



CHISU Results in Action

Improving the health and supply chain systems to increase commodity availability in Saint Vincent and the Grenadines

December 2023

Background

The Saint Vincent and the Grenadines (SVG) Ministry Of Health, Wellness and Environment (MOHWE) implemented the St. Vincent and the Grenadines Health Information System (SVGHIS) in 2010, with a focus on supporting the automation of health information needs. SVGHIS is the only health information system (HIS) in the country and is built on a proprietary software called Populus (Accesstec Inc.).

However, SVG is experiencing challenges in health commodity availability at the service delivery points. While the country's supply chain only contains two tiers (a central/national medical commodities warehouse and the health facilities themselves), several obstacles exist to understanding and effectively balancing supply and demand for health commodities.

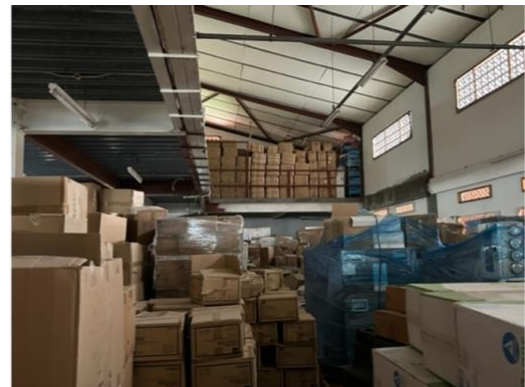
In July 2023, a CHISU supply chain specialist and an information technology expert traveled to SVG to assess these obstacles and make recommendations to improve commodity management and availability at health facilities nationwide. The team visited the central medical warehouse and several health facilities that the central warehouse provisions to understand the flow of commodities, the inventory strategy for managing them, and how SVGHIS supports these efforts.

Country Health Information Systems and Data Use (CHISU) is USAID's flagship data and information system program to strengthen host country capacity and leadership to manage and use health information systems to improve evidence-based decision-making. www.chisuprogram.org

Steps Taken

CHISU found that two key factors hampered supply chain management:

1. The existing SVGHIS is a custom-developed application first implemented about 13 years ago, and supply chain management is the only widely used functionality of the country's HIS. Some limitations in the Electronic Health Record and Supply Chain Management modules that health facilities and Central Medical Stores were using contributed to commodities being unavailable. Shortcomings included a lack of nationwide health commodity stock visibility at MOHWE; a lack of key supply chain metrics; inaccessibility of information for reporting and analysis; and a custom software development that was not structured around supply chain best practices.
2. SVG has a shortage of warehouse storage space, which contributed to significant challenges in inventory management.



In addition, MOHWE manages different classes of commodities—like vaccines, emergency supplies, medicines, and more for programs such as nutrition, family planning, and immunizations—as separate supply chains, so significant supply chain improvements could be made by consolidating functions like inventory management and transportation.

CHISU created process diagrams to address these issues, which capture existing commodity provisioning, management, and transportation methods. Based on observations, the team also developed a list of improvement opportunities that could mitigate some of the supply chain and system challenges currently affecting health commodities' availability.

Additionally, CHISU led a three-day workshop with senior decision makers and functional leaders (nursing, old age care, vaccination, warehousing, IT, etc.) to present findings, review and prioritize opportunities, and develop the new HIS.

Requirements for an end-to-end IT infrastructure—a set of systems that manages the exchange of data across the entire supply chain to provide visibility—were discussed. Meeting these requirements necessitates three unique systems to support the delivery of health commodities: a Warehouse Management System (WMS) for the Central Medical Store (CMS); an electronic logistics management information system (eLMIS) facilitating communication between CMS and health facilities; and facility-level health management information systems to replace the SVGHIS currently in use. All three of these systems are required in a well-functioning supply chain since no one system alone

