

USAID'S HEALTH EVALUATION AND APPLIED RESEARCH DEVELOPMENT (HEARD) PROJECT

Strengthening Systems to Avert Maternal Death

Integration of Maternal Near Miss Case Reviews
into Pre-existing Maternal Death Surveillance and
Response System in Malawi: Learning from Three
Hospitals

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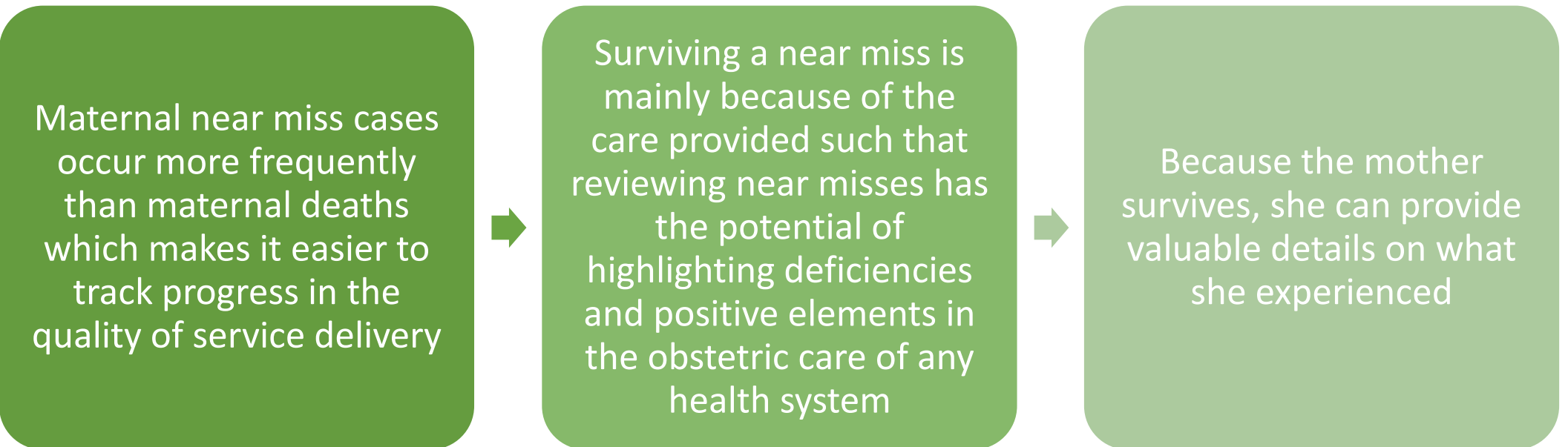
Maternal Death Surveillance Response (MDSR) Overview

- **What is MDSR?** a continuous cycle of maternal death identification, notification and review.
- **The goal of MDSR:** prevent future maternal deaths by learning from previous deaths
- **MDSR in Malawi:**
 - Maternal death audits are conducted at the district level (est. 2014)
 - Challenges: the **focus on death results** in blame game, *demotivated providers; weakens quality of care improvements.*

Opportunities to Improve Care

Maternal near-miss - a severe life-threatening obstetric complication during pregnancy, delivery or within 42 days of termination of the pregnancy which the woman survives either by chance or because they receive good care at a facility

Rationale for assessing maternal near miss:



Aim and Objectives

Aim: assess the integration of the maternal near miss case reviews within the pre-existing maternal death surveillance and response system in three hospitals in Malawi.

