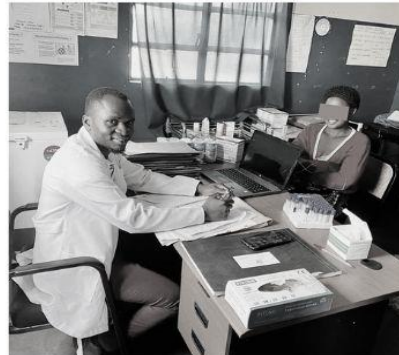# ANNUAL PROGRESS REPORT

USAID Electronic Supply Chain Management Information System (eSCMIS) Project

20 23

1 October 2022 - 30 September 2023

CONTENTS

ACRONYMS

AIDSFree	Strengthening High Impact Interventions for an AIDS-free Generation
ART	Antiretroviral Therapy
CCB	Change Control Board
CE	Central edition
CHAZ	Churches Health Association of Zambia
CIDRZ	Center for Infectious Disease Research in Zambia
CRM	Client Resource Management
DHO	District Health Office
eLMIS	Electronic Logistics Management Information System
eSCMIS	Electronic Supply Chain Management Information System
FE	Facility edition
FY	Fiscal year
G2G	Government-to-government
GRN	Goods received note
GRZ	Government of the Republic of Zambia
GHSC PSM	Global Health Supply Chain Program - Procurement and Supply Management project
ICT	Information, Communication, Technology
IMPACT	Information Mobilized for Performance Analysis and Continuous Transformation
IR	Intermediate result
JSH	John Snow Health Zambia Limited
JSI	John Snow, Inc.
LAN	Local area network
M&E	Monitoring and evaluation
MEL	Monitoring, evaluation, and learning
MOH	Ministry of Health
OJT	On-the-job training
PEPFAR	United States President's Emergency Plan for AIDS Relief
PHO	Provincial Health Office
PPP	Public-private partnership
R&R	Report and requisition
SO	Strategic objective
TSS	Technical supportive supervision
TWG	Technical working group
USAID	United States Agency for International Development
ZAMMSA	Zambia Medicines and Medical Supplies Agency
ZICTA	Zambia Information, Communication, and Technology Agency

PROJECT OVERVIEW

The USAID eSCMIS project supports the Government of the Republic of Zambia (GRZ) and the Ministry of Health (MOH) in enhancing supply chain efficiency through digitalization. This project aims to ensure an adequate quantity and quality of essential medications, medical supplies, laboratory commodities, malaria, HIV, and family planning products are readily available at healthcare facilities in Zambia. The project aims to establish a safe, secure, reliable, and sustainable automated supply chain.

Digitization has revolutionized Zambia's healthcare supply chains. A digital health supply chain fosters efficiency and streamlines work processes by automating and enhancing decision-making capabilities. Technology-based solutions and operations have significantly increased the productivity of supply chain personnel.

The five-year USAID eSCMIS project builds upon the success of Zambia's eLMIS, which was initially established by John Snow Inc. (JSI) through its USAID-funded projects, the USAID | DELIVER PROJECT, SCMS, and AIDSFree projects, in collaboration with the MOH, ZAMMSA, and other critical supply chain partners. Through the USAID eSCMIS project, John Snow Health Zambia Limited (JSH) is responsible for facilitating the transition of the eLMIS to the next-generation logistics information system. JSH is the prime contractor for the USAID eSCMIS project. JSI and the Churches Health Association of Zambia (CHAZ) are subcontractors.

USAID eSCMIS PROJECT YEAR 4

This report provides an overview of the fourth-year activities (October 2022–September 2023) carried out by the U.S. Agency for International Development (USAID) Electronic Supply Chain Management Information System (eSCMIS) project. Over this period, the project focused on digitizing Zambia's healthcare supply chain, aiming to extend its impact to communities, healthcare personnel, public and private facilities, and public health administrative units. Collaborating with the MOH, the project surpassed its FY23 goal by deploying the Electronic Logistics Management Information System (eLMIS) to 181 healthcare facilities, achieving 109% of its target, with the MOH playing a pivotal role in 94.5% of deployments. Since FY2020, 966 eLMIS Facility Edition (FE) deployments and training for 5,100 MOH staff have been completed. The project addressed challenges, conducted a mid-term review, and focused on integrating eLMIS with SmartCare+ and ZAMMSA's WHXpert system (the warehouse management system). Efforts were made to transition eLMIS leadership to the MOH, achieving 50% facility coverage and engaging key stakeholders, including presenting at the Zambia Medical Doctors Conference to promote proper system utilization at all government levels.

