



Safe Blood Cross-Country Virtual Learning Series November 2023 – February 2024

A synthesis report of key learnings and findings

About the Accelerator

The Health Systems Strengthening Accelerator (Accelerator) is a global health system strengthening initiative, funded by the United States Agency for International Development (USAID), with co-funding from the Bill & Melinda Gates Foundation that supports local partners as they find their own pathways to meaningful and lasting health systems change. The Accelerator is led by Results for Development (R4D), with support from Health Strategy and Delivery Foundation (HSDF), headquartered in Nigeria, and ICF. Additional global, regional, and local partners will be selected in partnership with USAID/Office of Health Systems and USAID Missions based on demand.

Prepared by

Health Strategy and Delivery Foundation (HSDF)
Plot 1980 Wikki Springs Street
Maitama, Abuja, Nigeria

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Cover photo

Colleagues from Accelerator partner country blood transfusion services of Liberia, Malawi, Rwanda, and Namibia. Credit: Aphrike Studios and Media.

Disclaimer

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Abbreviations and Acronyms

AfBTS	African Blood Transfusion Society
BTD	Blood Transfusion Division
BTS	Blood Transfusion Service
COBA	Coalition of Blood for Africa
MBTS	Malawi Blood Transfusion Service
MCHN	Maternal and Child Health and Nutrition (MCHN)
NBSP	National Blood Safety Program
HSDf	Health Strategy and Delivery Foundation
HSS	Health Systems Strengthening
HSSA	Health Systems Strengthening Accelerator
HTC	Hospital Transfusion Committees
LMIC	Low-and-Middle Income Countries
LSBTS	Lagos State Blood Transfusion Service
MBTS	Malawi Blood Transfusion Services
MEL	Monitoring, Evaluation, and Learning
MoH	Ministry of Health
NamBTS	Namibia Blood Transfusion Service
NBSP	National Blood Safety Program
R4D	Results for Development
USAID	United States Agency for International Development
VNRBD	Voluntary Non-remunerated Blood Donors
ZimBTS	Zimbabwe Blood Transfusion Service

Executive Summary

From November 2023 to February 2024, the Health Systems Strengthening Accelerator (Accelerator) facilitated a series of action-oriented virtual cross-country learning webinars among Liberia, Malawi, and Rwanda. During these webinars, participants shared successes, best practices on priority blood transfusion services (BTS) technical topics, and effective approaches to addressing key BTS challenges. They also worked to develop and foster a network of professionals and experts in safe blood services. The webinars focused on three priority topics namely: (i) Blood donor mobilization and retention strategies, (ii) Hemovigilance, blood management and the clinical use of blood, and (iii) (Re) activation of Hospital Transfusion Committees and their role in the blood transfusion system.

In addition to the inherent complexity of blood systems challenges, the webinar series demonstrated the need for low- and middle-income countries (LMICs) to have forums specifically tailored to their unique contexts and challenges. The webinars also served as a platform for sharing and learning from other countries' BTSs and how they have applied and adapted approaches to address priority BTS challenges.

This report includes key highlights and insightful questions that emerged from each webinar, offering further details on the discussed topics.

Webinar 1: Blood donor mobilization and retention strategies

- Despite their different contexts, Liberia, Malawi, and Rwanda face similar challenges in blood donor mobilization and retention. These three countries are actively working to establish a sustainable blood donor base amid significant financial and operational hurdles. For example, Malawi is working to reduce funding constraints by targeting secondary school populations. Both Malawi and Rwanda operate static blood donor clinics to enhance donor engagement with the blood systems and they implement reward systems to encourage repeat donations. In more remote and difficult-to-access areas in Liberia and Malawi are pushing for more resources and adaptable approaches to effectively manage blood donor clinics that serve such populations.
- Promising blood donor approaches across these countries involve inclusion of secondary school populations in the blood donor base, setting up open clinics during school holidays and increasing community-specific communication to raise awareness about the importance of blood donation.
- Several key learning questions emerged from the discussions on this theme, including: (1) *How do countries balance the use of voluntary non-remunerated blood donors (VNRBD) with the need for cost recovery?* (2) *How are communication plans and social behavior change communications tailored for different communities/contexts or are they standardized across the country?* (3) *What mechanisms or processes have proven most effective in retaining blood donors?*

These questions highlight the ongoing need for innovative and context-specific approaches to improve blood donation systems in varying country settings.

Webinar 2: Hemovigilance across the blood transfusion chain

- This session focused on various strategies for the vein-to-vein process and blood transfusions, highlighting the importance of a robust governance structure to ensure long-term sustainability. Discussions emphasized the need to integrate quality management systems into BTSs to deliver healthcare that is not only effective, efficient, but also sustainable.
- Several prerequisites for an effective hemovigilance system exist, with governance as an important initial entry point. It is also important to consider how services are organized and delivered, the existing human and financial constraints, and the quality systems already in place in hospitals and BTSs, among others. A deep understanding of the specific needs of programs and countries, as well as the limitations of the current health systems is vital for shaping an effective hemovigilance framework and identifying opportunities for intervention.
- Promising best practices presented included (1) establishment of a national hemovigilance scheme that enables a coordinated review of adverse event reports and data consolidation beyond the level of individual hospitals and blood banks, (2) implementing surveillance that can be either active, passive or a combination of both, and (3) initiating hemovigilance at the local institutions and facilities with clear and standardized reporting forms and timely reporting. (4) engaging multi-level multi-stakeholders to ensure alignment with country priorities and processes.
- Several key learning questions were raised, including: (1) *What guidelines and protocols are necessary to ensure a quality hemovigilance systems?* (2) *How can hemovigilance data be transformed into actionable outputs such as policies, toolkits, and guidelines?* (3) *What are the key critical decision points in establishing an effective hemovigilance system?* (4) *What strategies are best for facilitating a multi-stakeholder, multi-level process to support hemovigilance?* (5) *How can the effectiveness of hemovigilance be measured in terms of service delivery, process efficiency, and quality?*

These points and questions underline the complexity of developing hemovigilance systems and the need for comprehensive strategies that address both the technical and organizational aspects of implementation.

