

## LMIS Solutions for Transforming Public Health Supply Chains



Empower



## LMIS SOLUTIONS FOR TRANSFORMING PUBLIC HEALTH SUPPLY CHAINS

Enable and foster an environment of transition from a paper-based system of data management to an electronic format for ensuring better, faster and accurate reporting of supply chain data, reducing stockouts of health commodities, and providing better access to medicines to improve health outcomes

### BACKGROUND

Health programs rely on supply chains for adequate quantities and quality of health products for their patients. To meet patient demand and improve health outcomes, some countries developed electronic logistics management information systems (eLMIS) that include most major health programs in the country and link health facilities with the central stores to collect and distribute logistics data in real time. Knowing which medicines are used and which medicines are required helps health supply chain managers in maintaining continuity of supply to the last mile. A strong eLMIS can ensure data visibility throughout each function, and essential logistics data can be communicated to supply chain managers for decision making. Information is the engine that drives the logistics cycle; without information, the logistics system would not run smoothly. Further, as eLMIS systems evolve they offer greater automation functionalities, improving efficiency of operations and reducing costs over the long run.

With the introduction of the eLMIS, program managers now have quicker access to aggregate specific data at their fingertips. With electronic reports, automated approval workflows, and features like email/ short message service (SMS) notifications, processing time for requisitions has dramatically decreased. An eLMIS enables district health management teams to easily identify overstock and understock situations and then to redistribute stock to meet patient needs and reduce losses through commodity expiry. Additionally, data is visible to authorized users throughout the product supply chain, allowing managers to pinpoint where supportive supervision may be necessary to assist their staff. For program managers, policymakers, donors, and implementing partners, dashboards and detailed management reports streamline the aggregate nationwide raw data, making it easier to process for decision making.

### EMPOWER OFFERINGS

Empower has been actively engaged in providing services and solutions for design, evaluation and effective roll out of eLMIS for its key partners and clients. The solutions designed by Empower have widely helped clients in areas like improving supply chain efficiency in transportation and distribution planning, mitigating and managing stock-out risks, inventory management and improving order management at the last mile. The core areas where we provide solutions are:

**eLMIS Landscape Study-** conducting assessment and feasibility studies for introducing eLMIS and analyse the factors in implementing the eLMIS deliberately and carefully, department by department—i.e., procurement, warehousing, finance tracking, etc.—to ensure that each team is completely benefited and on-boarded before moving to the next step. Drawing up the plans for system development and deployment with timelines, responsibilities and budgets

**LMIS Design & Selection-** Identify the user requirements and develop the functional and technical specifications. Determine how well a new piece of software or existing solutions such as open LMIS, m-Supply, Logistimo etc can be integrated with the current processes, people and infrastructure. Check compatibility with other supply chain software or HMIS implemented in the country. Align the design to country/program policies, guidelines, processes and goals

**LMIS Development and Implementation-** Manage and own the entire project of developing and deploying eLMIS solution in the country. Help the program to select and on-board vendors, develop detailed system specifications and use cases. Oversee the development process and ensure timely deliverables by the software vendors. Lead user acceptance testing and pilot rollouts. Train and handover the system to program staff. Plan and execute full-scale rollouts.

**System Integration of all LMIS- supply chain solutions and LMIS in the country-** We evaluate the level of compatibility of the LMIS with other existing systems and detail the integration specs. Besides integrating the sensitive data and the multifunctional uses of various applications also ensure re-alignment of processes and people with due training for a successful interlinkage.

**Data reporting and dashboards-** designing web-based dashboards for managers, enabling them to visualize data from across supply chain and health systems covering all locations and product categories. Generate reports on key operational and performance indicators, including stock status, stock aging, consumption, etc.

## EXPERIENCES

### **Online Logistics Information System - Zimbabwe**

Empower with MOHCC Zimbabwe worked to develop an online integrated supply chain system in the form an eLMIS to manage health commodities and equipment across supply chain functionalities.

The broad scope of the consulting project was:

- Gathered user requirements and assessed and analysed the local fragmented systems in use. Compared with the Rwanda and Zambia system as per reports available and gauged the suitability to the Zimbabwean context
- Finalized functional, technical and integration specification for the eLMIS and analyse the existing requirements and related documentation while taking into consideration stakeholder inputs to recommend an appropriate eLMIS system.
- Prepared a detailed implementation plan and costing of the project including each component such as software licensing, customisation, hardware, network & internet addition/up-gradation, installation, training, technical support

### **Implementation of the eZICS (Enhanced Zambia Inventory Control System) Software for Medical Stores Limited, Zambia and the Health Sector**

Empower successfully rolled out the powerful inventory management system at MSL to automate and enhance the core inventory management processes. eZICS was rolled out in 60 facilities across the country by the Empower team and MSL team jointly. Following was executed as part of the scope of the project:

- Liaise with the eZICS vendor (IBM) for development and user acceptance testing to ensure the system is developed optimally in the process also detailing and refining the system specifications
- Develop the M&E and reporting framework for the eZICS project (activities, costs, etc) and develop guidelines for pilot roll out of eZICS
- Develop the eZICS project costed implementation plan and coordinate meetings with stakeholders related to eZICS project
- Oversight the rollout and conducted training of users and administrators

