TESTED SOLUTIONS FOR

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Reducing Postpartum Hemorrhage

Despite being largely preventable, postpartum hemorrhage (PPH) remains the leading cause of maternal death globally. Innovative solutions that are responsive to the realities of facility-based delivery in challenging contexts are needed.

In close collaboration with providers, women, programmers, and policymakers in Madagascar we used behavioral design to develop a package of evidence-based solutions tailored to providers' working context. These resources help to empower providers to better prevent, detect, and manage PPH - the biggest risk to the lives of women giving birth in their facilities.





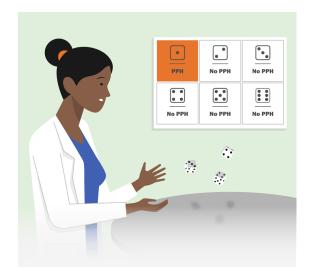
How to Use This Guide

This tool guides you through the *how-to* of the solutions so you can see if you may want to adapt and implement these solutions in your own setting.

- 1 Learn more about the 4 different solutions that were tested
- Consider how these could be useful for your programming
- 3 Download the actual files of the solutions for implementation
- 4 Read more about the formative research or pilot test results



Tested Solutions



Risk Visualization Exercise

An activity that uses dice rolls to simulate risk and motivate prevention.

EXPLORE



Family Task Badges

A set of badges for assigning roles to family members that accompany a woman during delivery.

EXPLORE



Oxytocin Timer

A custom device that reminds midwives of the one-minute window to administer oxytocin after birth and records this data.

EXPLORE



Glow Algorithm Poster

A simplified, illustrated poster on how to manage PPH based on cause that glows in the dark.

EXPLORE

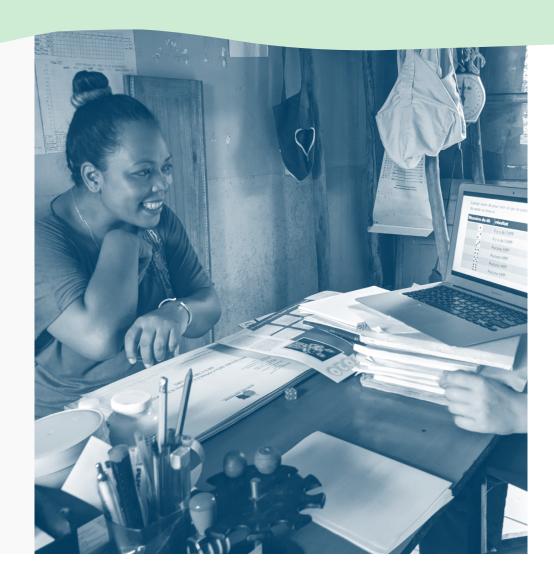


Risk Visualization Exercise

Motivating prevention and detection of PPH

Rural providers perceive low risk of PPH and, given their competing concerns about other types of complications, either consciously or unconsciously undervalue the importance of adhering to best practices for prevention and early detection of PPH.

The risk visualization exercise makes the risk and consequences of PPH more salient, to motivate a commitment to prevention.





How the Risk Visualization Exercise Works

1

Providers are given dice and told each roll represents one month in their facility.

2

Providers roll the dice with a roll of 1 representing a patient experiencing PPH. 3

Each provider rolls several times, representing multiple months.

4

Providers are told the story of their "patient" with PPH.



Reinforces the notion that PPH will happen but can't be predicted.



Provokes feeling of risk and then disappointment or relief.



Highlights the inevitability of PPH at a facility.



Evokes emotion by putting a face and story to the dice roll.



Risk Visualization Exercise

Considerations for Adaptation and Implementation

- When possible, use local incidences of births and PPH to calculate risk and adjust the dice rolling instructions accordingly.
- This activity is short, and therefore could be incorporated into other trainings or meetings already being organized.
- This activity will ideally be implemented as a group exercise but can also be adapted to a one-on-one setting.
- Group settings allow for comparing dice rolls and facilitated discussion on the consequences and best practices for PPH prevention and early detection.
- Incorporate a public commitment step at the end of the group exercise, once providers feel motivated and empowered to prevent PPH.

Materials

DOWNLOAD ACTIVITY MODULE (ENGLISH)

DOWNLOAD ACTIVITY MODULE (FRENCH)



Family Task Badges

Engaging family to support providers and mothers

In many settings, it is common for relatives and neighbors to accompany women to facilities and stay for the birth to show support. The crowd of attendees can be overwhelming for a sole provider, who is already stretched thin. At the same time, family members often want to help but do not know how.

The badges allow providers to easily assign family members to specific ways they can support the provider and mother and to feel pride in the support they give.

"If I compare the use and non-use of badges, we are very comfortable when we need something with the use of badges. Before... everyone was there looking at each other. Some did not even know where to set foot. There were many of them, but there was nothing they could do."—PROVIDER

"People would like getting the badges since they'll feel proud that they're contributing to the health of the mother."—COMMUNITY MEMBER



How the Family Task Badges Work

1

Task badges are stored on a hanger in the provider's office.

2

Provider uses badges to explain delivery tasks on family's arrival. 3

Provider distributes the badges to assign specific tasks.

1

Family members wear their badges at the facility.

5

Family members fulfill their assigned tasks.



Provides visual reminder of support available to the provider and a conversation aid during prenatal consultations.



Creates a moment for providers to engage families directly and set expectations.



