

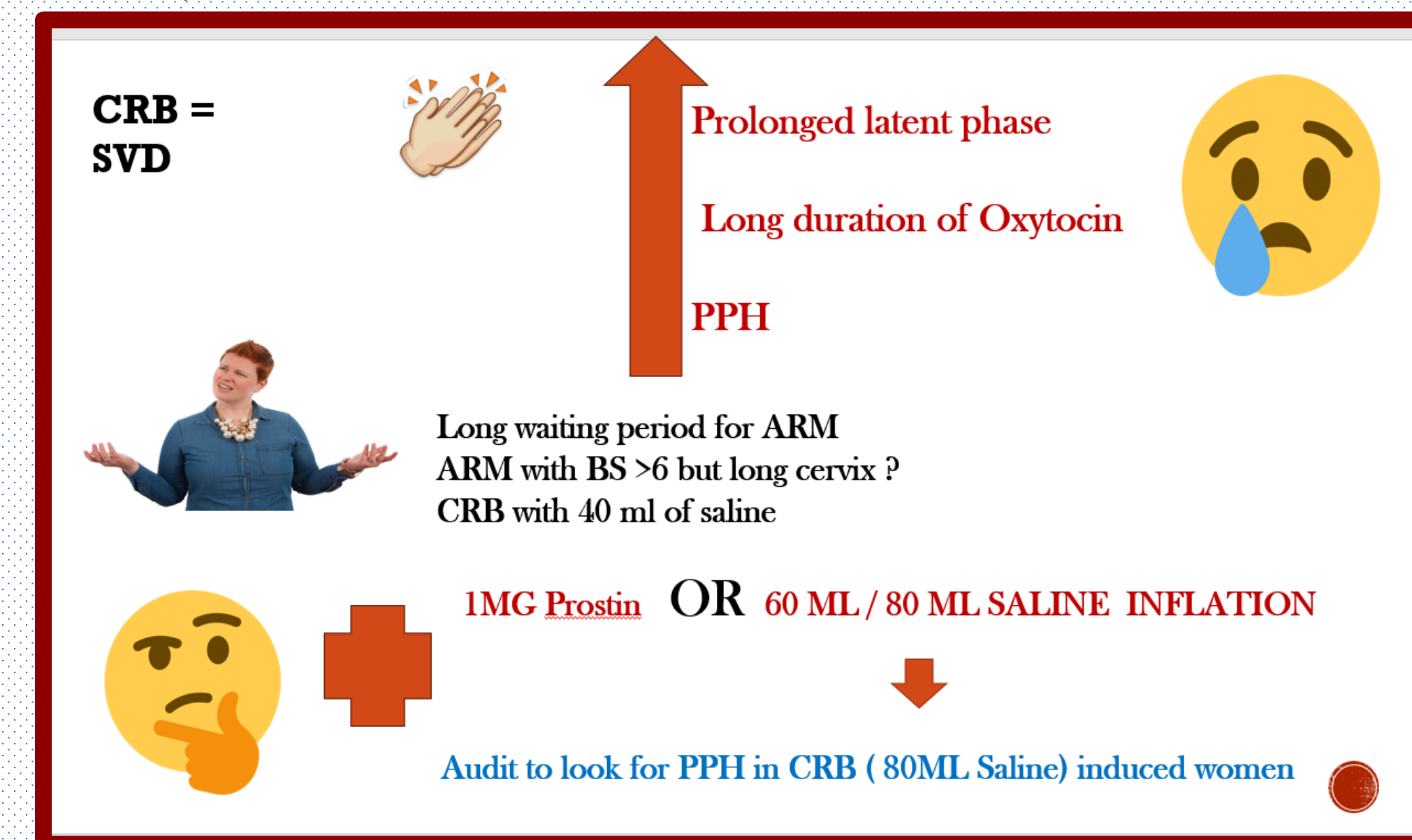
Effect of Cervical ripening balloon catheter on postpartum haemorrhage- Complete Audit cycle.

