

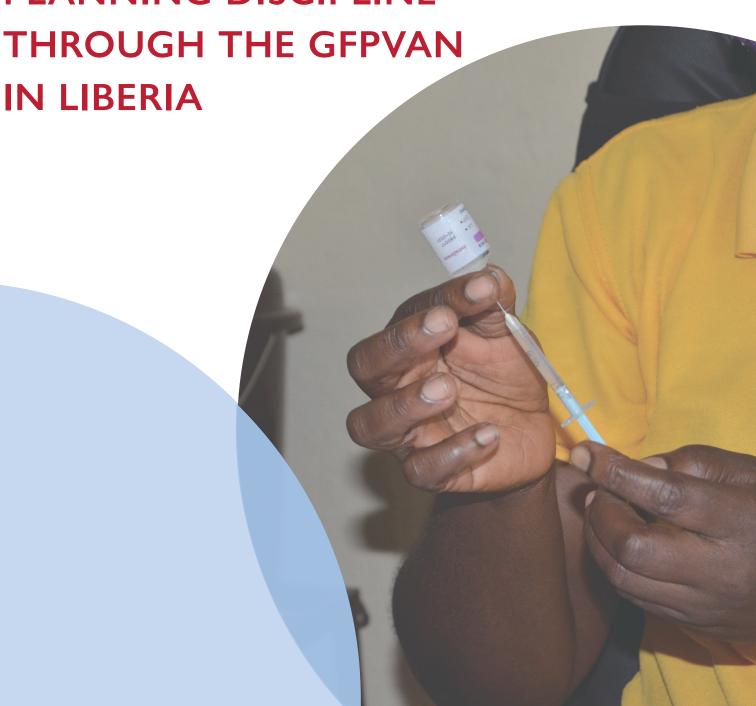






PEOPLE, PROCESS, POLICY, AND TECHNOLOGY:

STRENGTHENING SUPPLY PLANNING DISCIPLINE



+ Introduction

This case study dives into Liberia's journey of implementing the Global Family Planning Visibility and Analytics Network (VAN) and the evolution of its supply chain management technical capacity and ownership. It covers Liberia's changing needs as ownership over supply chain decision-making increased and how the VAN supported those needs.

From the entry-level implementation of the network to support inventory management and the later upgrade of its membership to include robust tracking of supply planning and other advanced features, Liberia has been in the driver's seat of this journey. Outcomes from this journey thus far include enhanced supply chain visibility and coordination, greater stakeholder engagement and discipline in supply chain management activities, increased accountability for supply planning, and increased ownership of supply chain decision-making. It also covers the challenges Liberia faced stemming from the change in administration, uneven platform utilization, and poor data capture at lower levels and how the Ministry of Health is working to address them to further its mission to ensure the availability of commodities for women throughout the country.

Overview of VAN

The Reproductive Health (RH) community has long recognized that the availability of a range of safe, affordable contraceptives is a prerequisite for contraceptive security and forms the bedrock of efforts to increase contraceptive prevalence in developing countries. In the complex realm of public sector contraceptive supply chains, a dizzying number of actors with varying

technological capabilities spread across countries and time zones need to work together in concert to ensure sufficient quantities of contraceptives are funded, procured, shipped, warehoused, and delivered to the health facilities for women to access. For over a decade, suppliers, procurers, funders, and country supply managers worked through the Reproductive Health Supplies Coalition (RHSC) to share data and develop systems to support more collaborative supply planning, forecasting, and replenishment to ensure a reliable supply of products to countries.

In 2016, the members of the RH community asked the RHSC to take the lead in defining and operationalizing a more efficient way to gather and use data for upstream supply chain decision-making, building on the foundations of the past databases and processes. The vision that emerged was the Global Family Planning Visibility and Analytics Network (VAN). The vision is premised on the idea that you cannot manage what you cannot manage what you cannot manage what you cannot see. The VAN is a "shared platform to capture and use supply chain data from multiple sources and organizations to provide enhanced visibility for decision-making." The VAN's network is more than a data tool, it brings people and information together in new ways to make getting family planning products to health facilities easier. The VAN offers a platform to estimate and prioritize supply needs and engages people and processes to act when supply imbalances loom.