The project is making significant gains to meet its three goals: 1) implement the next-generation eLMIS; 2) enable GRZ to make data-driven supply chain decisions independently; and 3) transfer eLMIS to GRZ to own its data and reporting systems.

Impact Snapshot

966
eLMIS FE deployments by USAID eSCMIS project

5100
MOH staff trained in eLMIS use

1643
Total number of eLMIS sites in the country

IMPLEMENTATION OF THE NEXT GENERATION eLMIS

The primary aim of the national health logistics system is to guarantee the ready availability of essential commodities at health facilities, thus improving patient care efficiency. An effective logistics system plays a vital role in achieving this goal. The USAID eSCMIS project partners with the GRZ and its MOH to ensure that commodities are consistently accessible at health facilities. This commodity accessibility, in turn, leads to enhanced health outcomes for individuals and communities. The project accomplishes this by creating, deploying, and maintaining a robust electronic system that supports a secure, dependable, and sustainable supply chain.

Deployments

109%
Achievement rate this year

By the end of the fiscal year 2023, the USAID eSCMIS project, in collaboration with MOH eLMIS champions and super users, successfully expanded the eLMIS FE system to 181 additional health facilities. This growth surpassed the annual target by 109%, with 94.5% of the deployments achieved through MOH super users and champions, demonstrating progress towards a phased transition of activities to the Ministry of Health. Additionally, MOH super users and champions played a significant role in conducting on-the-job training and providing technical support, completing 98% of the sessions conducted for the fiscal year.

Enhancements

89%
Achieved over the life of project

The USAID eSCMIS project successfully completed 18 eLMIS system enhancements. Although falling short of the annual target, these enhancements contribute to 217 (89%) achievements over the project's lifespan. Additionally, 53 more enhancements were implemented through submissions to the change control board during the same fiscal year. The eLMIS FE underwent three version upgrades, allowing health facility staff to view order fulfillment rates based on supplies initiated by ZAMMSA at the central level. These efforts aim to ensure ongoing user satisfaction and improve the system's functionality.

Technical Support and Supervision

80%
Support requests resolved remotely this year within one week of being reported