Savitha Shetty, Aleksandra Trojak, Nisha Martyres, Nazish Zulfiqar, Nirmala Vaithilingam

Department of obstetrics and Gynaecology, Queen Alexandra Hospital, Portsmouth University Hospital NHS Trust.

Objective: Induction of labour (IOL) is a known risk factor for postpartum haemorrhage (PPH). The aim of this project was to establish if the inflation of cervical ripening balloon (CRB) with 80mls 0.9%NaCl, compared with the use of 40mls, reduces the risk of PPH, as well as to assess the association between duration of long latent phase and Oxytocin infusion and the incidence of PPH in those patients.

(Outcome of first Audit done in Jan 2023 -Mar 2023)-



Design: A retrospective audit was completed at Queen Alexandra Hospital, Portsmouth with two sets of data obtained from electronic records system between 2023 and 2024.

Jan 2023 -Mar 2023
>1000ml

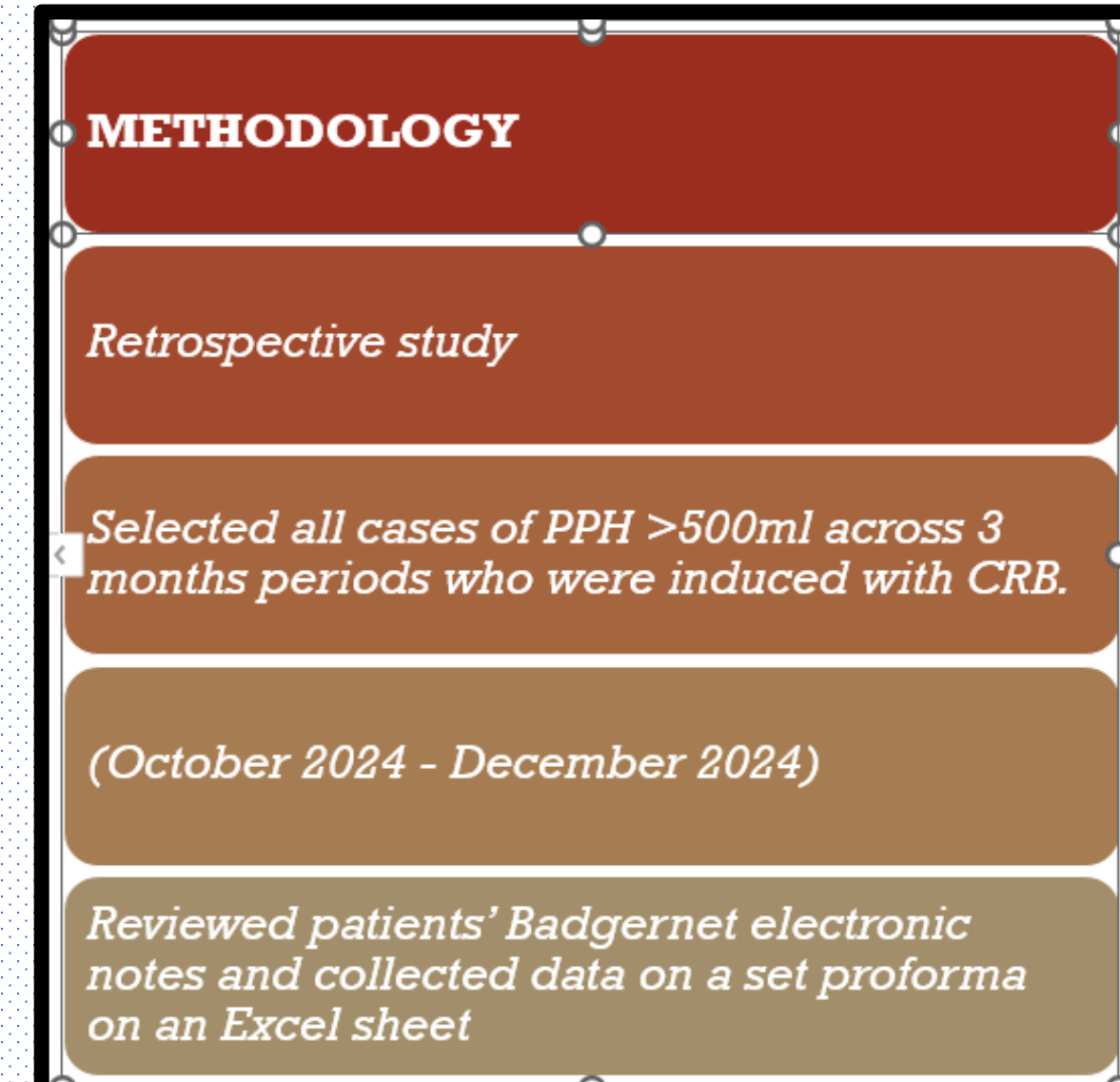
113 women had PPH
58 were induced

22 of them had PPH >1000mls
40% of them had a PPH

October 2024- December 2024
> 1000 ml

99 women had PPH
39 were induced

12 of them had a PPH >1000mls
39% of them had a PPH



80 ml of normal saline
used from October 2023.