Webinar 3: (Re)Activating Hospital Transfusion Committees

- Hospital Transfusion Committees (HTCs) play a crucial role in ensuring that all patient blood management and transfusion practices meet the national guidelines and standards. These committees should comprise clinical staff and other personnel involved in the transfusion of blood products, with clear definitions of each member's roles and responsibilities.
- The composition of HTCs typically extends to executive management and various relevant departments, underlining its comprehensive approach. The flexibility of HTCs as a tool in the hemovigilance scheme was emphasized, with its capability to adjust to the diverse requirements of different countries. Participants in the discussion highlighted several areas in which HTCs can

bolster a robust and sustainable Blood Transfusion Service (BTS), including the development of policies and guidelines, management of blood product usage and wastage, and handling of transfusion-related errors and incidents.

A key learning question raised during these discussions was:: *How can we leverage available IT solutions for data reporting?* This question points to the potential for integrating technology to enhance the efficiency and effectiveness of HTC's in managing blood transfusion services.

Potential future cross-country learning priorities:

- A recurring theme across all webinar topics was the need to demonstrate the intermediate results and key milestones within each of blood donor mobilization and hemovigilance topics. Participants also highlighted the need for in-person learning events to foster idea exchange and relationship building.
- In addition, there is a need for BTSs to document their BTS strengthening journeys. This includes detailing how activities were implemented, identifying what strategies were successful versus those that faced challenges and understanding the decision-making process including where and when pivotal decisions were made.
- Looking ahead, participants identified several key areas for future cross-country learning to support future planning: (i) enhancing reporting channels for hemovigilance systems, (ii) increasing social accountability, and equity within the BTS framework.

For the year 2021 and beyond, it will be crucial for the Health Systems Strengthening (HSS) Accelerator to document and disseminate the lessons learned about what strategies are effective, which are not, and the reasons why. This information is vital not only for improving the Accelerator's future program planning but also for sharing with the global HSS community as valuable public resources.

This report provides an overview of the key insights from the safe blood cross-country learning webinars and suggests potential directions for future support to country BTSs through learning initiatives and/or technical assistance.

Introduction

Overview of the Accelerator

The Health Systems Strengthening Accelerator (Accelerator) is a five-year initiative funded by the United States Agency for International Development (USAID) Office of Health Systems and the Bill & Melinda Gates Foundation. Launched in October 2018, this program aims to enhance self-sufficiency in health systems within low- to middle-income (LMICs). Led by Results for Development (R4D), in collaboration with the Health Strategy and Delivery Foundation (HSDF) and ICF, the Accelerator focuses on identifying and addressing critical health system challenges.

The program operates by engaging with a wide range of stakeholders, including government officials, local and regional technical organizations. Its goal is to deepen understanding of systemic health issues, pinpoint their root causes, and use both global and regional insights to develop contextually appropriate solutions.

Throughout its operation, the Accelerator has established partnerships with USAID Missions and various leaders and partners across countries such as Côte d'Ivoire, Ghana, Guinea, Liberia, Malawi, Rwanda, and Togo. It also collaborates with several USAID bureaus, including the Asia Bureau, the Office of

Maternal Child Health and Nutrition, and the Bureau for Democracy, Development, and Innovation (DDI).

Overview of the Cross-Country Learning Events

Context and objective

Supported by the Office of Maternal and Child Health and Nutrition (MCHN) within USAID’s Bureau for Global Health, the USAID Health Systems Strengthening Accelerator (Accelerator) program provides technical assistance to strengthen the national safe blood systems in Liberia, Malawi, and Rwanda. Among other interventions, the Accelerator team—comprised of Results for Development (R4D) and the Health Strategy and Delivery Foundation (HSDF)— facilitates cross country learning among safe blood stakeholders from these countries. This initiative encourages the exchange of strategies, insights and solutions to address critical challenges in blood systems across these countries.

The collaborative learning approach employed by the Accelerator aims to expedite improvements in safe blood systems. By leveraging country-led, demand-driven learning methods alongside technical assistance provided to national blood services, the program intends to nurture cross-country relationships. This effort enhances experience sharing and collaborative problem-solving, ultimately supporting stakeholders in their roles involving leadership, decision-making, and oversight to drive significant changes in health systems.

Topics

Topics for cross-country learning were identified and prioritized by safe blood stakeholders from all three countries through key informant interviews and a co-creation session during the International Maternal Newborn Health Conference (IMNHC) in May, 2023, held in Cape Town, South Africa. High-level representatives such as Directors, CEOs and Medical Directors from the three countries agreed on the following priority topics based on the discussions and emerging themes: (1) sustainable funding sources and strategies; (2) hemovigilance; (3) blood donor recruitment, retention, and management; (4) coordination between the national blood service and regional/district hospitals; and (5) routine data generation, use, and management (covering service delivery and blood donor data).

In August 2020, directors and managers involved with the Accelerator were invited to select priority topics for discussion in the Virtual Learning Sessions (VLS), choosing from a list that reflected the priority themes and approaches identified in the first two years of the Accelerator’s operations. These discussions aimed to enhance the relevance of the sessions to the teams’ ongoing work and the overall goals of strengthening health systems in their respective countries.

- BTS Topics from the KIIs include:
 - Financial management/Funding, including capital project
 - Staffing and Human Resource (HR) needs (competency training for HR
 - Quality Assurance/Hemovigilance
 - System Coordination and Alignment

- Generation and use of safe blood data
- Procurement of blood system commodities
- Storage and distribution of blood, blood products and commodities
- Donor retention strategy for safe blood system
- Leverage technology to improve safe blood system
- Hospital Coordination for safe blood system
- Development of policies and guidelines (Malawi only mentioned)
- Research and innovation (Rwanda only mentioned)

Following the co-creation session at the International Maternal Newborn Health Conference (IMNHC), the cross-country learning activity was organized around five key themes, namely:

- 1) Funding strategies for sustainable blood transfusion services
- 2) Hemovigilance across the blood transfusion chain
- 3) Blood donor recruitment, management, and retention
- 4) Coordination between the National Blood Service and regional/district hospitals
- 5) Safe blood data generation and use for performance management and decision making

These themes were selected based on the feedback from representatives of the country Blood Transfusion Services (BTSs). This approach ensured that the learning activities were directly aligned with the specific needs and challenges identified by the stakeholder.

