

MaineHealth

## MaineHealth Knowledge Connection

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Operational Excellence

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Summer 6-2-2023

### Reducing PostPartum Hemorrhage Rates at Maine Medical Center

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## Problem/Impact Statement:

In the United States, approximately 700 women die each year from pregnancy related deaths and the most frequent cause of preventable maternal mortality is obstetric hemorrhage. The postpartum hemorrhage (PPH) rate at Maine Medical Center (MMC) is three times the national average. At our facility we care for the most complex patients in the State and we must decrease our rate to accurately reflect our expertise, knowledge and skills.

## Scope:

**In Scope:** Hemorrhages that occur at MMC during the patient's postpartum stay

**Out of Scope:** Hemorrhages that occur outside of patient's postpartum stay

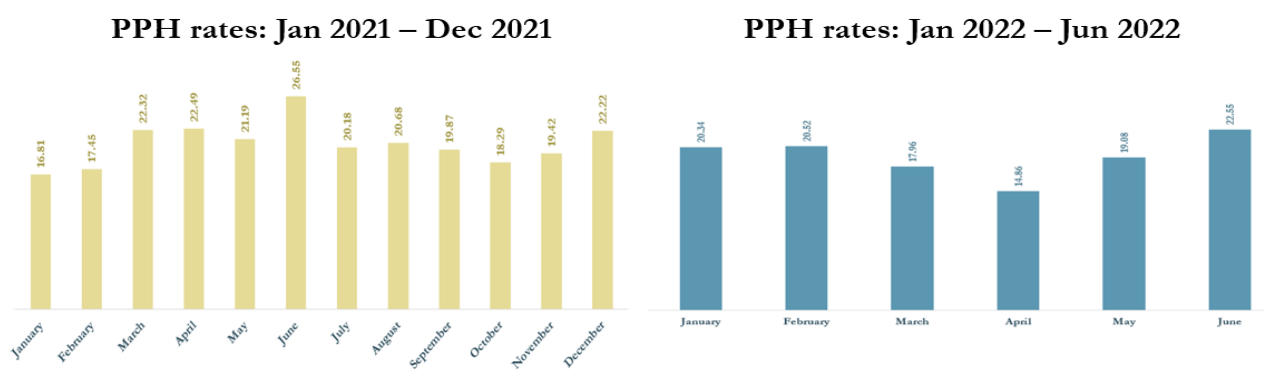
## Goal/Objective:

Reduction of total percentage of patients experiencing a hemorrhage, defined by AWHONN and ACOG, as blood loss greater than 1000ml, by three percent.

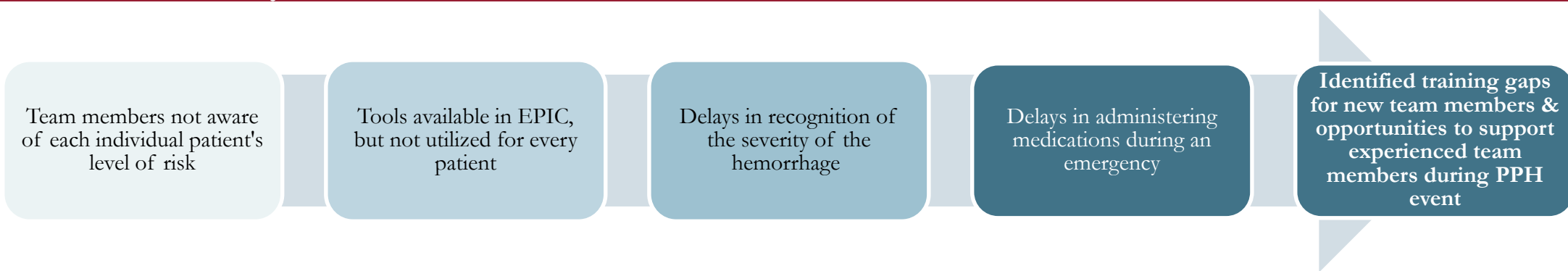
## Baseline Metrics/Current State:

Average PPH Jan 2021 - June 2022 = 20.15 % with a peak of 26.55% in June 2021

Plan



## Root Cause Analysis:



## Countermeasures

Do

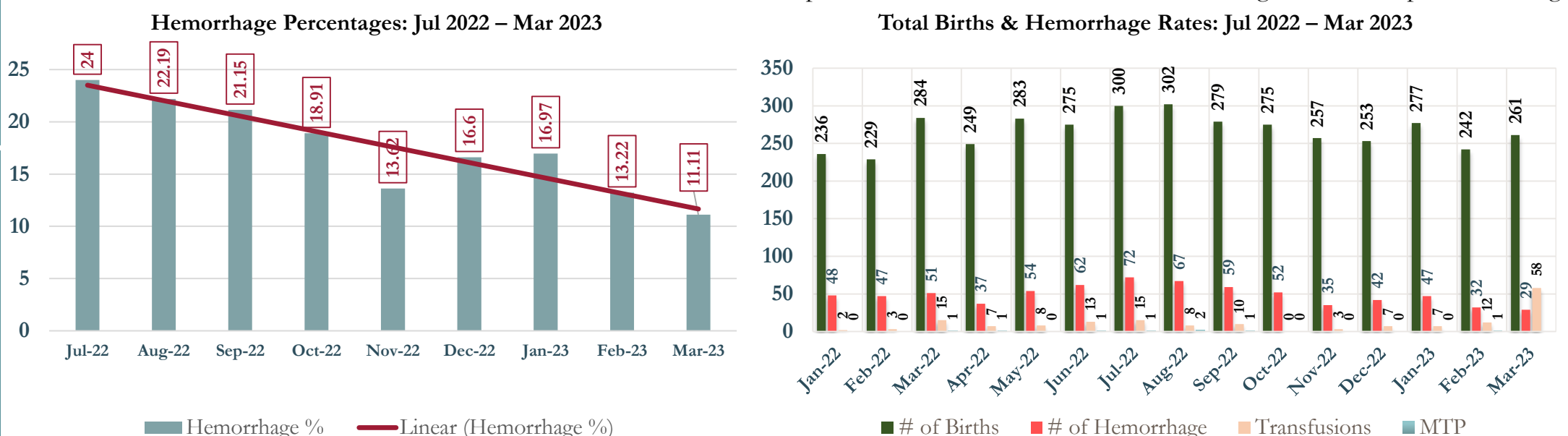
| Action   | Owner                                | Due Date | Status            |
|--|--------------------------------------|----------|-------------------|
| 1. Establish current state, review PPH rates   | Labor and Delivery (L and D) leaders | Jul 2022 | Completed         |
| 2. Conduct chart audits  | CNC team                             | Aug 2022 | Completed         |
| 3. Complete EPIC flowsheet edits   | Colette Dumais                       | Aug 2022 | Completed         |
| 4. Continue to accurately document admission/intrapartum, any change in status, update/postpartum. Risk score all patients | L and D RN team                      | Ongoing  | Standard work     |
| 5. Use color dots on patient's doors to communicate risk level   | L and D RN team                      | Ongoing  | Standard work     |
| 6. PPH medication made available at all deliveries, risk level announced at start of case                                  | L and D RN team                      | Ongoing  | Standard work     |
| 7. Improve EPIC reports and additional flowsheet edits (specific medication length and administration, dry weight changes) | Colette Dumais                       | Aug 2022 | Completed         |
| 8. All team members to complete JADA training  | CNC team                             | Nov 2022 | Completed         |
| 9. Weekly reporting on PPH rates. Communication to leadership team   | Colette Dumais                       | Ongoing  | Standard work     |
| 10. New guideline created for PPH and edits to PPH checklist. Education provided to team members                           | Meaghan Smith                        | Nov 2022 | Completed         |
| 11. Change made in delivery of standard post-partum Pitocin – moved to pumps vs free flow                                  | Meaghan Smith                        | Nov 2022 | Completed         |
| 12. Skills Fair education provided for all team members (PPH guideline, Red Hat Checklist, JADA)                           | CNC team                             | Nov 2022 | Completed         |
| 13. Continue real time communication with charge RN when in a PPH. Improve RN documentation                                | L and D RN team                      | Ongoing  | Completed/Ongoing |
| 14. EPIC reports improved again to capture delivery type and medications administered                                      | Colette Dumais                       | Dec 2022 | Completed         |
| 15. Updated RN CBO tool to include new measures for all RNs to reduce PPH  | Carrie Comeau                        | Dec 2022 | Completed         |
| 16. Staff competency review for QBL calculation – all RNS  | CNC team                             | Dec 2022 | Completed         |
| 17. Mentorship program routine check ins for all new staff review 4 T's of PPH   | L and D leaders                      | Ongoing  | Standard work     |
| 18. PPH risk added to the L&D EPIC shift handoff tool  | Meaghan Smith                        | Feb 2023 | Completed         |
| 19. Implemented first AI blood volume scanning device within Maine Health (Triton)   | CNC team                             | Feb 2023 | Completed         |
| 20. Increase use of Triton - 100% of OR cases, stop OR drape weighing  | CNC team                             | Mar 2023 | Completed         |
| 21. Medication storage improved with use of cooling kits to increase theoretic stability of med                            | Meaghan Smith                        | Mar 2023 | Completed         |
| 22. Final edits to EPIC reports – additional opportunities to standardize process found                                    | Colette Dumais                       | Mar 2023 | Completed         |
| 23. Improve communication strategies with the Anesthesia team at MMC   | L and D & Anesthesia                 | Ongoing  | Ongoing           |

## Outcomes

Overall, we have seen a dramatic reduction in our PPH rates. Our since July 2022 PPH = 17% with March 2023 at 11%!

This is attributed to increased PPH risk communication and clear closed looped communication when the team is taking action to stop a hemorrhage

Study



## Next Steps

Act

- Continued use of Triton to standardize communication around blood loss in the OR, hardwire this into our process
- Increase education related to PPH risk and response process when onboarding new team members