In FY2023, the USAID eSCMIS project provided remote support to over 1,500 health facilities in Zambia through a cost-effective model, using tools like a call center and software such as AnyDesk and TeamViewer. With over 3,000 support requests, 80% were resolved remotely within the first week of being reported.
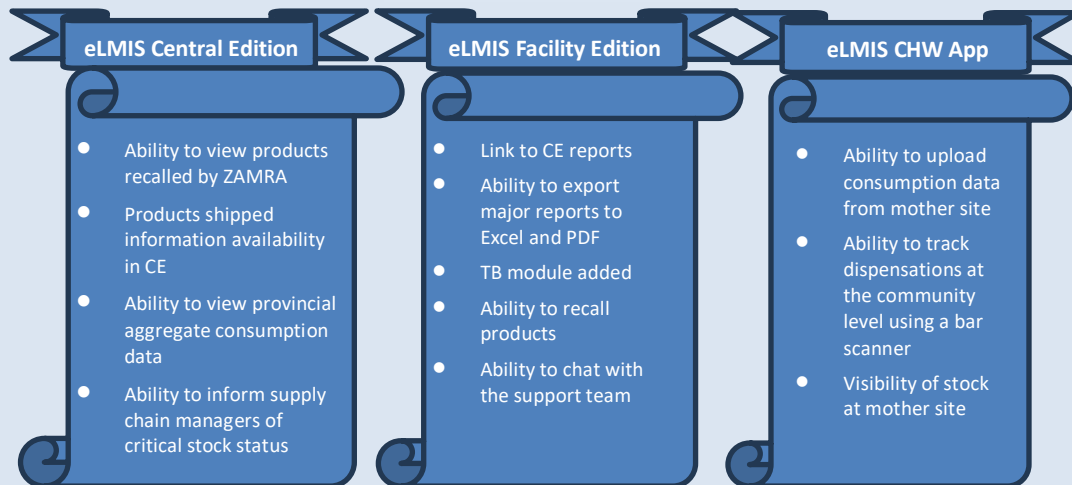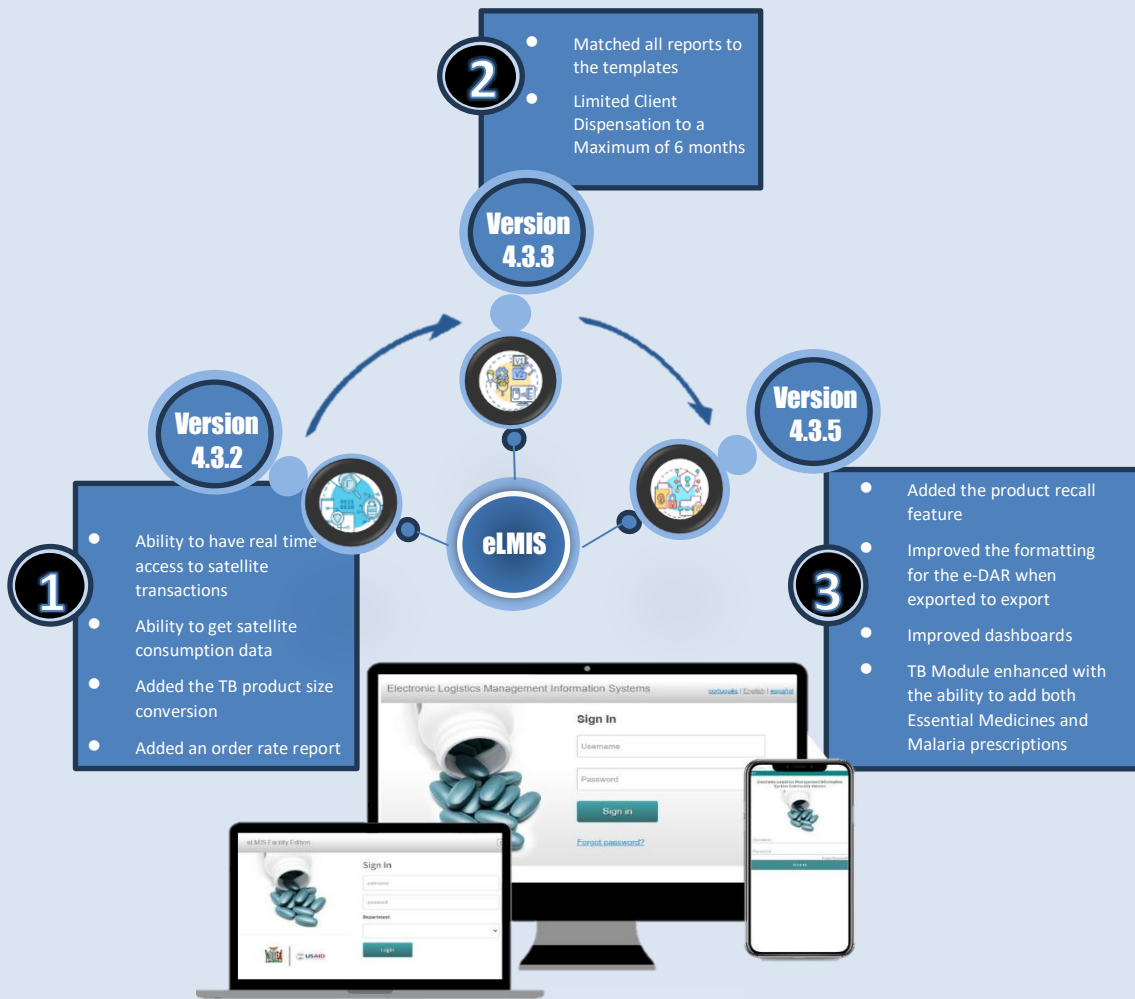
Monitoring and Evaluation

The USAID eSCMIS project prioritizes performance monitoring throughout its lifecycle, tracking key indicators like deployments and training to ensure project alignment. In the past fiscal year, activities included health facility visits, comprehensive desk reviews, and evaluations. A targeted monitoring initiative covered 134 health facilities, utilizing a hybrid approach of physical and virtual assessments, leading to recommendations for improvement. An evaluation and mid-term review involving 101 randomly selected facilities used qualitative and quantitative methods. Findings will be shared with USAID in FY2024, highlighting the project's commitment to systematic assessment and improvement.