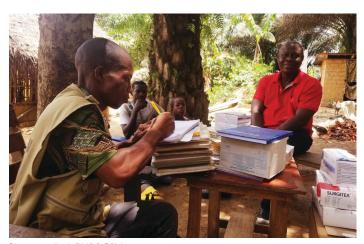


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I Reproductive Health Supplies Coalition. End-to-End Visibility in Ghana. Page 1.

² Reproductive Health Supplies Coalition Management Unit. Global Family Planning VAN: Proof of Concept (phase 1) Review. May 2019. Page 2.



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+ Methodology

The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project collected and analyzed data to illustrate the significant benefits of VAN membership as demonstrated in the country case of Liberia. This included a desk review of relevant documents, mostly pertaining to standing up the VAN, country snapshots, and membership details. This was followed by a short interview for background conducted remotely with members of the VAN Management Unit. The desk review and background interview informed the development of an interview guide used to remotely conduct interviews with three country stakeholders. The stakeholders interviewed included representatives from the Liberia Ministry of Health and GHSC-PSM (See Appendix A). A thematic analysis was then conducted on the qualitative data collected and is summarized in this case study.

+ Background on Liberia's involvement in the VAN and the decision to add features

In 2021, Liberia launched the VAN with the platform's entry-level features, such as the ability to track incoming orders and shipment data. The impetus for this implementation was a result of a global initiative sunsetting outdated predecessor tools and databases. As much of Liberia's reporting structure remained

the same, staff experienced minimal change to their internal processes during this transition.

Prior to implementing the VAN, country stakeholders described not learning about a stockout of products until it happened or became a crisis. Interviewees also discussed a health system that was reliant on donor-provided commodities. They noted limited coordination and a lack of coordination amongst the donors and those procuring commodities who worked in isolation, resulting in duplicate shipments of products and little information-sharing on expected arrival times. This resulted in frequent stock imbalances of family planning products throughout the country. The VAN was conceived to address these challenges by providing the increased visibility needed to improve the effectiveness of the reproductive health supply chain management process.

As time went by and usage of the VAN's base offering continued, the needs of the Ministry of Health staff evolved. Staff learned about the advanced features available by upgrading the country's membership from international meetings with presentations about the platform. These additional VAN features included: the ability to upload and monitor supply plans and track against incoming order and shipment data, communicate action requests through an electronic ticketing module and access advanced analytics and technical support. The decision to upgrade was driven by MOH leadership's desire to improve visibility, coordination, and decision-making in a supply chain reliant on donor procured products.

While Liberia's VAN journey continued, in April 2022, Liberia launched the <u>Quantification Analytics Tool (QAT)</u>. The QAT "enables program managers to easily build multiple forecasts for comparison and selection, optimize commodity procurement and delivery schedules, monitor the stock status of products and share data with external platforms and key stakeholders." The data from the QAT can feed directly into the VAN and could further bolster the impact of the VAN upgrade. The implementation of the QAT was part of a larger effort to use both platforms to strengthen Liberia's supply planning and forecasting capacity.

The process for upgrading the VAN membership required stakeholders to first advocate for increased usage of the platform and the need for a more robust network of committed people

and processes to support supply chain management activities in country. This kicked-off a process to build a consensus supporting the platform. Representatives from the Liberia Ministry of Health led this advocacy process and held a series of stakeholder meetings to share information and give country representatives an opportunity to learn about the changes involved. These meetings helped advocates anticipate lingering questions or concerns. This effort culminated in a larger in-person workshop, including representatives from across Liberia's government, donors, implementing partners and the VAN Management Unit.