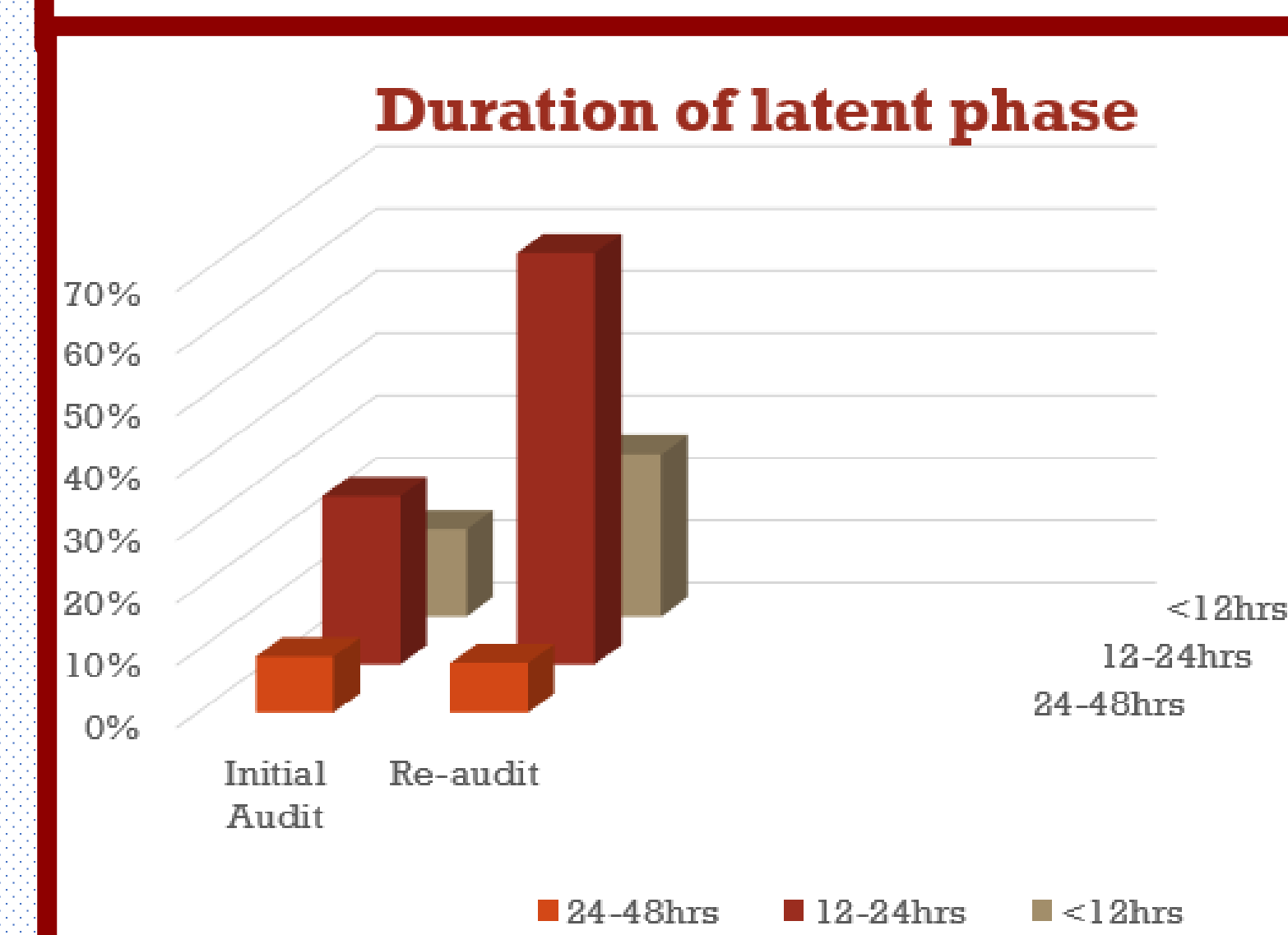