From May to September 2023, the facilitation team engaged with country Blood Transfusion Services (BTSs) and Accelerator implementation teams to collaboratively design and plan the webinar sessions. These sessions focused on the most timely and significant sub-topics, identifying relevant examples and speakers to ensure the content was pertinent and engaging. The final concept notes and agendas for these sessions are included in the annex of the report.

Format and methodology

The cross-country learning webinars were structured around three priority topics, delivered across three virtual sessions lasting 90 to 120 minutes each. These sessions combined plenary and small group discussions, utilizing interactive tools to foster an active and participatory atmosphere. At the start of each theme, facilitators conducted brief interactive exercises to reintroduce essential terms, concepts, and definitions relevant to the discussion.

Each session featured presentations by expert facilitators, followed by discussion sessions or breakout rooms. In these breakout rooms, participants delved deeper into specific examples related to the topic to extract common themes, challenges, and key learnings across different country Blood Transfusion Services (BTSs).

The facilitation strategy primarily utilized session icebreaker polls, participant questions, comments, feedback during the sessions, and facilitators' summary recaps. Post-event surveys, detailed in the appendix, were also crucial for gathering participants' feedback and lessons learned from the sessions.

Audience

Participants from the Accelerator activity teams, along with local and regional partners and relevant government and USAID counterparts, were invited to share experiences and insights during the webinars. The involvement of Accelerator partners was crucial to the success of these learning events. Esteemed members from the country blood transfusion services—such as Malawi Blood Transfusion Service (MBTS), Liberia's National Blood Safety Program (NBSP), and Rwanda Blood Transfusion Division (BTD)—along with colleagues at USAID in Washington and in country and regional offices, and the Accelerator consortium's partners ICF and R4D, all played invaluable roles.

The sessions were well-attended, both by the Accelerator project team and its partners from Nigeria and other locations, with an average attendance of 40 people per session, not including the core facilitation team

Outputs

Findings from the cross-country learning webinars, including the learning questions that emerged from the group discussions, are summarized in this report.

Synthesis of the Cross-Country Learning Webinars

The topics discussed in the webinar—blood donor mobilization and retention, hemovigilance, and hospital transfusion committees—represent complex challenges within the blood system. The aims of the webinar were to increase awareness of these emerging health systems themes, enable countries to share successes, learn best practices tailored to their specific contexts and challenges, and identify promising strategies for adaptation and scaling. The webinars proved highly engaging, with participants actively providing feedback on the topics presented. They also highlighted additional considerations relevant to their contexts and advocated for the development of a clear strategy to demonstrate the impact of safe blood provision, or its absence, on the overall health system.

This section outlines the key points discussed in each cross-country learning session theme. Key learnings by webinar

1. Webinar 1: Blood Donor Mobilization and Retention

The process of safe blood transfusion is both logistically complex and resource intensive, starting with the collecting blood from suitable donors. Low- and middle-income countries (LMICs) face multiple challenges in this regard, including concerns about the health risks associated with blood donation, a lack of awareness about the importance of blood donation, and the resources required to reach the potential blood donors.¹ The ideal scenario is one where blood donors voluntarily contribute without any financial incentive. To increase the number of voluntary non-remunerated blood donors (VNRBD) in LMICs, a comprehensive approach is necessary. This approach should combine best practices, context-specific innovations, and multidisciplinary policymaking. The webinar focused on strategies for safe blood mobilization and retention, aiming to design a more sustainable approach that can be scaled up by countries.

The first cross-country learning webinar took place on November 8th, 2023, featuring participants from Liberia, Malawi, and Rwanda, with a turnout of over 40 attendees. Originally scheduled for 1.5 hours, the session extended by an additional 30 minutes due to the engaging discussions, without any participants leaving.

The webinar began with introductions of the topic and the experts, including Mrs. Malvis Chirwa and Janet Katonda from the Malawi Blood Transfusion Service (MBTS) and Mr. Menard Mutenherwa from the Zimbabwe National Blood Service (NBSZ). Mrs. Chirwa shared insights into Malawi's donor mobilization strategy, noting that 75% of their donors are voluntary non-remunerated blood donors (VNRBD), primarily secondary students aged 16-25, considered low-risk. However, she mentioned the challenge of maintaining donor clinics during school holidays, which are then set up in busy trading centers. Mr. Mutenherwa discussed NBSZ's strategy of achieving 100% VNRBD by recruiting donors from community blood champions, faith-based organizations, youth leaders, and schools. He emphasized the operation of

both static and mobile clinics, with mobile units located no more than 300km from a regional center to ensure prompt and quality handling of blood. NBSZ's approach focuses on targeted donor populations to enhance the efficiency of blood collection, reducing unnecessary deferrals and disposal of unsuitable blood.

Both countries shared their methods for setting annual blood donor targets, which include reviewing past trends and demands influenced by health issues such as malaria and anemia, and aligning collection efforts with school calendars and local events.

The session concluded with a lively 40-minute discussion among participants, who inquired about the definition of open days and their impact on blood collection percentages, and the specific challenges faced in donor mobilization and retention. Questions also focused on the benefits of static clinics and targeting school populations. The experts agreed on the importance of creating a positive interaction between donors and the blood transfusion services to foster engagement and encourage repeat donations.

