

Creating order out of chaos: a Quality Improvement Project evaluating a structured SITREP communication tool during Major Obstetric Haemorrhage

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PPH SITREP

ON ARRIVAL/ REPEAT WITH VBG RESULT OR CLINICAL CONCERN

B BLOOD

- MEASURED BLOOD LOSS?
- CROSS MATCHED BLOOD AVAILABLE?



L LAB RESULTS

- STARTING HB
- HAVE WE TAKEN G&S / VBG / FBC / U&E'S / TEG / CLOTTING?



O OBSERVATIONS

- HEART RATE / BLOOD PRESSURE
- ACVPU



O OBSTETRIC UPDATE

- WHAT IS THE SOURCE OF BLEEDING?
- TONE / TRAUMA / TISSUE / THROMBIN



D DRUGS

- WHAT UTEROTONICS HAVE BEEN GIVEN SO FAR?
- ANY CONTRAINDICATED?
- ARE MORE REQUIRED?



S NEXT STEPS

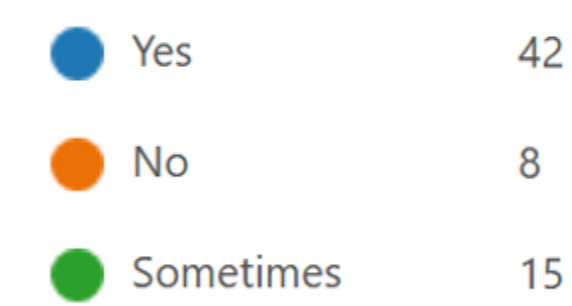
- DO WE NEED BLOOD?
- DO WE NEED TO MOVE TO THEATRE?
- DO WE NEED A 2222 MOH CALL?



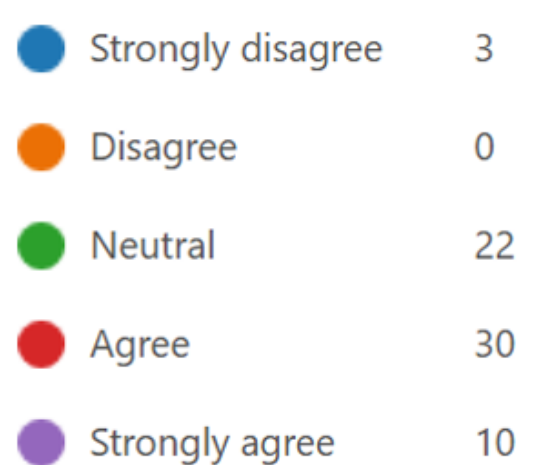
Introduction: Major obstetric haemorrhage (MOH) is an emergency requiring a rapid, coordinated multidisciplinary team (MDT) response. Human factors including loss of situational awareness, cognitive overload and communication failure contribute to errors during high-stress events, causing treatment delays and drug errors. Recent evidence, including the E-MOTIVE trial¹ and the Obs Cymru care bundle², demonstrates that structured prompts improve early treatment delivery and outcomes; however, effective implementation depends on clear MDT communication during rapidly evolving emergencies. Drawing on military communication principles, we introduced a Situation Report (SITREP) tool, BLOODS, to improve shared situational awareness and decision-making during MOH.

Methods: This six-month QIP was conducted in a UK DGH maternity unit. The BLOODS SITREP framework (Blood loss/products, Laboratory results, Observations, Obstetric update, Drugs and Next Steps; see Figure 1) was used to rapidly summarise the clinical situation and prompt next steps during MOH. Its use was encouraged but optional, it could be initiated by any MDT member in labour rooms following MOH declaration, after transfer into theatre with actively haemorrhaging patients, and in theatre cases meeting MOH threshold. The tool was introduced through incorporation into the haemorrhage session of mandatory PROMPT training and reinforced through labour ward teaching. Implementation was supported by lanyard cards and crib cards in clinical areas. Pre- and post-implementation staff surveys assessed communication, confidence, and leadership clarity. MOH was defined locally as estimated/measured blood loss $\geq 1500\text{mL}$, or $\geq 1000\text{mL}$ with ongoing haemorrhage causing clinical concern.