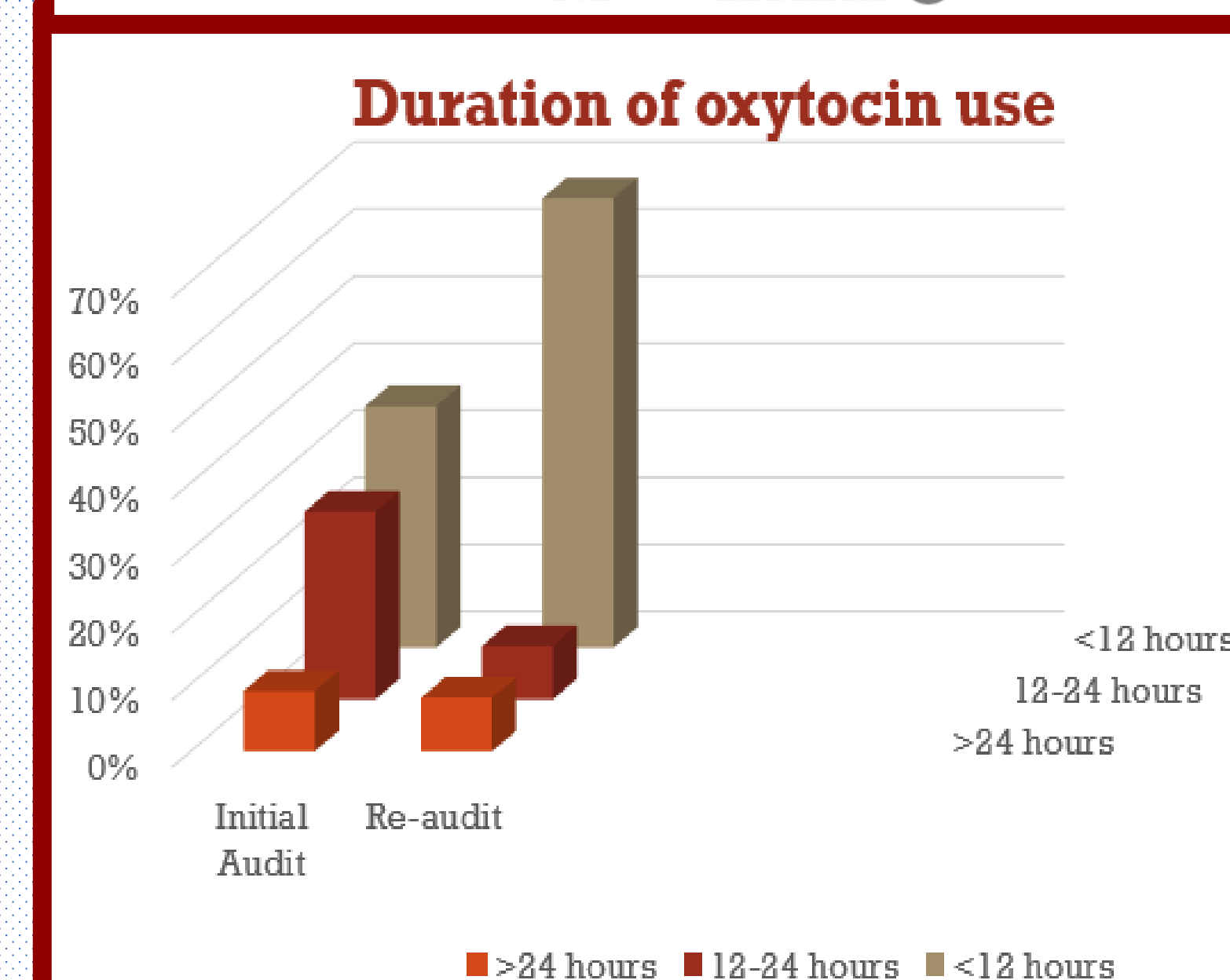