2. .Webinar 2: Hemovigilance across the blood transfusion chain

Key Learning Questions Emerging from Discussions on Blood Donor Mobilization and Retention

- How can evidence-based, culturally competent blood donor retention strategies be implemented in the safe blood system? (This question explores the integration of strategies that are both scientifically validated and culturally sensitive into the framework of blood donation systems to enhance donor retention)
- How can the approaches used (e.g., open days, targeting secondary school populations, etc.) be sustained? What are mechanisms/processes for sustainability? (This question seeks to understand the long-term viability of current donor recruitment strategies and what structural or procedural changes are needed to maintain these initiatives over time).
- How can countries learn from each other about successes and challenges in blood donor mobilization and retention mechanisms and financing models? (This emphasizes the importance of cross-country learning and collaboration to share best practices and lessons learned in the financial and operational aspects of blood donor mobilization)
- How can technology be leveraged for blood donor recruitment? (This question looks at the potential roles that technological solutions can play in enhancing the efficiency and effectiveness of recruiting blood donors, including digital marketing, data management, and mobile health applications).

The second learning event was held on the December 15, 2023 and focused on the challenges to implementing good hemovigilance policies, protocols and guidelines and the best practices, approach and strategies for vein-to-vein process and blood transfusion. Blood transfusions are life-saving interventions and form an essential component of the healthcare of millions of people. The administration of blood comes with risks and a good hemovigilance practice is a step to ensure the safety of patients. Hemovigilance is the set of surveillance procedures covering the entire transfusion chain, from the donation and processing of blood and its components, to their provision and transfusion to patients and

their follow-up.² It includes the monitoring, reporting, investigation and analysis of adverse events related to the donation, processing, and transfusion of blood, and taking actions to prevent their occurrence or recurrence with the goal of continuous quality improvement of the transfusion chain through both corrective and preventive actions.

The webinar drew over 40 participants across the three countries and featured speakers Dr. Bodunrin Ibitola Osikomaiya from the Lagos State Blood Transfusion Service (LSBTS) and Mrs. Caroline Wangamati from the Coalition of Blood for Africa (COBA). The webinar began with a technical framing of hemovigilance systems by Dr. Osikomaiya, using the LSBTS as a case study. In her presentation, Dr. Osikomaiya highlighted the results from a recent audit conducted that noted several challenges within the LSBTS, challenges that are common in the hemovigilance systems within LMICs and the three countries. These challenges included the lack of standard operation procedures (SOPs), guidelines and documentation platforms. Another challenge that was common among all was the lack of reporting channels for both private and public hospitals to report transfusion and/or blood donor reactions. Additionally, was the absence of or inactive hospital transfusion committees (HTCs). Dr. Osikomaiya also discussed the interventions and steps the LSBTS took to address the challenges. Some of which were developing and drafting the SOPs and guidelines, orienting facilities and healthcare workers to the new guidelines and posting the guidelines where necessary to ensure adherence. Additionally solutions included engaging hospitals, conducting quarterly meetings and encouraging non punitive voluntary and timely reporting of adverse events or near miss event. Lessons learned from implementing the interventions were, (1) hemovigilance is team work, (2) hemovigilance requires a lot of advocacy – especially to hospital management, the hospital transfusion committees were able to fill the knowledge gap of the SOPs, guidelines, trainings and continuing medical education. Recommendations for countries was to provide effective training of laboratory and clinical staff on blood bank and blood management procedures, respectively, collaboration with professional associations to enhance uptake of good hemovigilance practices and electronic and centralized data collection.

Following Dr. Osikomaiya's presentation, the country participants were prompted to identify, and problem solve for the gaps in their respective country hemovigilance systems. These gaps and strategies developed by country BTS stakeholders led to a fruitful discussion on solutions to bridge gaps in the hemovigilance systems including influential stakeholder support and buy-in as well as strengthening data collection methods, highlighting the importance of timely reporting and capacity building of staff at all steps of the blood transfusion chain.

The focus on HTCs provided a great platform for Mrs. Caroline Wangamati to expand upon the overview of HTCs and their role in the hemovigilance system. Mrs. Wangamati spoke on strategies to implement and make active HTCs by providing an overview of the framework needed, as well as functions and benefits of HTCs before delving into the challenges that arise when developing these committees, and

² Jonge, Layla L. de, et al. "Haemovigilance: Current Practices and Future Developments." *Annals of Blood*, AME Publishing Company, 30 June 2022, aob.amegroups.org/article/view/6918/html.

recommendations for successfully sustaining them. Following this, the participants were placed in breakout rooms by country (Liberia, Malawi, and Rwanda) to discuss how the implications of not having functional HTC impacts the hemovigilance system, identify some of the gaps and potential solutions that could be implemented in their respective countries' blood system. The participants discussed who should be present, and what departments should be prioritized in the development of HTCs. The outcomes of these discussions were presented to the wider group with actionable next steps to be incorporated in the respective blood systems moving forward.

Key learning questions emerging from discussions on instituting hemovigilance program.

- How best to steward/facilitate a multi-stakeholder hemovigilance process? Who needs to be involved and where in the process?
- What are the key decision/inflection points in the hemovigilance pathway?
- How to look at patient pathways/experience as part of the process?
- How to measure hemovigilance, not just for service delivery, but the process, efficiency, and/or quality? And who or what entity oversees this process?

Following the webinar, participants filled a survey determine their level of satisfaction the webinar and speakers, highlight specific areas of the webinar that were particularly useful, as well as upcoming learning topics of interest. Overall, participants revealed the webinar was very insightful, and the breakout rooms were great for fostering discussions. The majority of country participants highlighted their interest in learning more about the composition of HTCs, the actionable steps to ensure communication between HTCs and regulatory authorities and to clearly define the role of any blood service in patient blood management.

Webinar 3: (Re)Activating Hospital Transfusion system improvements.

Following the success and robust discussion after the second learning session, a Hemovigilance follow-up webinar was unanimously requested by participants, with a focus on HTCs. This webinar was held on the February 15, 2024 and began with a presentation from Dr. Chris Gashaija from the Rwandan Blood Transfusion Division (BTD) on Rwanda's newly drafted hemovigilance strategy. Rwanda had been operating a hemovigilance system with a documented hemovigilance strategy that highlighted data collection and management rather than roles and responsibilities in the transfusion chain which created fragmented procedures across hospitals and blood banks. Dr. Gashaija discussed the newly drafted strategy's goals, the institutions targeted, as well as their roles and responsibilities, the objectives, features, and intended outcomes of the strategy. A unique aspect of the BTD strategy was the explicit inclusion of the regulatory authorities, the Rwanda Food and Drug Agency, and their responsibilities within the hemovigilance systems. Dr. Gashaija highlighted the challenges encountered with implementing the strategy that included the necessity to sensitize all stakeholders – the Ministry of Health, regulatory authorities, hospitals and health facilities. Additionally, Dr. Chris explored data

privacy, traceability of blood products, and security of the hemovigilance strategy.