### LMIS Integration through dashboard in India's HIV AIDS programme

Empower has worked with National AIDS Control Organization and developed the National Strategy for Procurement and Supply Chain for the programme which included strengthening plan for state AIDS societies. A key requirement was to integrate 11 systems including two eLMIS systems to streamline the data management and supply chain operations. Empower developed an integrated dashboard for supply chain decision making pulling real-time data from numerous systems into a secure database and dashboard. Description of actual services provided within the assignment:

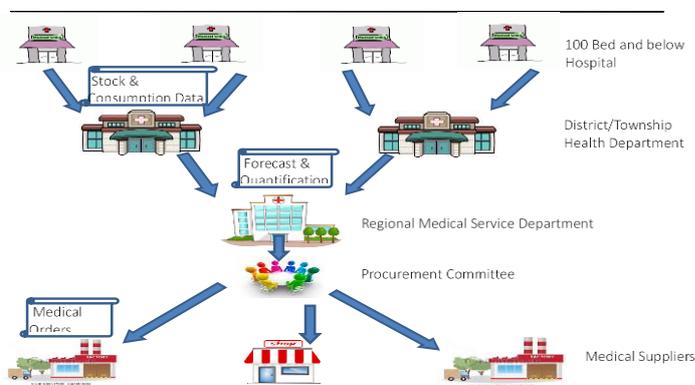


- Conducted a detailed assessment study of the existing procurement and supply chain system across the country, with an in-depth focus on data capture and quality
- Integrated data from IMS & SIMS LMIS systems (besides several other systems) to produce detailed analytics and reports through a data warehouse solution
- Developed an approach for establishing a ‘dashboard for decision-making’ by leveraging

existing information systems or recommending the development of ‘add on’ features to those systems

- Oversight the development, deployment and training of the dashboard to program

### Training on LMIS in Myanmar



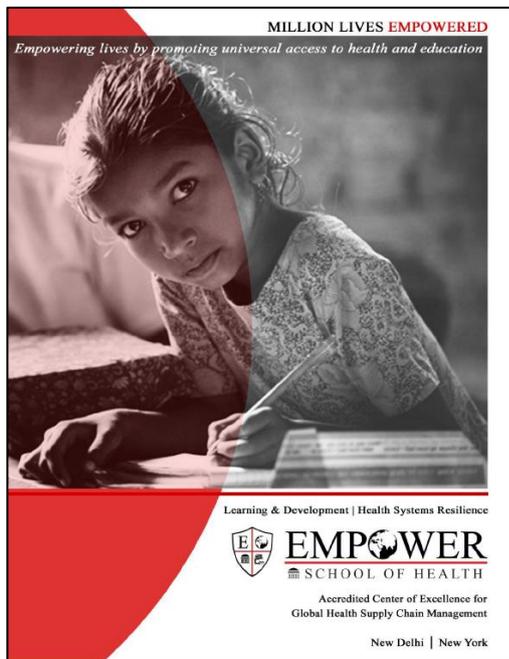
- Empower covered general principles of LMIS
- Leveraging information for decision making from Logistimo and m-Supply systems
- Practical elements of implementing and using LMIS solutions

## High level LMIS Advisory for Timor Leste (Project in Progress)



- High level assessment of country LMIS needs
- Analysis of existing and alternate systems
- Key recommendation on future LMIS strategy and roadmap

## ABOUT EMPOWER



Empower is a leading global organization focused on the area Public Health Procurement & Supply Chain. The key PSM solutions from Empower include:

- Research and Technical Assistance
- Learning and Development for building human resource capacity
- Supply chain operations consulting
- Health Systems Strengthening

Empower has executed diverse projects in supply chain consulting which include diagnostic studies, strategy development, process improvement, LMIS and technology implementation, supply chain network redesign, warehouse engineering, new product introduction, market shaping studies and projects etc. across all areas of the supply chain from product

selection to rational use of commodities in the last mile.

## KEY PARTNERS



**Microware** has over two decades of experience across health, livelihoods and Education. Microware engages with UN agencies, government, bilateral and multi-lateral funding agencies as well as foundations and international and domestic NGOs. Microware provides solutions that work across multiple geographies and technologies, including off-line, mobile and on-line systems in diverse domains like, water and sanitation (WASH), rural livelihoods, education, health, child nutrition and women empowerment.



**Techno Brain** is an African IT company that provides innovative solutions to advance the way organizations do business. Assessed at CMMI Level 5 and with operations in 19 African countries and 23 countries worldwide, Techno Brain provides industry leading technology solutions to local governments, ministries, not-for-profit agencies and private sector enterprises across the African continent and worldwide.

#### CONTACT

[www.empoweringmillions.org](http://www.empoweringmillions.org)  
[info@empowerschoolofhealth.org](mailto:info@empowerschoolofhealth.org)  
+91 95.99.83.50.01