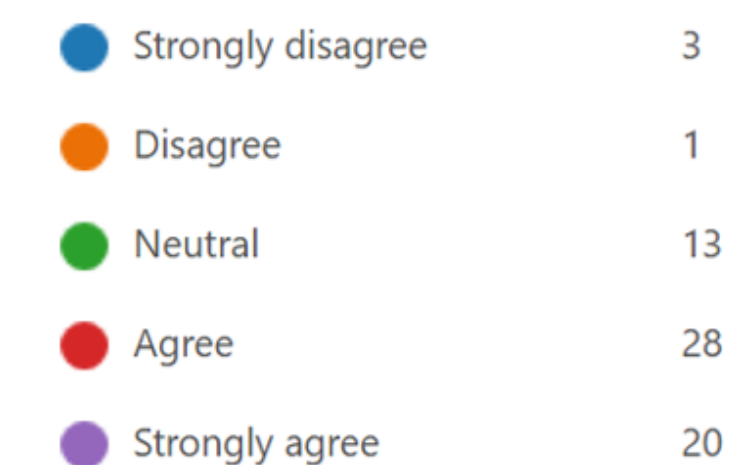
Does using the BLOODS tool increase your confidence when communicating during MOH?



Has BLOODS improved clarity of leadership and delegation during emergencies?



Do you feel the BLOODS tool helps ensure no critical information is missed?



Results: 86 staff completed pre-implementation and 66 post-implementation surveys, representing anaesthetists, midwives and obstetricians. Pre implementation only 9.3% of clinicians felt there was always a clear handover on arrival at an MOH, only 8% felt they had a clear understanding of the clinical picture and next steps for an MOH in theatre. Post implementation, 86% reported it increased communication during MOH, and 73% agreed BLOODS helped with capture of critical information. Improved leadership clarity was reported by 61%. The tool was perceived as easy/somewhat easy to apply by 64%. Qualitative feedback highlighted improved shared understanding, support for junior staff speaking up, and facilitated earlier escalation and decision-making.

Discussion: A structured SITREP tool can improve MDT communication, leadership clarity and situational awareness during MOH. BLOODS provides a simple, reproducible communication scaffold potentially supporting safer decision-making, early escalation, and timely treatment delivery. Limitations include single-centre implementation, subjective feedback, and absent objective outcome data. Future work will focus on wider adoption and objective outcome evaluation.

References:

1. Gallos, Ioannis et al. "Randomized Trial of Early Detection and Treatment of Postpartum Hemorrhage." *The New England journal of medicine* vol. 389,1 (2023): 11-21.
2. Rai T, Hinton LE, Mackay R, et al. Managing obstetric bleeding in Wales: A qualitative evaluation of the OBS Cymru care bundle using Normalisation Process Theory. *PLoS One*. 2025;20(4):e0320754.

MOH SITREP

READ TO A QUIET THEATRE EVERY 15- 30MINS AS APPROPRIATE

B BLOOD

- MEASURED BLOOD LOSS
- TOTAL PRODUCTS GIVEN
- IS MORE BLOOD REQUIRED? DO WE NEED THE HEAM CONS?

L LAB RESULTS

- LATEST GAS / TEG / BLOODS

O OBSERVATIONS

- ANAESTHETIC UPDATE
- CURRENT PATIENT OBS

O OBSTETRIC UPDATE

- WHAT IS THE CAUSE? TONE / TRAUMA / TISSUE / THROMBIN
- SEVERITY? IS CLOTTING AN ISSUE?
- DO YOU NEED EXTRA HELP?

D DRUGS

- WHAT UTEROTONICS HAVE BEEN GIVEN SO FAR?
- ARE MORE REQUIRED?
- ARE ANY CONTRAINDICATED?

S NEXT STEPS

- ANAESTHETIC: GA, ARTERIAL LINE, CELL SALVAGE, CENTRAL LINE, ICU
- OBSTETRIC: BAKRI BALLOON, UA LIGATION, GYNAE CONS / HYSTERECTOMY

Figure 1. BLOODS SITREP for Labour Ward Delivery Rooms

Figure 2. BLOODS SITREP for Obstetric Theatres