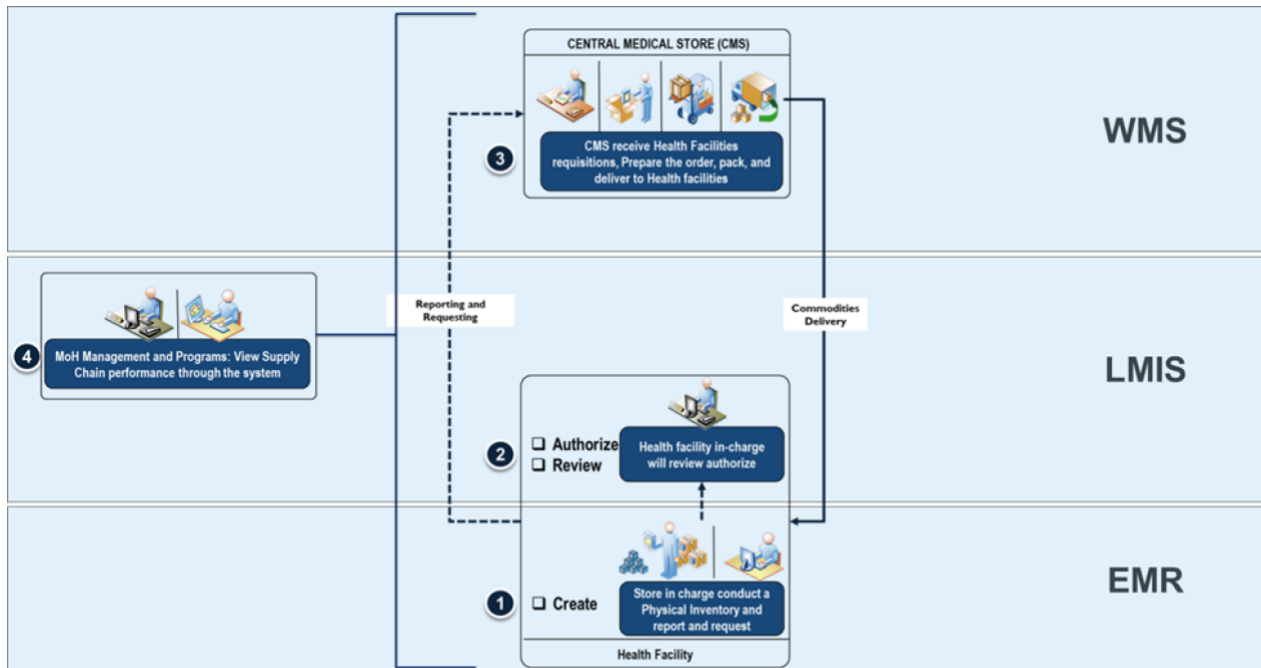


Diagram illustrating IT systems supporting SVG's supply chain processes

can provide all the functionality that is required to ensure inventory visibility across the entire system. The main objective of this new system's architecture is to establish a single, reliable source of truth for supply chain data, and these modules will collectively support the collection and sharing of this data. While these three systems could be implemented simultaneously, best practice suggests that separate, well-considered implementations are more likely to succeed.

The workshop sessions were highly interactive, and attendees generated, validated, and prioritized improvement ideas for SVGHIS and the supply chain. Participants identified two areas of opportunity that would have the biggest impact on commodity availability: 1) improving inventory management at all levels of the supply chain through improved processes and more efficient use of warehousing capacity, and 2) deploying a new integrated system more closely aligned with user requirements to support improved health commodity availability.



Participants attend a three-day supply chain and information technology (IT) systems workshop in SVG.

Results + Next Steps

In response to the priorities identified during the workshop, CHISU developed and shared a comprehensive Supply Chain Management Action Plan and Roadmap with the MOHWE management for implementation. Noteworthy recommendations stemming from the workshop included pivotal strategies like consolidating storage facilities to accommodate all commodities across various programs, conducting an ABC analysis for inventory items, executing routine physical inventory assessments, and establishing protocols for disposing of expired or surplus commodities.

Furthermore, the proposal advocated for integrating a WMIS at central medical storage facilities and adopting an eLMIS for enhanced tracking and reporting capabilities as discussed during the CHISU-supported workshop. Developing standardized operating procedures (SOPs) was also highlighted as essential in the proposal. In parallel, CHISU supported the MOHWE by delineating comprehensive business requirements for an end-to-end HIS, which is anticipated to significantly increase the country's health care supply chain efficiency. In the coming months, CHISU will support MOHWE to identify a set of systems that meet SVG's requirements, and to improve the inventory management operations of the CMS through better processes, data capture, and data exchange.



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