Following the presentation, participants went into country break out rooms to brainstorm on what their country needs were for HTC and noting these on Jamboard. (Figure x) This included thinking through and noting the stakeholders that should be included on the HTC, the strategies and requirements for HTCs to be functional, the data to be collected and how the data would be reported. Additionally, the participants how corrective actions should be taken forward by the HTC . The HSDF team used the notes from the Jamboard to co-develop an HTC toolkit that has been posted on the Safe Blood Cross-Country Learning website.

Key learning questions emerging from discussions on (re)activating hospital transfusion committees

1. How do we leverage available IT solutions for data reporting?
2. What methods can be used to ensure ownership of hemovigilance systems at national and sub-national levels?
3. How can HTCs be engaged directly at all levels of the health system (direct engagement referring to ensuring that the HTCs have a holistic understanding of roles and guidelines through workshops, seminars and hands-on simulations)?

Following the discussion, the participants were split into country-specific breakout rooms to co-create the Hospital Transfusion Committee Toolkit (HTC). The participants were asked to respond to questions around their current country HTC process- how many they have? The implications of not having one, who should be prioritized on an HTC, etcetera. The results from the breakout room were shared when the participants returned to plenary. (See results from Rwanda below)

1. What percentage of your facilities have HTCs?

All the hospitals already have as it is a requirement before a hospital begins transfusions

2. For those facilities that have HTCs? How many are functional?

There has to be a member appointed and meetings need to be held and reports need to be made month

1. members have to be appointed
2. members have to meet
3. members have to make reports
4. members have to be active - investigate

3. How is functional defined? (meeting monthly, investigations occur, etc.)

Once a month, Just as the BTC adverse effects can be discussed in the meetings

4. What are the implications of not having HTCs?

Adverse effects are not reported

5. What needs to be put in place to make HTCs functional?

Committees need to be incorporated into the BTC and meets once a month

MDs of the regional Centres for BT, Clinical directors of the hospitals Physicians from disciplines that transfuse a lot - eg. surgery Pharmacist (Usually heads the BTC)

Figure 1: Jamboard drafted by the Rwanda BTD team during Webinar 3: (Re)activation of HTCS.

The results were discussed with other country participants, after the participants returned to plenary. Some country representatives from Liberia recommended using a decentralized approach to setting up HTCs in order to support national and sub-national ownership, while other country participants discussed leveraging digital platforms like websites and apps for more accessible dissemination of guidelines.

The webinar was concluded with a summary of the key success factors necessary for setting up functional HTCs. The importance of capacity building and setting up communication channels between national and sub-national blood system stakeholders to ensure that HTC activities are cohesive, in line with national policies and not occurring in silos. The summary provided the participants with some next steps to take with them as they went on to develop and increase the functionality of their HTCs.

Next Steps

Following the 3 webinars, planning began for an in-person learning session in Windhoek, Namibia on

- (1) Sustainable and innovative financing for safe blood services.
- (2) Generation and use of routine safe blood data for decision-making and performance management

Additionally, several outputs were developed from the webinars including the co-created HTC toolkit, FAQ documents for blood donor mobilization and retention, and hemovigilance desk review document. Finally, a website dedicated to the Safe Blood Cross-Country learning was created to house all the outputs, learnings, and recordings from each learning session. This website can be used as a resource for

all country participants to leverage as they continue to develop their blood systems.

Annex 1: Webinar 1 Concept Note

Wednesday, 8 November 2023, 10:00-11:30am UTC+1

Background

There is a high demand for blood transfusions, yet voluntary non-remunerated blood donation contributes only about 36 % of the total requirements across low- and middle-income countries (LMIC). Additionally, millions of litres of plasma that could be extracted from whole blood are currently either not separated or are destroyed. To address these issues, the Health System Strengthening (HSS) Accelerator team, comprised of Results for Development (R4D) and Health Strategy and Delivery Foundation (HSDF), is organizing and facilitating cross country learning events among key stakeholders in Liberia, Malawi, and Rwanda stakeholders.

These cross-country learning events aim to facilitate exchange of knowledge, solutions, best practices, and learnings, among relevant stakeholders across Liberia, Malawi, and Rwanda as well as from the broader Sub-Saharan African region (and beyond). They focus on enabling country teams to learn from innovative organizations and the expertise of global practitioners. Specifically, these learning events are designed to assist blood system change agents leverage peer learning for timely decision-making and evidence-building.

By adopting country-led, demand-driven joint learning methods as a complementary form of technical assistance, these exchanges will support leadership, decision-making, implementation, and analysis of impact to local experts and institutions that can drive health systems change. With effective facilitation and active participation of change agents, joint learning has the potential to accelerate progress and health systems strengthening, foster relationship-building, deep-dive into the host country's safe blood implementation and facilitate experience-sharing and problem-solving.

The inaugural edition of the cross-country learning event will focus on safe blood and plasma donor mobilization, management, and retention in the design of a more sustainable approach and scale up efforts in the participating countries.

Objectives: To discuss the current global safe blood and plasma donor trends through global evidence and best practices and provide innovative approaches and strategies for long-term sustainability. To achieve this, participants will:

- Identify the challenges encountered in community and/or school-based blood drives,
- Share successes and best practices on voluntary blood donation and retention towards increasing safe blood supply in the country.