Moses Chisenga, USAID eSCMIS project, giving TSS and OJT at a Health Facility in Nakonde District

eLMIS SYSTEM ENHANCEMENTS AND UPGRADES

2
- Matched all reports to the templates
- Limited Client Dispensation to a Maximum of 6 months

Version 4.3.3

Version 4.3.2

Version 4.3.5

eLMIS

1
- Ability to have real time access to satellite transactions
- Ability to get satellite consumption data
- Added the TB product size conversion
- Added an order rate report

3
- Added the product recall feature
- Improved the formatting for the e-DAR when exported to export
- Improved dashboards
- TB Module enhanced with the ability to add both Essential Medicines and Malaria prescriptions

Electronic Logistics Management Information Systems

Sign In

Username

Password

Sign in

Forgot password?

eLMIS Facility Edition

Sign In

username

password

Department

Login

eLMIS Central Edition
- Ability to view products recalled by ZAMRA
- Products shipped information availability in CE
- Ability to view provincial aggregate consumption data
- Ability to inform supply chain managers of critical stock status

eLMIS Facility Edition
- Link to CE reports
- Ability to export major reports to Excel and PDF
- TB module added
- Ability to recall products
- Ability to chat with the support team

eLMIS CHW App
- Ability to upload consumption data from mother site
- Ability to track dispensations at the community level using a bar scanner
- Visibility of stock at mother site

ENABLE GRZ TO MAKE DATA-DRIVEN SUPPLY CHAIN DECISIONS INDEPENDENTLY

System Harmonization

In FY2023, the USAID eSCMIS project achieved significant milestones in system integration efforts. Collaborating with MOH, ZAMMSA, and USAID's GHSC-PSM, eLMIS was successfully integrated with ZAMMSA's warehouse management system (WMS), facilitated by consultant APEX. The project also sustained efforts to integrate eLMIS and SmartCare+ seamlessly at health facilities in partnership with the Institute of Health Management (IHM), addressing challenges during pilot testing. Additionally, the project collaborated with MOH and supply chain partners to integrate the Tuberculosis (TB) logistics system into eLMIS, which is currently in a pilot phase. Furthermore, the project is actively working with MOH to integrate eLMIS data into the MOH Data Warehouse, aiming for comprehensive data visibility across different health systems for analytics and analysis. These initiatives reflect the project's commitment to enhancing healthcare logistics and information management in Zambia.

Implementation of the IMPACT Teams

In FY2022, Zambia's MOH collaborated with partners to advance digital health systems, particularly the eLMIS, for improved health logistics management. The MOH introduced Information Mobilization for Performance Analysis and Continuous Transformation (IMPACT) teams to enhance the impact of life-saving information generated by the system. These teams, aligned with the Sustainability and Transition Plan (SaTP), aim to foster a "data culture" among supply chain managers at various levels. In FY2023, efforts to institutionalize the IMPACT teams faced delays as a meeting among provincial chief pharmacists was postponed. In collaboration with its subcontractor the Churches Association of Zambia, the project engaged the Districts Medicines and Therapeutics Committees in Eastern Province to pilot the IMPACT team strategy. Plans are underway to implement the model in Q1 FY2024, with ongoing efforts to secure a meeting with Provincial Chief Pharmacists to further advance the initiative.

Pharmacist conducting physical count of health commodities in health facility store room

TRANSITION LEADERSHIP OF eLMIS IMPLEMENTATION AND SUPPORT TO MOH AND ENSURE GRZ CAN TAKE OWNERSHIP OF ITS DATA AND REPORTING SYSTEMS

Sustainability and Transition

The USAID eSCMIS project has been instrumental in developing and executing a SaTP to ensure the ongoing maintenance and support of the eLMIS system. The plan gradually transitions project activities to the GRZ, primarily through the MOH. Thematic areas include leadership, governance, financing, capacity building, and Information, Communication, and Technology (ICT) support. In FY2023, the project collaborated with the MOH to update the SaTP, gaining approval from both MOH and USAID. Over the first three years, the project enhanced the MOH's capacity, independently networking 34% of the 966 deployed facilities. The SaTP, monitored through a sustainability continuum, guides the transition's progress. Additionally, the project introduced an eLearning platform on Moodle, providing self-paced training for eLMIS users and stakeholders. The platform's content was tested internally in FY2023, with the rollout planned for FY2024 reinforcing the project's commitment to sustainable capacity building.

Public-Private Partnerships

In FY2023, the USAID eSCMIS project collaborated with the MOH to develop a public-private partnership (PPP) strategy, addressing leadership, governance, financing, capacity building, and ICT support. While no formal PPPs have been signed, initiatives are in progress, including television white space technology for rural connectivity and renewable energy solutions for off-grid sites. The project actively manages electronic waste through an approved plan involving MOH supervision and partnerships with e-waste management companies. A new eLearning platform on Moodle was introduced for self-paced training. Ongoing efforts focus on sustainable practices, equipment tracking, and minimizing electronic waste.