Objectives:

1. Establish and evaluate a process for integrating Maternal Near Miss case reviews with MDSR activities
2. Document and disseminate insights elucidated from the MNM data related specifically to the identification and management of postpartum hemorrhage

Pilot sites: Queen Elizabeth Central Hospital, Thyolo District Hospital, Chikwawa District Hospital

Implementation Science Research Methodology

1. Service providers trained on the near-miss criteria, identification, documentation and auditing
2. Near Miss data was collected between 28th May 2020 to 28th February 2021
3. Qualitative interviews and quantitative surveys were completed at 3 points: pre, during, post implementation

Assessed the integration of near miss into MDSR with focus on:

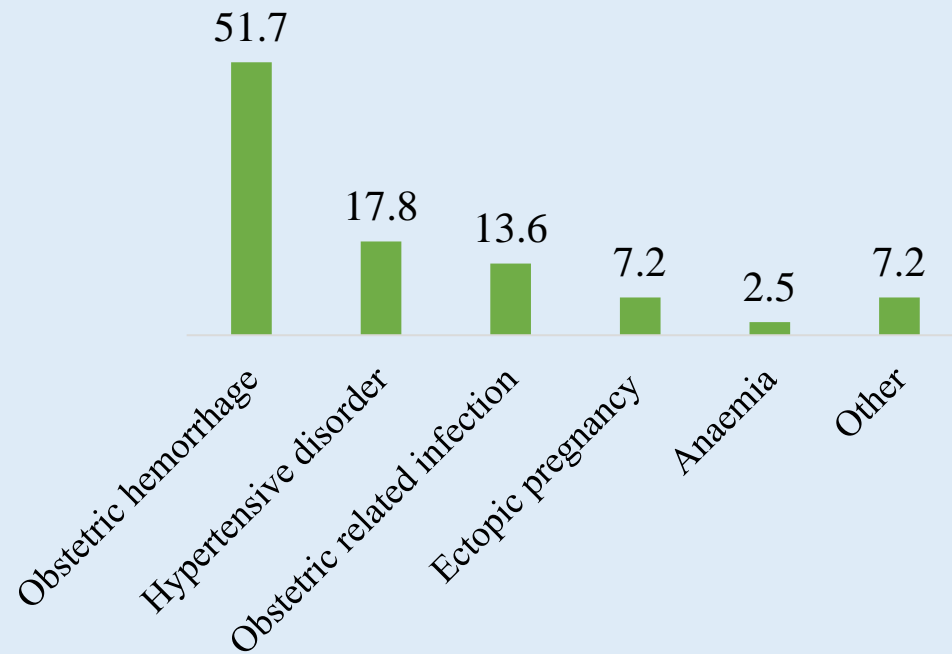
- **Acceptability—*comfort*** : comfort and approval of integration
- **Appropriateness—*perceived fit***: whether integration is agreeable, appealing and aligns well with the hospital priorities
- **Feasibility—*practicability***: can integration can be implemented
- **Fidelity**—whether integration can be implemented as designed
- **Sustainability**—can integration be implemented with no external support



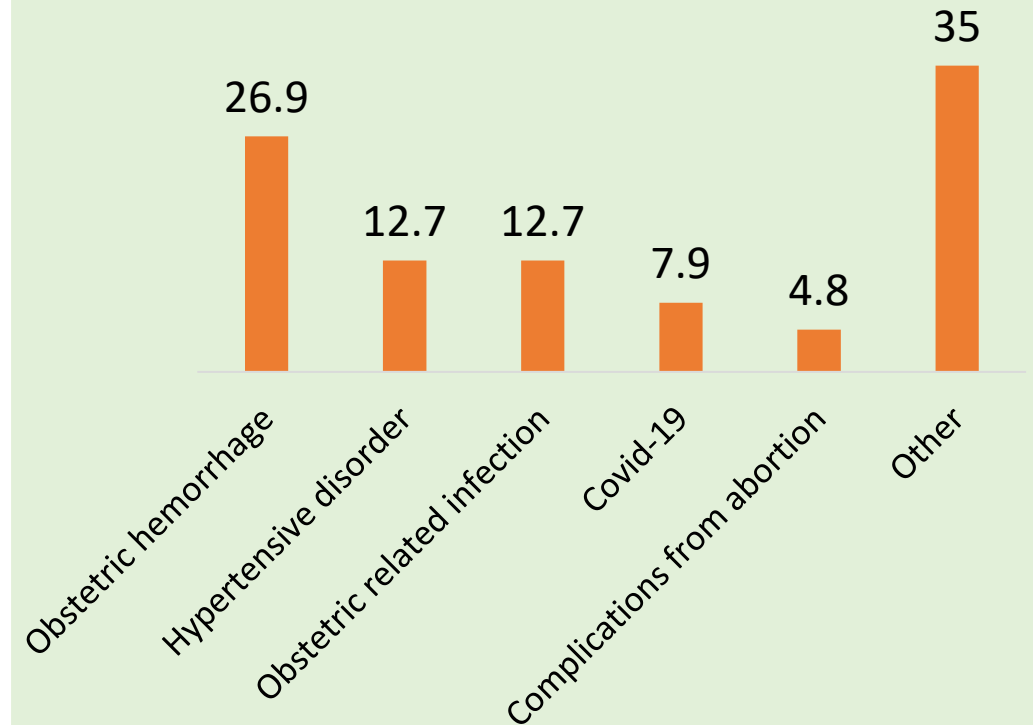
Findings: Near Miss/Maternal Death across 3 sites

