

Anaesthetic Escalation in Major Obstetric Haemorrhage: Part of the REDUCE project

Audit in Gloucestershire Royal NHS Hospital

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INTRODUCTION

Major obstetric haemorrhage (MOH) is the leading cause of global maternal mortality and morbidity. Early recognition is the key to effective management (1). The **REDUCE** project at GRH is an MDT initiative aimed at improving management of post-partum haemorrhage (PPH). Current interventions include new risk assessment processes, changing uterotonics, mandatory consultant obstetrician attendance at MOH and anaesthetic escalation.

OBJECTIVE

- To evaluate anaesthetic escalation / senior involvement in major obstetric haemorrhage (MOH)
- To identify areas for improvement

METHODS

All MOH cases (>1500mls) over a 3 month period (May-July 2025) were retrospectively reviewed.

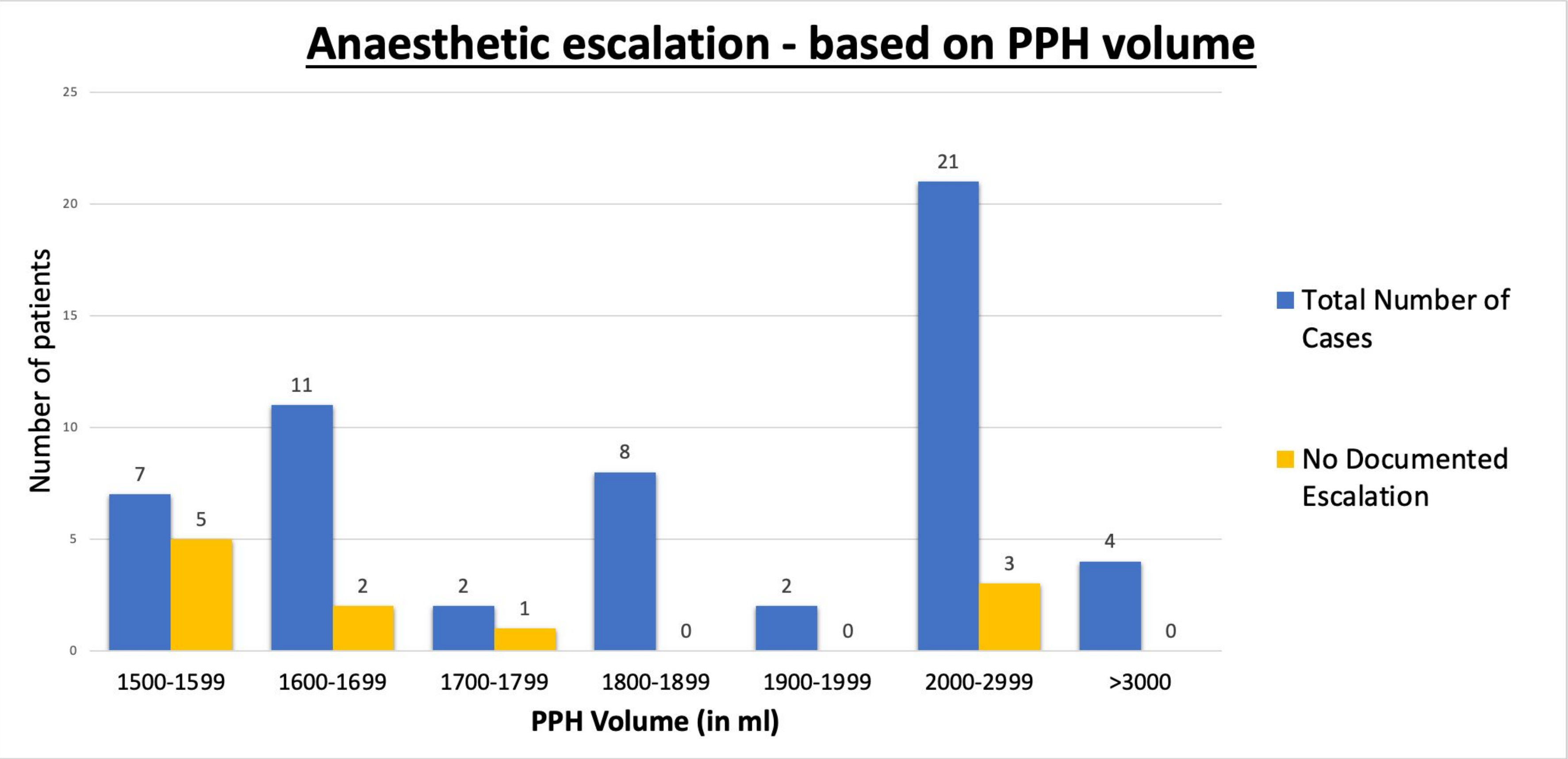
Primary Measure

- Evidence of senior anaesethetic involvement (ST5+)

Secondary Measures

- Volume of PPH, time of day (in / out of hours), mode of delivery, grade of primary anaesthetist

RESULTS



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- There were 59 recorded MOHs in the 3 month period (28 caesareans, 14 forceps, 2 ventouse, 15 vaginal deliveries).
- 4 were excluded due to missing notes.
- 52% of MOHs occurred in hours (0800-1800) and 48% occurred out of hours (1800-0800).
- **There was documented evidence of senior anaesthetic involvement in 80% of all MOH cases**
- Of all the cases without evidence of senior anaesthetic involvement, the majority (75%) fell into the 1500-1800 mls bracket.
- In the 38 cases >1800 mls there were only 3 cases without evidence of senior anaesthetic involvement (92% compliance).
- Of the non-escalated cases, one had an ST4 as the primary anaesthetist who didn't escalate, one had a CT2 primary anaesthetist who escalated to an ST4 and one was managed in the delivery room



CONCLUSION

- **Overall, 80% of MOH cases had documented evidence of senior anaesthetic involvement.**
- The majority of non-escalated cases had EBL volumes of < 1800mls.
- Of the large volume MOHs (>2000 mls), there was a small but significant percentage (**11%**) of cases that did not meet the agreed standard of 'senior anaesthetic involvement'.
- These unescalated cases provided a target for improvement

FUTURE RECOMMENDATIONS

The data was presented at the local labour forum, the local QI meeting with the aim of increasing awareness about senior escalation in MOH and discuss human factors involved.

In response, guidelines now mandate informing the anaesthetic consultant of all ongoing MOHs >2000ml. This measure further contributes to the **REDUCE project** aim of improving management of PPH and improving maternal outcomes. Re-audit is required to establish if improvement has been made. The target would be 100% of MOH cases being correctly escalated.