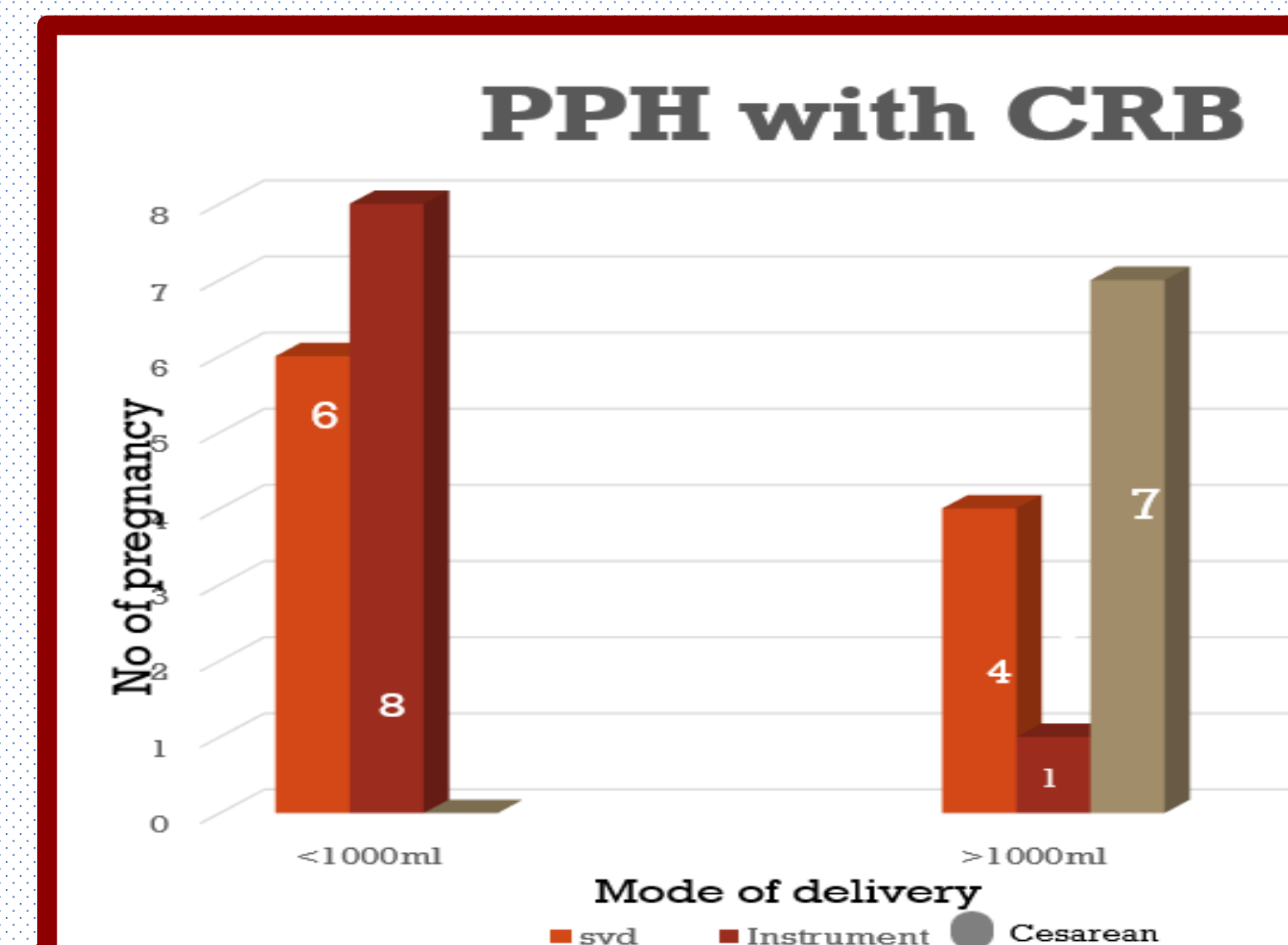
Removed after 12 hours