Captured 237 near miss cases and 63 maternal deaths over 12,252 deliveries

Causes of Maternal Near-Miss Cases



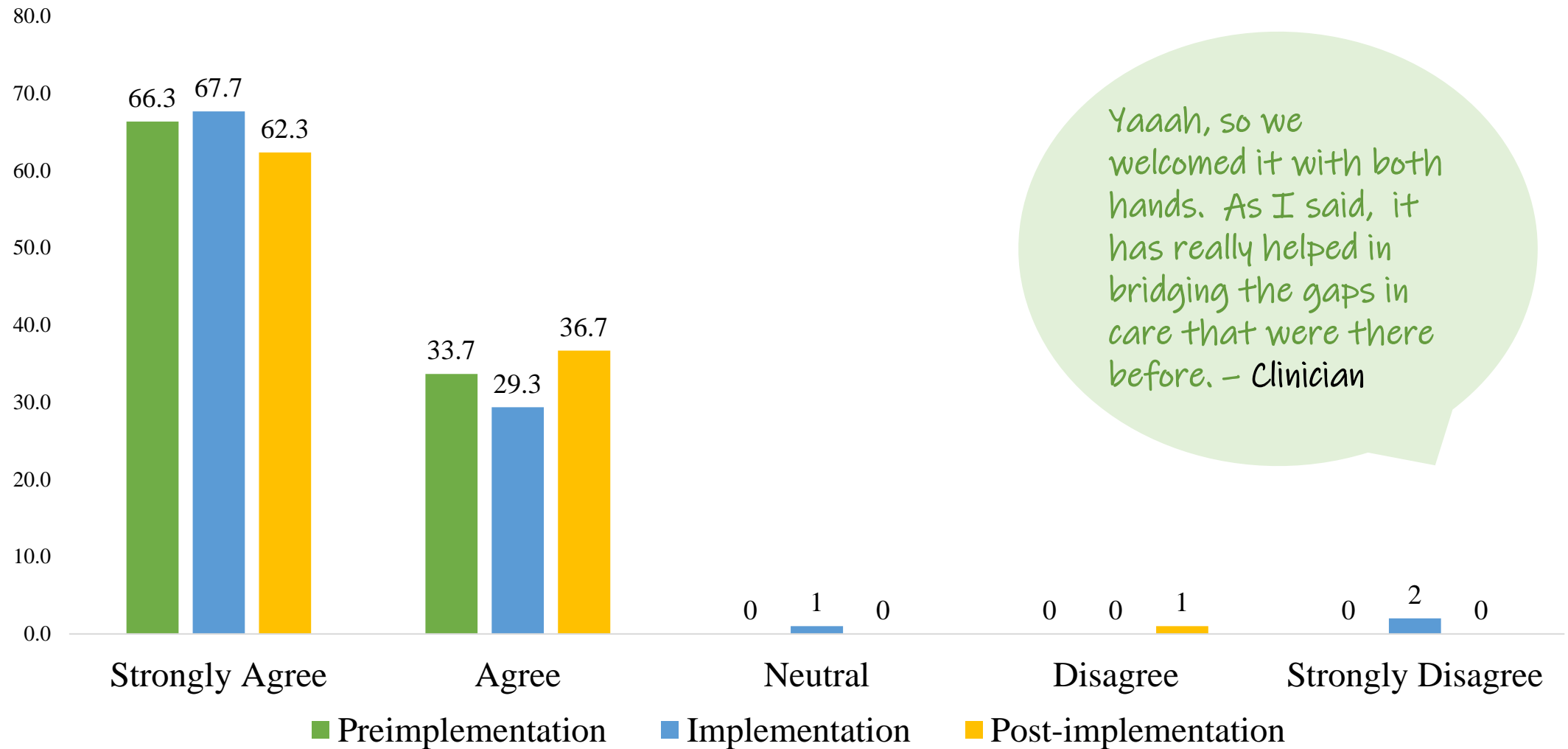
Causes of Maternal Deaths



Findings: factors contributing to severe maternal outcomes (from near miss/death audits)

Administrative factors	<ul style="list-style-type: none">• Persistent shortage of essential obstetric drugs and supplies• Lack of blood and its products• Shortage of staff• Substandard ANC services
Community/patient factors	<ul style="list-style-type: none">• Refusal of treatment• Delay in seeking health care services
Health worker factors	<ul style="list-style-type: none">• Delay in starting treatment• Inadequate resuscitation• Late referrals• Lack of obstetric skills• Inadequate monitoring of patients

Findings: Acceptability (approval) of Near Miss Integration (%)