As Liberia's journey progressed, stakeholders were keen to build more ownership of the country's supply chain and data, as well as the decision-making process. The country was also interested in generating engagement with the VAN as a platform and tool to improve supply planning. This included a desire to improve visibility into family planning products, better identify stock issues, and establish a process to address them. Interviewees cited the benefit of improved coordination with donors and the additional technical support from the Control Tower Analysts (CTA). The CTA strengthens the capacity of the country VAN members to ensure inventory and supply plan data is uploaded into the platform and meets quality standards. The CTA then collaborates with country members and strengthens its capacity to assess and prioritize supply needs and make critical decisions when imbalances loom. By working closely with the CTA, stakeholders build the country staff's capacity and knowledge. There was a particular concern around reducing the instance of overstocks and expiry. The VAN's ticketing module, which is used to communicate specific stock issues, allows users to work together to identify concerns of overstocks and expiry directly on the platform and request action from others to avoid the stock issue and improve coordination.

As awareness of the country's involvement with the platform grew and in learning more about the additional features available through the VAN, stakeholder questions focused on two areas. The first was around data-sharing and protection of the country's data. Prior to launching the VAN, the RH community, led by the RHSC, invested significant time and resources into developing a single data-sharing policy. The goal of this effort was to "operationalize a multilateral data sharing policy that enables a diverse network of members to share data via one central platform." This policy governs "how members use the



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VAN, how they share, access and use data within the VAN." The VAN Management Unit's engagement during the decision-making process gave stakeholders the opportunity for detailed discussion of the terms of use policy. In interviews, it was clear that the more the stakeholders learned about the policy and how datasharing was governed, the more comfortable they became.

Secondly, interviewees mentioned some hesitation regarding the fees associated with access to the advanced features. Proponents of the VAN secured funding from USAID, GHSC-PSM, and the West African Health Organization/KfW to cover the cost of the first three years, recognizing the value and benefits of the platform. Work is ongoing to secure a more sustainable source of support to cover these costs going forward. After conducting training with stakeholders and staff in-country, Liberia launched the advanced features in 2023.

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Reproductive Health Supplies Coalition. Sharing Data Across a Community: Operationalizing a Collective Legal Framework for the VAN. 2016-2021. Page 2. Reproductive Health Supplies Coalition. Sharing Data Across a Community: Operationalizing a Collective Legal Framework for the VAN. 2016-2021. Page 3.





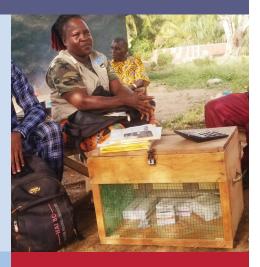
OUTCOMES FROM IMPLEMENTATION OF VAN

With three years of experience and the decision to take advantage of all VAN services, Liberia achieved several positive outcomes highlighting the platform's benefits. These outcomes include the following and are discussed in detail below.

01

ENHANCED SUPPLY CHAIN VISIBILITY AND COORDINATION 02

GREATER
STAKEHOLDER
ENGAGEMENT
AND DISCIPLINE IN
SUPPLY PLANNING
ACTIVITIES



03

INCREASED
ACCOUNTABILITY
FOR SUPPLY
CHAIN
MANAGEMENT
ACTIVITIES

04

INCREASED
OWNERSHIP OF
SUPPLY CHAIN
DECISION-MAKING

+ Current VAN usage by country partners

Interviewees in Liberia reported using the VAN regularly but with some inconsistency, mostly on a monthly cadence. They review the stock and shipment status reports, upload data to the VAN, as well as spend time in the supply planning section. Regarding the ticketing module, users received information on tickets in the regular VAN meeting and acted as needed. There is a focal person in the Ministry of Health who supports staff facing challenges with logging on or viewing data. There was some discussion by interviewees who reported not accessing the VAN for a few months and the password being discontinued which will be discussed further below.



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+ VAN implementation improved visibility of supply chain data and strengthened stakeholder coordination

By bringing together inventory and shipment data alongside supply plan data for the country, the VAN creates a one-stop-shop, building a network of people and processes around the platform's use for increased coordination. Interviewees reported that prior to the VAN, partners kept information on procurements and presented it to the MOH. Stakeholders and government officials were often unaware of what had been procured until after it was brought into the country. The procuring partners were not seen as coordinating, which often resulted in the same product being ordered by different entities resulting in overstock. When stock issues arose prior to the VAN, they were often resolved haphazardly using email and data in spreadsheets sent to various stakeholders for action.