- Problem solve issues with their respective donor mobilization and retention strategies together, and arrive at country specific, sustainable solutions.
- Develop a network of safe blood experts between the countries - creating opportunities for future collaboration and learning opportunities between the countries
- Generate buy-in for stakeholders at various levels of the blood system

Expected Outcomes:

- Participants are expected to have gained a deeper understanding, more knowledge and skills in safe blood and plasma donor mobilization and retention, understand their roles and responsibility, and
- Discussion should provide participants with at least one (1) innovative approach from the current global evidence and country exemplars they can leverage in their respective context to improving blood and plasma donor mobilization and retention strategies.

Time	Content	Facilitator
5 min	Welcome participants	Dr. Olasunmbo Makinde, HSDF
10 min	Introductory remarks Accelerator Strengthening Safe Blood Activity Introductory remarks on cross-country learning for safe blood	Dr. Olasunmbo Makinde, HSDF Julie Wieland, HSDF
10 min	Icebreaker Present Zoom functionality and ground rules	Julie Wieland, HSDF
20 min	Malawi (MBTS) blood donor mobilization strategy <ul style="list-style-type: none"> • Overview of MBTS blood donor strategy • Challenges, successes, lessons learned 	Malvis Chirwa, MBTS Janet Katonda, MBTS
5 min	QnA	Dr. Olasunmbo Makinde, HSDF
20 min	Evidence and trends in blood donation and blood donor retention strategies	Menard Mutenherwa, NBSZ
5 min	QnA	Dr. Olasunmbo Makinde, HSDF
5 min	Synthesis of discussion highlights	Dr. Olasunmbo Makinde, HSDF
5 min	Closing remarks and next steps	Dr. Olasunmbo Makinde, HSDF

Annex 2: Webinar 2 Concept Note

Friday, 15 December 2023, 10:00am – 12:00 noon UTC+1

Background

Blood transfusions are essential to patient care and often lifesaving. Blood safety challenges exist for the adequate supply of safe blood for transfusion. One of the challenges is variance of clinical practices across health systems and healthcare workers that compromise patient safety and create wastage.

Barriers to appropriate clinical use of blood transfusions include limited training and knowledge in transfusion medicine; lack of awareness and training on patient blood management; absence of national evidence-based guidelines for transfusion; absence of effective transfusion committees in hospitals; poor practices in blood component preparation, storage and handling, including maintenance of the cold chain. The 2nd edition of the cross-country learning event will be focused on the global best practices in the hemovigilance of whole blood donations and blood transfusions

Objectives: To discuss the current global hemovigilance of whole blood donations and blood transfusions evidence and best practices. To provide approaches and strategies for the vein-to-vein process and blood transfusions, including the governance structure to support long-term sustainability. To achieve this, participants will get the opportunity to:

- Identify the challenges encountered in the rational use of blood components in the transfusion facilities,
- Explore effective strategies to improve transfusion and thus patient safety through investments in training, etc., as well as external quality issues on testing, monitoring and reporting adverse transfusion reactions, etc.; and
- Discuss experiences, best practices and lessons learned in other settings and contexts, including Hospital Blood Transfusion Committees.

Learning objectives

- Understand the Blood Transfusion Service institutional responsibilities regarding hemovigilance across the safe blood value chain
- For participants to share best practices in order to improve the safety of blood and blood products transfusion
- For participants to problem solve issues with their respective blood systems together, and arrive at country specific, sustainable solutions, e.g. re/instituting Hospital Blood Transfusion Committees
- For the participants to develop a network of safe blood experts between the countries - creating opportunities for future collaboration and learning opportunities between the countries

Format

The learning event will include opening remarks, presentations, interactive experiences, group plenary

sessions, and action planning. The event will span 2 hours, starting at 10:00am and ending at 12:00 noon (GMT) The session will involve discussions and presentations on strategies on improving systems challenges to hemovigilance

Agenda

Time	Content	Facilitator
5 min	Welcome participants	Dr. Olasunmbo Makinde, HSDF
10 min	Introductory remarks on the webinar agenda, objectives and outcomes Introduce speakers and the support team	Dr. Olasunmbo Makinde, HSDF
10 min	Icebreaker Presentation of ground rules	Dr. Olasunmbo Makinde, HSDF Julie Wieland, HSDF
20 min	Technical framing on hemovigilance <ul style="list-style-type: none"> Prerequisites for an effective national hemovigilance program Best practices, challenges, and potential solutions 	Dr. Bodunrin Ibitola Osikomaiya, LSBTS
20 min	Break out rooms <i>Plenary – participants share their highlights</i>	Dr. Olasunmbo Makinde, HSDF Julie Wieland, HSDF Adaora Osi-Ogbu, HSDF Kimberly Idoko, HSDF
20 min	Hospital Transfusion Committees (HTC) and their role in the hemovigilance system <ul style="list-style-type: none"> Overview of HTCs and the necessary components 	Caroline Wangamati, COBA
20 min	Break out rooms <i>Plenary – participants share their highlights</i>	Dr. Olasunmbo Makinde, HSDF Julie Wieland, HSDF Adaora Osi-Ogbu, HSDF Kimberly Idoko, HSDF
5 min	Synthesis of discussion highlights	Dr. Olasunmbo Makinde, HSDF
5 min	Closing remarks	Dr. Olasunmbo Makinde, HSDF

Annex 3: Webinar 3 Concept Note

Thursday, 8 February 2024, 10:00am – 11:30am UTC+1

Background

Hospital Transfusion Committees (HTCs) play a crucial role in the implementation of a national hemovigilance program at the regional, local, and/or hospital level. The HTCs serve a critical role in the responsibility of ensuring safe blood transfusion practices and the implementation of transfusion guidelines and policies. They usually consist of a multidisciplinary group, including hospital management, laboratory, nursing, and doctors. While the HTCs play a crucial role in the safe transfusion of blood, few LMICs have fully functioning HTCs due to several challenges. Some of these challenges include low attendance and/or no central guidance or mandate on how the HTCs should operate.

Barriers to appropriate clinical use of blood transfusions include limited training and knowledge in transfusion medicine; lack of awareness and training on patient blood management; and absence of national evidence-based guidelines for transfusion. The 3rd edition of the cross-country learning event will be focused on the global best practices in the activation and management of hospital transfusion committees.