Allows providers to prioritize the tasks most useful to them.



Confers responsibility and pride to play an important role in the birth of a child.



Alleviates burden for providers through clearer, supportive roles.



Family Task Badges

Considerations for Adaptation and Implementation

- This design works best when multiple family members typically attend deliveries and providers are often busy.
- The specific tasks should be determined collaboratively between providers and community members to ensure they are relevant to the local context.
- The badges are meant to be a flexible tool; tasks can be combined or prioritized based on a provider's needs and number of people available.
- Badge illustrations should be locally-relevant and show how the task is performed without requiring literacy.
- Role playing the explanation and distribution of badges can help providers feel comfortable to integrate the badges into their delivery routine.

Materials

DOWNLOAD BADGES (ENGLISH)

DOWNLOAD HANGER STICKER (MALAGASY)

DOWNLOAD HANGER MOCKUP



Oxytocin Timer
Increasing prominence of the one-minute window after birth

Administering oxytocin to every mother within one minute of childbirth is the most effective way to prevent PPH.

For providers working alone under challenging circumstances, it is difficult to know when one minute has passed. Many providers administer oxytocin much later, after other important tasks have been performed. Providers receive no feedback and have no cue to reconsider their behavior or improve their performance of this critical best practice for prevention.

The oxytocin timer helps break through the noise of a delivery to ensure that the provider consistently administers oxytocin on time.

"We really used it and it helped us a lot... We especially need it in the use of oxytocin so that it does not exceed 60 seconds before the injection of oxytocin... Every time a woman gives birth, we use it." -PROVIDER

"It can also be used for parameters. It can also be used to count uterine contractions in a woman's labor. We can do all of this. When it comes to a timer, you can do anything with it."

-PROVIDER



How the Oxytocin Timer Works

1

Timer is stored in its wall dock next the delivery bed.

2

Provider starts the timer with an elbow once baby is born, freezing the birth time.

3

Cues a 60-second countdown with beeps at major intervals.

4

Provider stops the timer with an elbow upon administering oxytocin.

5

Provider can set flexible timers for other clinical tasks.



Provides convenient access during a delivery and a visible reminder of oxytocin.



Incentivizes routine use of the timer during deliveries to assist with record-keeping.



Draws attention to the one-minute window and urgency of administration.



Gives immediate feedback on the timeliness of actual administration and records this data.



Increases usefulness of device beyond deliveries.



Oxytocin Timer

Considerations for Adaptation and Implementation

- Identify a location in the delivery room where providers can activate the timer with their elbow from where they stand at the delivery bed.
- Make sure there is a source of electricity in the facility capable of recharging the battery approximately once a month.
- Pair the device with a "cheat sheet" of commonly used time-sensitive clinical tasks relevant for the facility.
- The device's memory chip records usage and could be leveraged to improve facility monitoring or deliver performance feedback to providers.
- Should you be interested in manufacturing this device for your setting please get in touch with us at gh@ideas42.org

Materials

DOWNLOAD TIMER
INSTRUCTIONS (ENGLISH)

DOWNLOAD TIMER INSTRUCTIONS (FRENCH)



Glow Algorithm Poster

Reminding of PPH management protocol, even in the dark

When PPH is infrequent at a small facility, it is hard for providers to remember the specific details of their training in an urgent moment, and when they have nobody to ask for help.

Existing clinical algorithms can be difficult to reference during an emergency and are not useful during a night delivery at the many facilities without reliable electricity.

The glow-in-the dark algorithm poster is meant to be easy and intuitive to reference in a moment of panic, even in the dark. Its simple illustrations remind a provider of how to stop PPH bleeding, based on cause.

"Every time I walk into the delivery room, I see it... I feel light when I see it, every time I see it, because you don't have to remember or wonder what to do with a hemorrhage because it's already there." —PROVIDER

"In the event of a problem, for example, it is easily visible. It guides us in the decision to make, or what to do. It is clear, and so are the images. In the event of a bleeding, it quickly recalls the decisions to be made."—**PROVIDER**



How the Glow Algorithm Poster Works

1

Poster is hung in the delivery room where it can be an easy reference.

2

Poster is exposed to light during the day and glows at night.

3

Illustrations indicate causes of PPH and corresponding steps to manage them.

4

Each branch directs to referral if bleeding continues.



Provides a visible reminder of PPH management, even during routine deliveries and consultations.



Stands out from other posters and still serves as a reference when needed.



Provides an easy-to-follow reminder of protocol providers have been trained on.



Normalizes the need to refer complicated cases beyond a facility's ability to manage.



Glow Algorithm Poster

Considerations for Adaptation and Implementation

- The algorithm in the poster should reflect national guidelines and most recent clinical protocols for PPH management.
- The management techniques included should be realistic for a provider to do on their own in the local context.
- Illustrations should be simple and recognizable, with consideration for how they will appear when glowing in the dark.
- The content must be printed on special photoluminescent paper, and delivery rooms must have a window or overhead light to charge the paper, in order for the poster to glow in the dark.

Materials

DOWNLOAD POSTER (FRENCH)



Additional Resources

LEARN MORE:

- Barriers to Provider Adherence to PPH Best Practices
 Summary brief on formative research (English/French)
- Simple Tools to Reduce Preventable Deaths
 Narrative blog post on context-driven designs

Help put an end to preventable PPH deaths. Take action now.

For more information about our tested solutions for PPH prevention, contact the

ideas42 Global Health Team at gh@ideas42.org

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