

Postpartum Transitions and Maternal Health: An Environmental Scan of the AIM Discharge Bundle's Implementation and Outcomes

Introduction

- Over 1/2 of maternal mortality occurs in the postpartum period and >80% of pregnancy associated mortality is preventable.
- The Alliance for Innovation on Maternal Health (AIM) developed evidence-based patient safety bundles to improve maternal outcomes.
- The postpartum discharge transition bundle aims to improve the transition from hospital to home but has not been implemented in every state across the US.
- We examine changes in state level maternal mortality trends following bundle implementation and identify challenges in evaluation.

Methods

- A literature review was conducted using PubMed with search terms: "Maternal Mortality", "AIM Bundle", and "Postpartum Discharge". Results were limited to the last 10 years.
- Maternal mortality data from 33 states were obtained for publicly available state reports.
- Mortality rates were compared before and after implementation of the PPDT when available, otherwise mortality rates from 2020 and 2022 were compared.
- Percent change trends were analyzed and compared to implementation status in each state.

Results

Figure 1: Changes in Rate of Maternal Morbidity per 100,000 between States with and without AIM Bundle Implementation

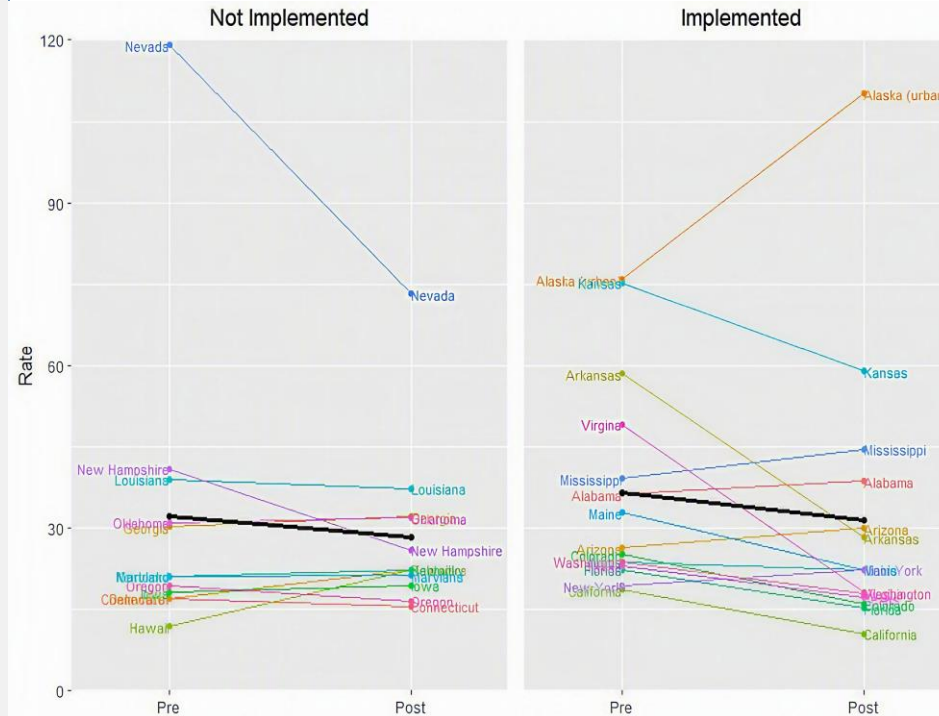


Figure 2:

Note: Black Lines in Figure 1 represent mean change in Rate of Maternal Morbidity per 100,000. Absolute values are provided in Figure 2.

	Not Implemented	Implemented
Mean		
Pre	32.2	36.6
Post	28.4	31.5
Median		
Pre	21.2	26.3
Post	22.3	22.3

Results Continued

- Mixed maternal mortality trends were observed; however, **the rate of maternal mortality per 100,000 showed a larger decline in states who implemented AIM bundle.**
- Direct comparisons were limited by variation in outcome reporting and availability of state-level data.**

State with Implementation	Percent Change
Kansas	-21.7
Mississippi	14.0
Virginia	-63.2
California	-43.6
New York	16.1
States without Implementation	Percent Change
Georgia	6.3
Kentucky	5.8

Conclusion

- Maternal mortality trends varied substantially across states.
- Several implementing states showed notable reductions in maternal mortality, but outcomes were inconsistent.
- Differences in data collection, reporting practices, implementation fidelity, and concurrent maternal health initiatives limit causal attribution to the PPDT Bundle.**
- Standardized outcome measures are needed to improve comparisons across states.
- Rigorous evaluation of postpartum care interventions is needed to better determine their impact on maternal health outcomes **as well as guide future intervention.**