Objectives: To discuss Rwanda's newly drafted hemovigilance strategy and its additions since the last iteration of the strategy. To provide guidance and collectively work through strategies implement and make active hospital transfusion committees. To achieve this, participants will get the opportunity to:

- Explore Rwanda's efforts to sensitize the blood system, including laboratories, hospitals and facilities on its new draft hemovigilance strategies;
- Discuss the challenges to implementing and keeping active HTCs
- Separate into country break out rooms to discuss, identify, and highlight best practices and lessons learned and action steps to activate Hospital Blood Transfusion Committees.

Learning objectives

- Understand the Blood Transfusion Service institutional responsibilities regarding hemovigilance across the safe blood value chain in the context of Rwanda
- For participants to problem solve issues with their respective blood systems as it relates to HTCs and arrive at country specific, sustainable solutions to re/instituting Hospital Blood Transfusion Committees
- For the participants to develop a network of safe blood experts between the countries - creating opportunities for future collaboration and learning opportunities between the countries

Format

The learning event will include opening remarks, presentations, interactive experiences, group plenary sessions, and action planning. The event will span 1.5 hours, starting at 10:00am and ending at 11:30 noon (GMT) The session will involve discussions and presentations on strategies on re/activating HTCs.

Agenda

Time	Content	Facilitator
5 min	Welcome participants	Dr. Olasunmbo Makinde, HSDf
10 min	Introductory remarks on the webinar agenda, objectives and outcomes Introduce speakers and the support team	Dr. Olasunmbo Makinde, HSDf
10 min	Icebreaker Presentation of ground rules	Dr. Olasunmbo Makinde, HSDf Julie Wieland, HSDf
20 min	Introduction to Rwanda's hemovigilance strategy <ul style="list-style-type: none"> • Overview of the strategy, what's new • Best practices for dissemination and communication of the new strategy 	Dr. Bodunrin Ibitola Osikomaiya, LSBTS
10 min	Brief Overview of Hospital Transfusion Committees (HTCs) and their role in the hemovigilance systems	Dr. Olasunmbo Makinde, HSDf Julie Wieland, HSDf Adaora Osi-Ogbu, HSDf Kimberly Idoko, HSDf
20 min	Break out rooms <i>Plenary – participants share their highlights</i>	Dr. Olasunmbo Makinde, HSDf Julie Wieland, HSDf Adaora Osi-Ogbu, HSDf Kimberly Idoko, HSDf
10 min	Each country presents their HTC implementation action steps	Representatives from each Liberia, Malawi, and Rwanda
5 min	Closing remarks	Dr. Olasunmbo Makinde, HSDf

Annex 4: Zoom photos of participants

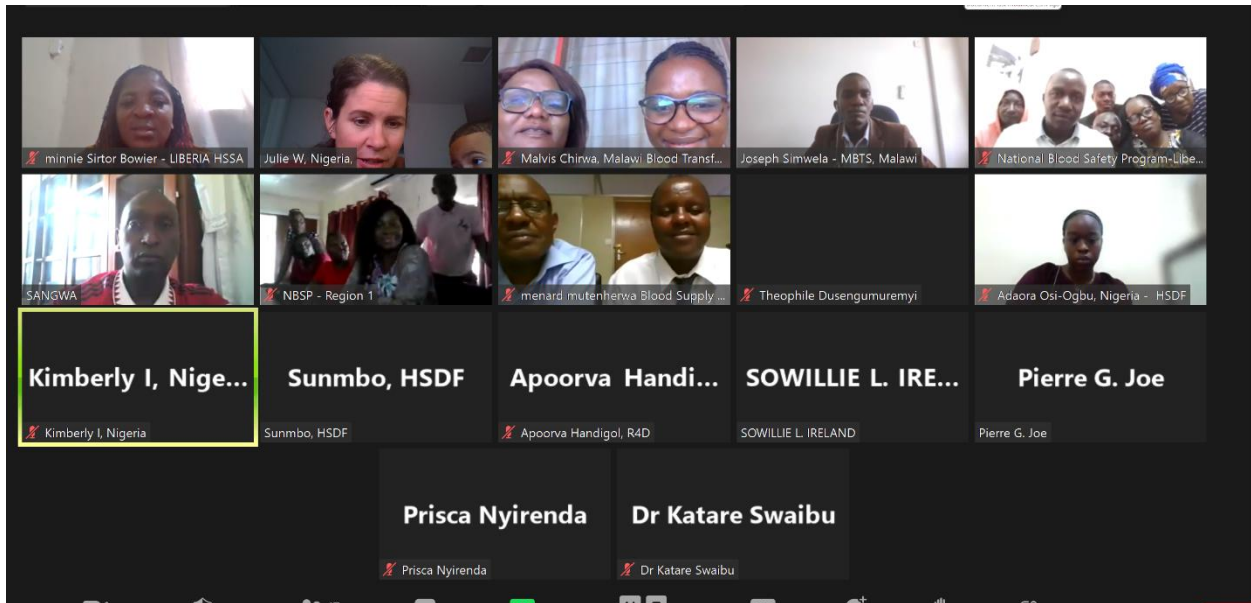


Figure 2: Cross section of participants and facilitators from 1st virtual learning session

