GFPVAN and GhiLMIS Integration – The Ghana Story

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Outline

MIS landscape in Ghana
Background to GFPVAN
Preparation
Implementation
Operational stage
Lessons Learned
Next Steps
MIS landscape in Ghana

Central Level
- Quantimed
- Pipeline
- DHIMS
  - Data Entry
- GhiLMIS
  - Data Entry
- GFPVAN
  - Data Entry

Regional Level
- DHIMS
  - Data Entry
- GhiLMIS
  - Data Entry
- GFPVAN
  - Data Entry

District/Facility Level
- DHIMS
  - Data Entry
- GhiLMIS
  - Data Entry
- GFPVAN
  - Data Entry

Key:
- Web-based
- Standalone
- Process action
- Data Interoperability
- Data Integration
<table>
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<th>System Name</th>
<th>Type</th>
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| DHIMS       | HMIS       | Global Fund, NORAD | • DHIMS is the local system name for DHIS2  
• Configured to capture aggregate data, and has data entered directly at the facility level  
• Currently available to all health facilities and service delivery points in 216 districts |
| GhiLMIS     | ELMIS      | Global Fund        | • Solution provides end to end supply chain functions for the Ghana supply chain from the central level to the last mile  
• Deployed at the central level and 299 Regional/District Hospitals  
• Data entered directly at facility level |
| GFPVAN      | LMIS       | “Multiple”         | • The Global Family Planning Visibility and Analytics Network is a shared web-based system used to capture and use supply chain data on Family Planning data from multiple sources and organization to provide enhanced visibility for decision-making. |
| Data Interoperability | Interoperability Layer | Global Fund | • Data interoperability between DHMIS and GhiLMIS (or any other applications used for the Ghana supply chain management) at the central level would provide the opportunity for these systems and services to create, exchange and consume data (i.e., virtualized datasets).  
• With data interoperability, MOH and GHS can utilize its data in all analytical situations and across all departments/agencies, thereby maximizing the data’s business value.  
• With virtualized datasets, data security threats are eliminated. |
| Data Integration | Integration Layer | Global Fund, RHSC | This layer integrates data from countries’ eLMIS with international procurers’ shipment data so countries can easily map their invention on hand with expected deliveries from incoming orders to maintain healthy socks of contraceptives. |
| Pipeline, QAT | Supply Planning | USAID              | Standalone supply planning tool |
| Quantimed   | Forecasting | USAID              | Standalone forecasting tool |
The Ministry of Health (MOH) aims to attain contraceptive security by ensuring that clients are able to choose, obtain and use quality contraceptives.

In 2018, Ghana Integrated Logistics Management Information System (GhiLMIS) was launched to increase visibility regarding the flow of products in-country and to expand beyond its borders to inbound shipments hence the need to connect to the greater ecosystem.

In 2019, MOH agreed to become a member of the VAN and worked to connect GhiLMIS to the VAN platform and aimed to achieve visibility from manufacturers to the last mile.
The hypothesis was that a routine connection between the two systems would improve efficiency by eradicating the manual reporting of inventory data into the VAN, and it would enable end-to-end visibility by linking incoming orders and shipments in the VAN to inventory and consumption data in the GhiLMIS.

The VAN and GHSC-PSM project teams worked with the GhiLMIS and VAN technology vendors to design and configure an automated connection between the two systems. In June 2021, the connection went live, allowing the uninterrupted flow of data.
Implementation

Similar to the GhiLMIS, integration and implementation of the VAN connection was incremental, starting from the central warehouses and later adding regional-level warehouses.

The team reconfigured tables, harmonized and mapped product and facility codes for both systems, and successfully integrated the GhiLMIS and the VAN.

Subsequently we have an end to end visibility of inventory and shipments.
Roles and responsibilities of key players for the GFPVAN and GhiLMIS integration

- **RHSC and Consensus Planning Group**: The CPG seeks to ensure better coordination between the two key institutional procurers of family planning commodities, USAID and UNFPA, and key supply chain partners.

- **S4D**: Lead System Integration of GFPVAN and GhiLMIS

- **GHS**: Forecasts future product demand and provides regular updates to donors, suppliers and other stakeholders. Analyzes data and recommends actions to make the most of available resources

- **GHSC-PSM**: Quantifies the funding gap between supply needs and available financing, and shares these with a view to mobilizing additional funds. Analyzes data and recommends actions to make the most of available resources
Operational Stage

Reduced manual data entry and improved trust in inventory data - thanks to automated data feeds that reflect inventory data from the GhiLMIS and the central warehouses and the 10 regional warehouses in the VAN at the end of every month.

Improved data visualization and data analysis now that requisition, order, shipment, consumption, and inventory data are available in one single view. A favorite dashboard is Ghana’s supply outlook and consumption outlook across a defined period.
Operational Stage

Easy access to the VAN visual roll-up that tracks planned and incoming shipments against consumption and inventory, flagging product over- or under-stocks against the supply plan; Visibility to trend in consumption and stock-outs over time against requests/orders; Use of the scenario builder in the platform to plan out future orders; and Increased donor visibility and collaboration, and improved coordination with PPAG and MSIG.

The government of Ghana is the first to connect its country’s e-LMIS and attained the status of Premium+. We are committed to documenting and sharing experiences with other countries and to increasing the use of VAN data across our RH partners.
Lessons Learned

Good stakeholder engagement and the stewardship of the ministry of health from the beginning are key to a successful integration.

Implementing the system integration functionality require commitment to reviewing and improving processes. Therefore, unclear roles and responsibilities cause confusion and derail progress.
Lessons Learned

• The need to conduct series of discussions to clarify data flow and data integrity between internal country systems and those shared with system outside the country.

• Real-time and correct data is essential in supporting timely decisions-making.
Next Steps

Stakeholders should continue to communicate to ensure smooth data feed and good use of the VAN.

Country Planners should continue to work to ensure correct and validated data is available in the GhiLMIS.

Funding deficit of $12,500 for Ghana premium membership from July 2024 to June 2025. Exploring partnership options to cover this funding gap.