient speciality groups unknown. Use of 7 day less los saving based on above original control group.	Current data to be compared once 2016 NCA PBM findings on length of stay produced. Length of stay reductions may be due to a number of factors not just blood transfusion.

# Comparison of Autologous reinfusion



# Limitations and Challenges

- Outpatient screening (POCT)– only catching average 15 patients p/m and should catch 15p/w.
- Therefore IDA is not detected until Pre-Op Assessment – current survey into how many patients deferred (1 a day).
- I.V iron correct coding
- TXA and Rotem guided care data collection- currently only able to collect data for patients that have had cell salvage.
- Current ICS machines- obsolete Dec 17
- Theatre PBM Group – no availability of time

# Hopes for the Future

- Efficient working system of outpatient screening for anaemia.
- Reduction in patients deferred at Pre-Op due to IDA.
- Continued increase in intra-operative PBM techniques, reducing the requirement for surgical blood transfusion.
- Improvements in post-operative PBM Care



# Summary

- Improvements in PBM have continued over the last 2 years, with an increased demand on the service. £115,072 saving
- Surgical Blood Transfusion has significantly reduced.
- Multi-disciplinary education of PBM has been improved and implemented across the surgical pathway.
- Challenges and limitations have been acknowledged and safe systems implemented to improve progress.

# Any Questions?