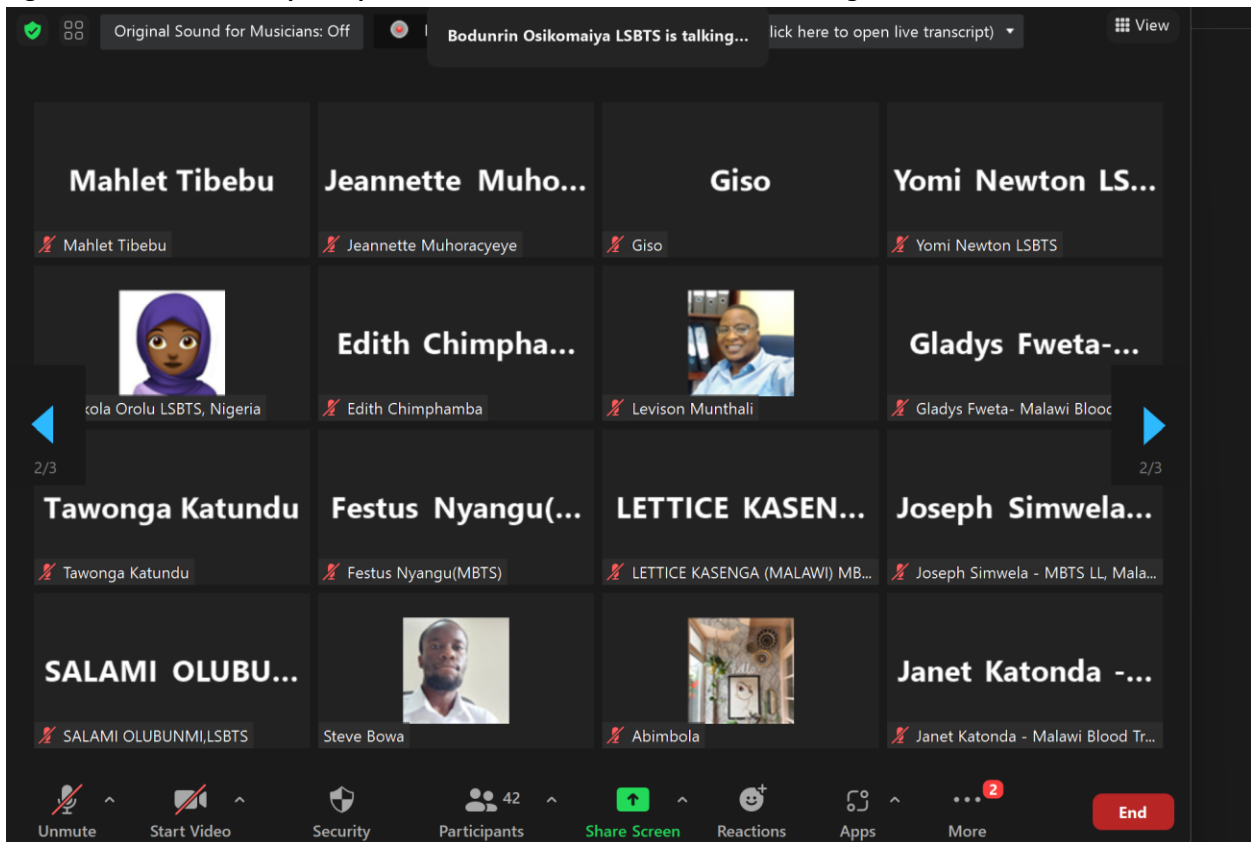


Figure 3: Cross section of participants and facilitators from 2nd Virtual learning session

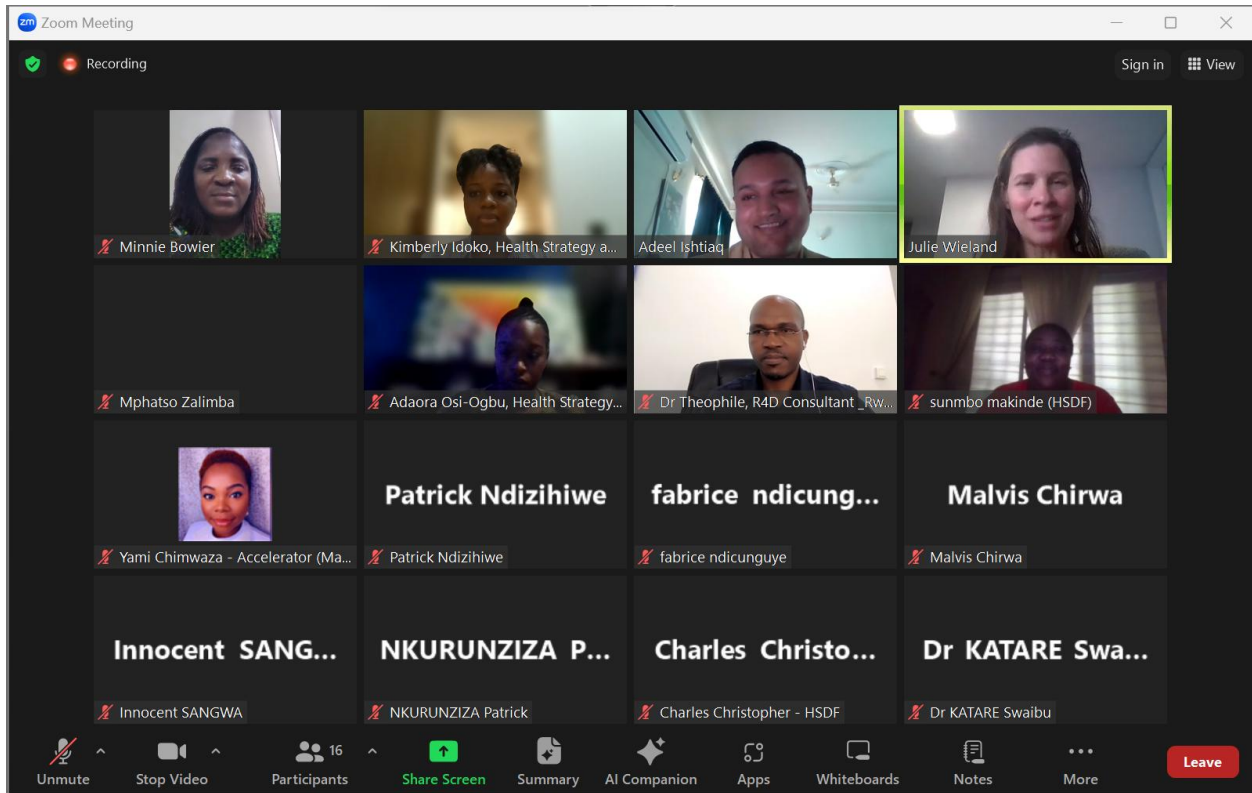


Figure 4: Cross section of participants and facilitators from 3rd virtual learning session