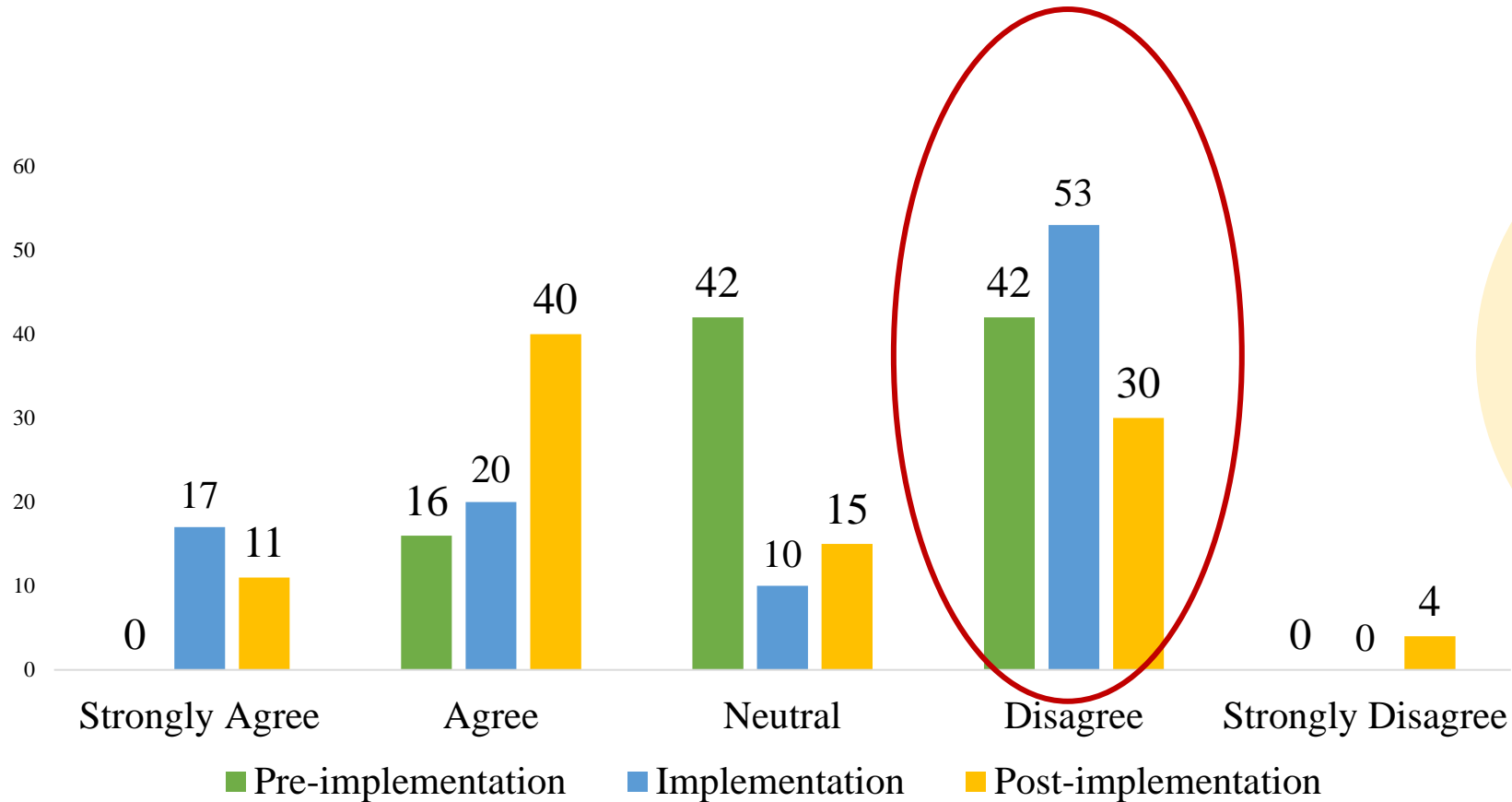
Findings: Intrinsic Motivational Aspect of the Integration

“

I think integrating maternal near miss into MDSR is a good strategy in the sense that at the end of whatever audit it is, you are looking to improve the quality of care. In addition, you feel better when you audit the care of a life that was saved than when you are auditing a patient who died. ”

- Matron

Findings: Provider Perceptions on Feasibility (Adequate Time)



⌘: The near misses are a bit more than the maternal deaths, so that means we need more time for auditing near miss cases.
- Midwife

Challenges and follow-up actions to improve quality of care

For us to address some challenges, it would require a lot of resources... So it becomes frustrating to be discussing the same issue over and over again and nothing is happening; it's like you are not auditing. So, it's easier when it comes to action points that won't require a lot of resources, such as just commitment, it's very easy and motivating to see things changing. But you audit today 'transport issues', you audit tomorrow 'transport issues', you are like, 'what are we doing?'.
- Administrator

The only resource I can put forward is a common one, shortage of blood, we don't have enough blood stored in the blood bank. -
In-Charge

Recommendations from the Integration Process

- Support responsive government machinery to support action points raised by MDSR committees.
- Institutionalize the auditing of near misses as a quality improvement and accountability initiative, factoring in the additional time and workload required.
- Need for inclusion of community stakeholders in the MDSR committee as some elements of care begin long before mothers reach the facilities
- Empower hospitals to supplement blood resources through district blood drives (given gaps in a centralized blood bank)

Implications for the Way Forward

- **What has been the impact of this work?**
 - Adoption of near-miss concept into national policy
 - Revival of Hospital Transfusion Committees
- **Why was the process successful?**
 - Stakeholder engagement from the start
 - Used an already existing system- MDSR
 - Bi-directional feedback mechanisms
- **Generated interest for scaling up the integration.**
 - Training and mentoring new districts
 - Continued evaluation of the integration
 - Commitment from different stakeholders.

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