This changed once Liberia implemented the VAN, especially once the upgraded features were included, bolstered by the QAT implementation. The VAN brought more visibility in terms of quantity procured, procurement agent, when shipments will arrive, quantity on hand and expiry information. The full pipeline of shipments is now visible to all stakeholders including the procurers. This enabled partners to coordinate shipments earlier in the process —before delivery—and make informed decisions. Interviewees describe positive discussions taking place around supply planning and incoming shipments that are supported by the data available on the platform. When stock issues arise, they can be addressed directly on the platform using the ticketing module which engages all the relevant stakeholders and facilitates the process of taking action.

+ VAN implementation created more engagement and discipline by prioritizing its usage

Another VAN membership outcome for Liberia was it created discipline around the monthly review cycle process. This was further bolstered by a consensus-driven decision process for upgrading the VAN membership which resulted in reprioritizing its use. By implementing and subsequently upgrading the VAN, country stakeholders mobilized to engage with the platform and created more discipline around supply planning by prioritizing VAN usage. Bentoe Tehoungue, Maternal and Reproductive Health Specialist with the Liberia Ministry of Health described the biggest change as being, "we are looking at our supply planning regularly." Specifically, one interviewee positively described the routine of monthly data submission and the participation of Family Health Division staff in training, work sessions and monthly meetings. Moreover, a focal point is available in the division to provide technical support, so staff did not become "stuck" if they encountered a technical barrier. Interviewees described staff as very interested and often contacted the focal point for support. Staff and stakeholders were reported to be more engaged in supply planning, data review, and decision-making. The ticketing module and monthly meetings kept partners focused on addressing problems and making decisions which, in turn, advanced the supply planning work. As a result, interviewees anecdotally noted improved stock management with staff better able to track inventory, expiries, and inbound shipments to prepare for receiving new stock. The central medical store could indicate when commodities had arrived on time and prioritize tracking family planning products.

+ Working with the VAN Control Tower Analyst drove discipline through accountability and built supply planning capacity

A key factor cited by interviewees as driving discipline for VAN usage is the accountability provided by the focused engagement of the VAN CTA. Interviewees described the experience of working with the CTA as positive and instrumental to the process. The CTA was said to encourage staff to continue updating the VAN and keep working to resolve discrepancies. Bentoe Tehoungue stated the CTA, "keeps us on our toes in our meetings." In turn, the MOH team tried to ensure they reviewed data and prepared in advance for the meetings. Working with the CTA helped staff build awareness around what actions should be done on a regular basis and how they should be completed. Additionally, the CTA, by conducting a careful review of VAN data and building the capacity of the in-country team to do the same, identified gaps or issues, which pushed the teams to improve their own data review as well as to act on identified issues. In summary, the extended collaboration and technical support improved supply planning and inventory management efforts.

+ Upgrade of the VAN increased country ownership by enabling proactive management of stocks and decision-making

The increased discipline, engagement and accountability ultimately resulted in increased ownership of the supply chain through proactive management of stocks by MOH and in-country partners. One MOH interviewee described that prior to VAN implementation, she would wait to be told when products might arrive in the country. She is now able to look in the VAN herself and manage the supply. Interviewees felt enabled to better advise their team and dig into gaps and issues. They likewise reported less reliance on partners by no longer needing to call for information, now they can find the information they need by working with data directly.

Bentoe Tehoungue stated, "thanks to this platform, it helped us to take charge of our stock, take action immediately and better manage our stock."

From the VAN's launch through the end of 2022, Liberia created two new orders worth CYP of 30,860. They also canceled one order and expedited another order using the VAN. The Director of the Family Health Division, Dr. Nowiah Gorpudolo-Dennis was equally clear about the capabilities of the VAN and its significant role in supporting the MOH's work, "We can use it to guarantee the availability of commodities for people to access. It is an important part of our mission to ensure the supplies will be available at all times for those who want and need it."