If not favourable induced
with prostin.

If favourable for ARM +/-
oxytocin

Results

Initial Audit findings demonstrated that the use of CRB with 40mls of 0.9%NaCl was associated with 38% incidence of PPH, which was higher compared with other IOL methods, particularly in patients under the age of 35. In 59% of cases, the latent phase lasted over 24 hours, and 71% patients induced with CRB required Oxytocin infusion with 28% of patients requiring it for 12 to 24 hours

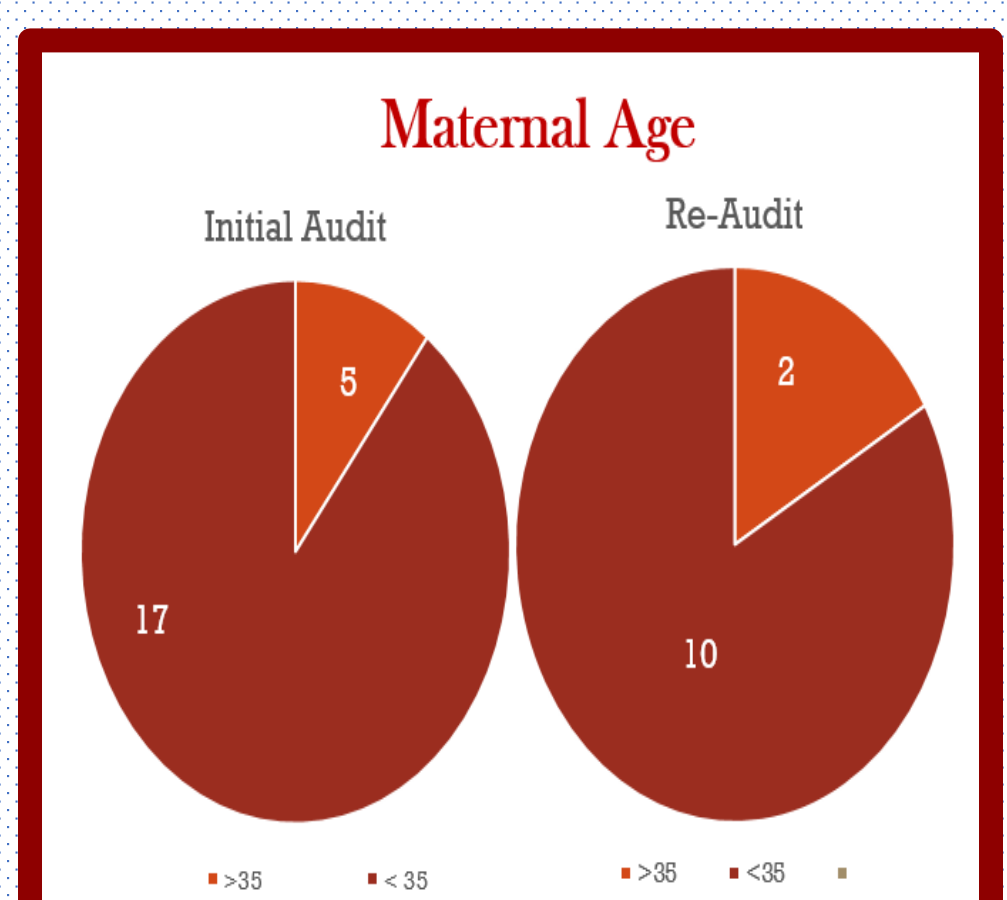
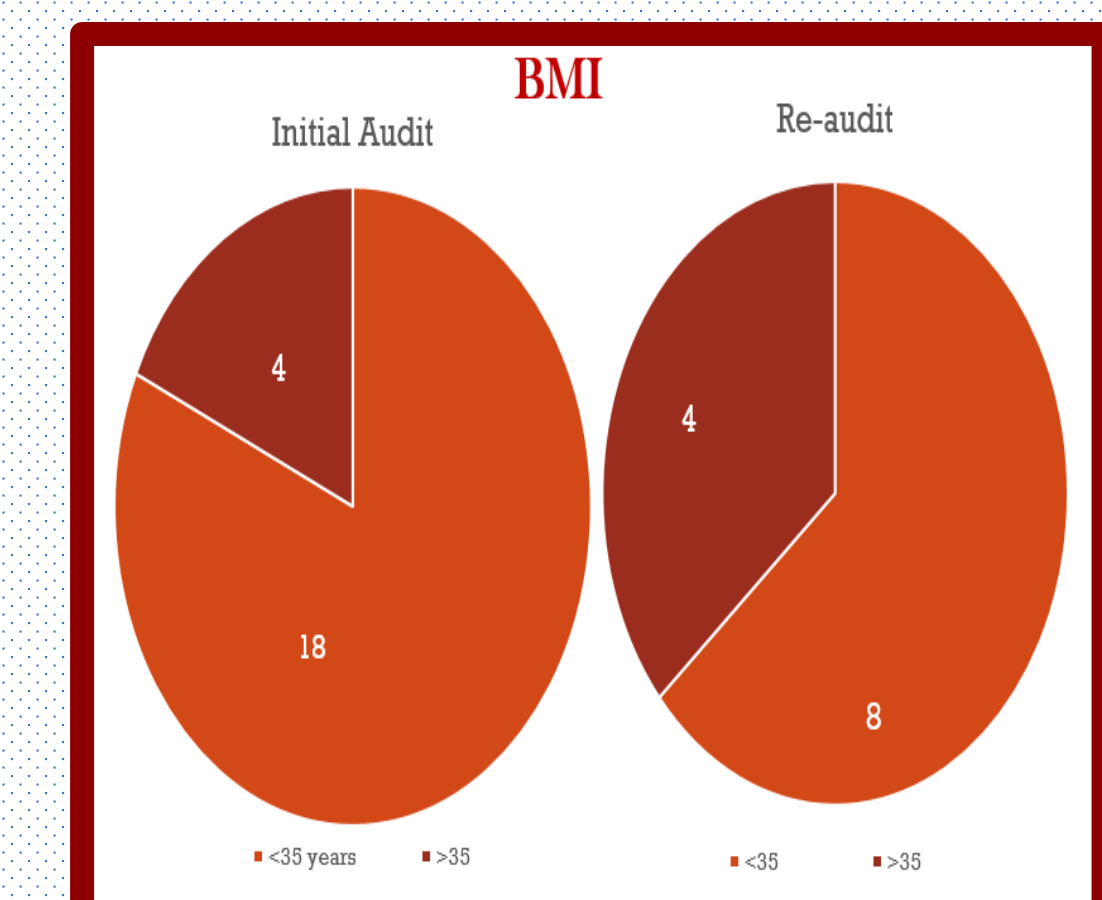
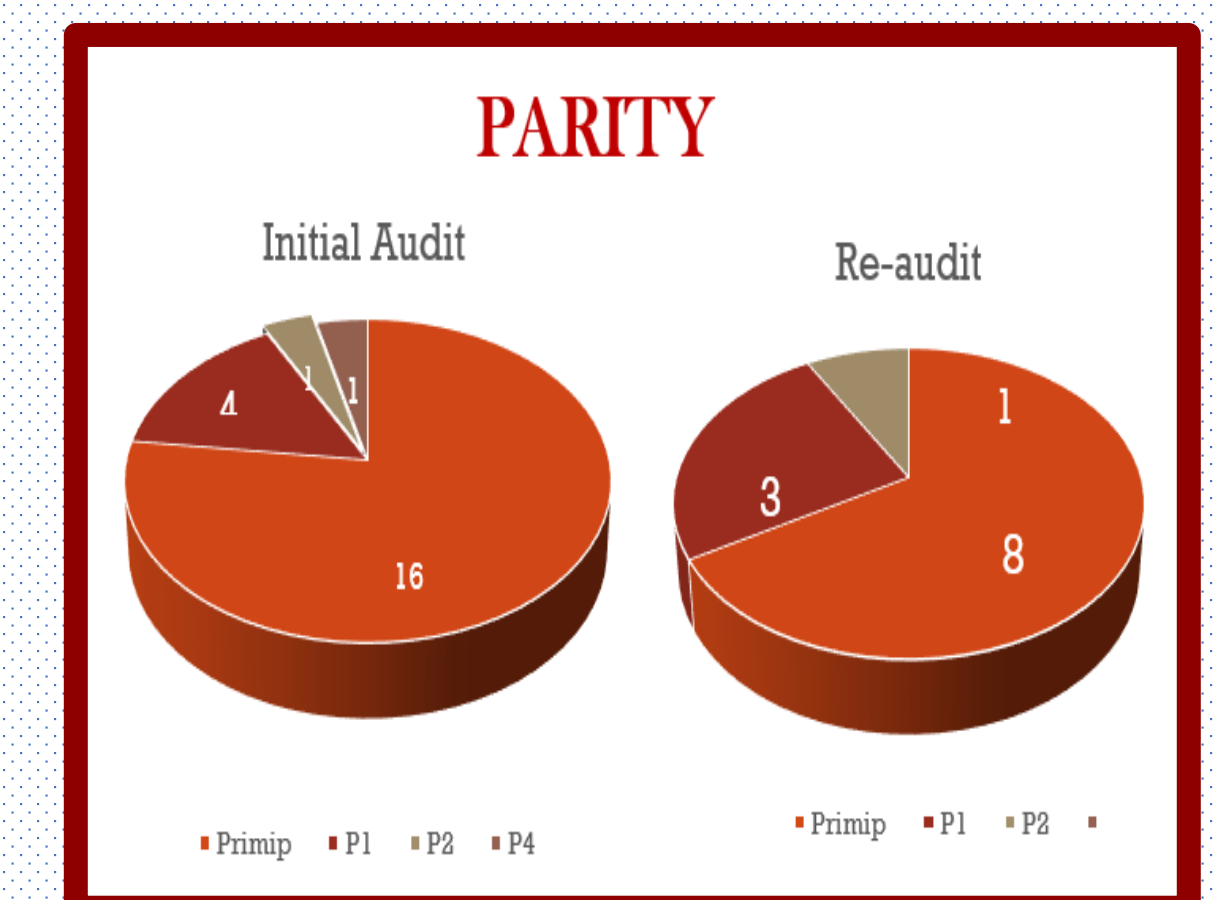


Following the increase in CRB inflation volume to 80mls, amongst 39 patients with PPH of at least 1000mls after IOL, the **incidence of PPH** following the use of CRB as IOL method decreased to 30%. The **latent phase** lasted more than 24 hours in only 8% of cases, compared with 59% previously and the number of patients with subsequent **Oxytocin infusion duration** between 12 and 24 hours decreased to 8%.

5% of the patients with PPH had antenatal PPH risk factors with 3% patients having a PPH score over 6. 17% patients had PPH due to 'tone' concerns with the main cause defined as 'trauma' in 100% cases

Conclusions:

Increasing CRB inflation volume to 80 millilitres during IOL is associated with a reduction in PPH incidence. Completing the audit cycle demonstrates that any changes made have been effective and patient care improved



Reference

1.Int J Gynaecol Obstet 2024 Feb

■Induction of labor and risk of postpartum hemorrhage in women with vaginal delivery: A propensity score analysis

2. International Journal of OBG

Published online: 11 August 2023

Induction of labor and risk of postpartum hemorrhage in women with vaginal delivery: A propensity score analysis