Prioritize access to safe blood to reduce PPH-related mortality

RHSC GMM, MHS Caucus
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Introducing our speakers

**Moderator**

**Cammie Lee**
Bill and Melinda Gates Foundation, Senior Program Officer, USA

**Deborah Armbruster, USAID, Senior Maternal and Newborn Health Advisor, GH/MCHN/MNH, USA**

**Presenters**

**Angela Ahadome**, Boston Consulting Group, Principal, Nigeria

**Yewedalem Tesfaye**, Results for Development, Associate Director, Market Shaping Practice, Ethiopia
Post Partum Hemorrhage (PPH) is the leading cause of maternal mortality, accounting for 200,000 deaths per year.

While access and appropriate use of uterotonics is vital to treating PPH, only safe blood can treat the most severe cases and reduce maternal mortality.
USAID’s Safe Blood efforts have spanned 4 phases

1. Identified safe blood as a need in PPH management
2. Landscaped blood systems
3. Created and piloted the Safe Blood Starter Kit (SBSK)
4. Supporting countries, WHO, and partners to strengthen safe blood systems

Current Phase
USAID is investing in an initial 4 focus geographies and global-level public goods to catalyze more investments into the safe blood space.

Current Focus Geographies

- Liberia
- Ghana
- Rwanda
- Malawi

- Assessment of blood system
- Assessment + country-level interventions
In partnership with USAID, BCG created the Safe Blood Starter Kit to help countries holistically understand strengths and challenges across their blood systems.

<table>
<thead>
<tr>
<th>Collection</th>
<th>TTI testing &amp; central storage</th>
<th>Ordering and Transport</th>
<th>Local Storage</th>
<th>Use</th>
</tr>
</thead>
</table>
| Donor recruitment  
  - VNRBD vs family replacement vs paid  
  Donor screening  
  - Age and weight  
  - Behavior questionnaire  
  Blood collection management  
  - Centralized vs. regional vs. local  
  Cultural attitudes towards blood donation  
  Fractionation into components | Blood screening/safety  
  - Test for TTIs  
  - Central, regional or local labs  
  - Discard as needed  
  - Availability of testing consumables (e.g., vials & reagents) | System/process for ordering blood from bank  
  Transport of blood to point of use from central or regional blood bank | Storage of “emergency” type O blood and other blood types  
  Infrastructure/electricity onsite for blood storage  
  Availability of consumables (e.g., needles & bags) and process for ordering them | Appropriate clinical use of blood  
  - Cross matching  
  - Compliance with clinical guidelines (incl. management of PPH)  
  Considerations for equitable access to care  
  Mitigation of wastage/loss  
  Payment models (providers and/or patients) |

1. “Value chain” refers to overall system components and the steps of how blood moves through the system
2. Voluntary non-remunerated blood donor
3. Transfusion transmissible infection
This has since been adapted in line with WHO's Action Framework, and will be published shortly as the Blood System Self-Assessment (BSS) Tool.
Safe Blood Activity helped all 4 countries better understand and mobilize support for their blood systems, and the resources developed with the WHO will help many more

Each deployment included a 2–3-week trip to conduct interviews and facilitate workshops…

…and culminated in a synthesis of findings to help blood system owners mobilize additional domestic and foreign resources

Exemplar findings from countries

- Blood system owners were siloed – e.g., some agencies had started to independently build blood banks at high volume maternity hospitals without coordinating with the national transfusion service

- Mismatches in size and timing of government funding allocations for blood systems are common across most countries

- Workshops illuminated that there were no standardized regulatory procedures or quality assessments to ensure safe blood delivery

- Mobilization of blood donors can be challenging, and there is sometimes an over reliance on select populations (e.g. school students)

- Blood administration in hospitals is not regulated, resulting in varied adherence to storage and transfusion protocols, documentation, and clinical indications for use of blood
We co-developed key interventions with the national blood services at the global level and within focus countries

<table>
<thead>
<tr>
<th>Country level</th>
<th>Global level</th>
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<tbody>
<tr>
<td>- Launch a <strong>TWG</strong> to enable greater stakeholder engagement</td>
<td>- <strong>TA to strengthen staff capacity</strong></td>
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<tr>
<td>- Develop national <strong>policies and strategies</strong></td>
<td>- <strong>Quantification</strong> of blood &amp; blood products and related supplies</td>
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<tr>
<td>- Develop <strong>SOPs and guidelines</strong> for quality management and hemovigilance</td>
<td>- Implement <strong>routine data collection and management</strong> practices, incl. via HMIS</td>
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<td>- <strong>Resource mobilization</strong></td>
<td>- Limited <strong>procurement</strong> of necessary supplies and equipment</td>
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<tr>
<td>- <strong>Cross-country learning</strong> on priority “HSS for Safe Blood” topics and approaches</td>
<td>- Develop and disseminate <strong>public tools and knowledge products</strong></td>
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In collaboration with national blood transfusion services, the following achievements have been made in focus geographies:

<table>
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<tr>
<th>Safe Blood TWG</th>
<th>National policies and strategies</th>
<th>SOPs and guidelines</th>
<th>Resource mobilization</th>
<th>Staff capacity</th>
<th>Quantification</th>
<th>Data collection &amp; management</th>
<th>Procurement</th>
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<tr>
<td>Launched in all 3 countries</td>
<td>Liberia’s first national policy and strategic plan launched</td>
<td>Rwanda’s first Blood Transfusion Policy and Hemovigilance Guideline developed</td>
<td>Add’l funding mobilized in Liberia and Malawi</td>
<td>Assessment of clinician transfusion knowledge and skills in Rwanda</td>
<td>Co-created technical approach &amp; realistic estimation of national blood needs in Malawi and Liberia</td>
<td>Initiated pilot to collect routine blood management &amp; use data in Malawi for learning and scale-up</td>
<td>Essential equipment and supplies procured to address key operational gaps in Liberia</td>
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To catalyze impact beyond focus geographies, we are also focused on generating cross-country learning and public knowledge products.

Cross-country learning

At IMNHC2023, national blood services from Liberia, Malawi, and Rwanda co-created priority topics for in-person and virtual learning to co-develop personnel capacity and practical resources.

Topics include:

- Sustainable funding models
- Stakeholder coordination
- Generation & use of routine data
- Blood donor recruitment & retention
- Hemovigilance & quality improvement

First virtual convenings planned for late-Oct and an in-person learning event in Rwanda for early Dec (tentative), to focus on blood donor engagement and management.

Public knowledge products

Learnings from Investment Case created for Malawi have been aggregated into a document of key considerations on building an investment case for blood systems, and will be made available by USAID in the coming months.
We have a vision to improve global coordination on safe blood

And we are looking forward to engaging stakeholders like you all to explore this going forward

Concept for Safe Blood Access Coordinating Unit

To enhance coordination, prioritization, and investment into safe blood, the Safe Blood Access Coordinating Unit will:

• Provide global leadership
• Harness existing and potential tools
• Convene what are currently disparate actors (funders, blood system leaders, and global health practitioners)
Discussion

1. Any questions about how the work to-date has taken place?

2. What are the challenges you see in blood systems? What is missed when it comes to blood?

3. What connections do you see to safe blood in your work to reduce PPH-caused maternal mortality?

4. Any objections to including efforts on safe blood into the MHS Caucus?