VAN CREATES A ONE-STOP-SHOP

A network of people and processes for increased coordination.



IMPROVED STOCK MANAGEMENT

Staff better able to track inventory, expiries, and inbound shipments

30,860

Through 2022, two new orders were created worth 30,860 CYPs, and one order was expedited

+ Challenges remain for optimizing VAN utility and benefits

Despite progress made in supply planning and VAN utilization since 2021, a change in ministry administration in February 2024 interrupted the momentum. A new team of senior leadership included a new Minister of Health, and Director/Deputy Director of the Family Health Division. During this transition period, interviewees observed a drop in VAN usage. Proponents of the VAN are confident that the new administration will further Liberia's commitment to the platform. There was recognition amongst interviewees that usage of the VAN dropped during the transition as the new administration got settled in place. During this brief time, staff reported having lost their logins along with a need for some retraining to refamiliarize themselves with the platform. Thanks to the country stakeholder commitment to the VAN, log-in data from the platform showed a dip in logins around January 2024 during the transition, but then a return to normal the following month. Fortunately, Dr. Gorpudolo-Dennis was familiar with the VAN from her previous role which aided in bringing the new administration up to speed. When interviewed, Dr. Gorpudolo-Dennis emphasized an interest in the new administration to increase the VAN's utilization in supporting the MOHs work.

Even before the change in administration, interviewees reported that utilization of the platform and engagement by country staff was uneven despite improvements prior to the VAN implementation. Interviewees described a desire for regular meeting attendance and improved responsiveness in providing updates. The presence of those with access to the VAN including the Family Planning and Reproductive Health commodity focal point at the MOH, is essential for updating partners who do not access the VAN and may not be aware of potential stock issues, then issues can be discussed in venues such as the commodity security meetings. Uneven attendance is exacerbated by poor internet connectivity in-country which can result in postponing or delaying the start of meetings as well as limiting attendance. The VAN Management Unit is working with partners in-country to train new staff, hold working sessions, and establish monthly office hours to support full engagement of the network and platform by the MOH and partner staff alike.

Despite the improved data visibility brought by the VAN, poor data capture at lower levels of the supply chain continues to delay VAN reporting and hinder supply planning. Data from the lower

levels is often incomplete with gaps in the reporting or can be delayed. In Liberia, it is a lengthy process to receive all the data from the health facilities coming through the country to the national level. This results in delayed reporting to the VAN and limits the effectiveness of decision-making when the data is unreliable or out of date. Dr. Gorpudolo-Dennis acknowledged the challenge Liberia faces around collecting data at the community level and its impact on the quality of supply planning produced through the VAN. The MOH is working with partners to improve the quality of data throughout the country's supply chain, particularly at the lower levels.

+ Conclusion

Building competence and capability in managing the public health supply chain is a journey that takes time. Networks such as the VAN, with its emphasis on connecting people, policies, processes, and technology through a common data-sharing platform enables countries to drive changes that allow them to support contraceptive security more effectively. After almost three years on its journey as a VAN member, Liberia has benefited from enhanced supply chain visibility and coordination, greater stakeholder engagement and discipline in supply chain management activities, increased accountability for supply planning, and increased ownership of supply chain decision-making. From the VAN's launch in country through the end of 2022, the Liberia team tracked 36 orders and 45 shipments, as well as resolved 10 data quality issues⁷. Nevertheless, the evolution continues as more work remains to be done in terms of VAN usage particularly as the new administration takes the helm at the Ministry of Health. The platform is also only as good as the data that is provided, and gaps remain in data quality and capture at the lower levels of the health system. Liberia is regaining the coordinated engagement around supply planning and beginning to build on that momentum as it aims to strengthen supply chain management and ownership in-country. In the words of Dr. Gorpudolo-Dennis, "the VAN is important, I would recommend it to other countries who have not yet adopted it for their supply chain for family planning."

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⁷ Country Brief: Liberia and the Global Family Planning Visibility and Analytics Network (VAN). Page 1.This case study made the decision to use examples from published resources however; there are also more recent examples and data from 2023 and 2024.