External Collaboration with Partners and Donors

In FY2023, the USAID eSCMIS project actively collaborated with various partners and donors to enhance healthcare supply chain management in Zambia. Partnerships included working with the National Malaria Elimination Center to address supply challenges using a logistics seasonality index algorithm. The project convened with UNICEF and other key partners to strategize the adoption of Tanzania's Vaccines Information Management System (VIMS), exploring alternatives like the OpenLMIS Vaccine module due to funding considerations. Collaboration with Zambia Medicines Regulatory Authority involved implementing a GS1 barcode system for medicines and supplies. The project also contributed to establishing a last-mile distribution system for condoms in collaboration with the United Nations Population Fund (UNFPA), Global Fund, and other stakeholders. Furthermore, a partnership with the University of Zambia focused on developing modules for postgraduate health supply chain management programs. These collaborations demonstrate the project's commitment to improving healthcare logistics through innovative strategies and partnerships.

Implementation Challenges and Lessons Learned

This report section focuses on the significant challenges faced and the valuable lessons learned while implementing the USAID eSCMIS project activities in FY2023. By thoughtfully analyzing these challenges and documenting the lessons, positive adjustments and realignment of the project's course to better align with its overarching goals and objectives have been possible.

eLMIS and SmartCare+ Integration

The integration of eLMIS with SmartCare+ has consistently aimed to enhance the efficiency of business processes at health facilities by eliminating the duplication of efforts in updating both systems. While the benefits of this integration are clear, the progress in achieving it has been slow, with notable advancements made in FY2023. A pilot program involving three health facilities in Lusaka—Chainda, Mwembeshi, and Railway Clinic—has been underway. The USAID eSCMIS project and IHM are collaborating closely to ensure the success of this pilot program.

IMPACT Teams Implementation

In the latter half of FY2023, the USAID eSCMIS project focused on the phased implementation of the IMPACT team to assess its feasibility. Following guidance from the Director of Clinical Care Services, the project initiated discussions with the Eastern Provincial Health office. These discussions centered on the potential implementation of a pilot IMPACT strategy through the medicines and therapeutics committee of the province to eventually scale it up to all ten provinces. Progress in implementing this plan has been slow, primarily due to the inability to hold meetings with key MOH staff to finalize the implementation approach.

Public Private Partnerships

The implementation of public-private partnerships (PPPs) has the potential to bring numerous benefits to the targeted community. These advantages are substantial. However, realizing PPPs requires a significant capital investment and demands a delicate equilibrium between serving public interests and profit motives.

In response to an identified necessity for providing alternative energy and internet access to health facilities not connected to the national grid, the USAID eSCMIS project, in collaboration with Crown Agents, answered a call for concepts. The goal was to harness the combined strengths of the public and private sectors to meet the community's needs. Nevertheless, it's important to acknowledge that implementing PPPs is intricate and time-consuming, involving complex negotiations that take time to come to fruition.

Looking Forward

FY2023 has been a pivotal year for the five-year life of the project. Utilizing lessons learned, feedback from the mid-term review and evaluation, and sustainability and transition plan discussions, the USAID eSCMIS project adopted a collaboration, learning, and adaptation approach to continuous improvement. In FY2024, the project will continue its collaborative efforts with the MOH, USAID, and other implementing partners to ensure the long-term viability of the eLMIS in Zambia. Below is an extract of crucial activities scheduled for FY2024, the final full year of the project implementation.

Objective 1: Implement a next-generation eLMIS

- Complete incorporation and deployment of all required eLMIS suite enhancements, including all integrations, GS1 serialization requirements, and analytics.
- Continue to build a community of local software programmers to support the software after completing the project.
- Complete deployment of eLMIS FE to 1,000+ health facilities.
- Provide strategic TSS to sites with FE and CE users.

Objective 2: Enable GRZ to make data-driven supply chain decisions independently

- Roll out eLMIS and SmartCare+ integration to additional health facilities (funding pending).
- Deploy eLMIS and WHXpert integration at ZAMMSA.
- Improve analytics and data visualization through strategic interactions with MOH.
- Promote data use for decision-making through the IMPACT team strategy.

Objective 3: Complete the transition of eLMIS activities to MOH leadership

- Update and implement the sustainability and transition plan to enhance the capacity of the GRZ to own and operate the eLMIS.
- Implement key activities from the sustainability and transition plan, such as rolling out the MOH eLMIS eLearning platform.
- Meet with ten provincial MOH teams to map transition activities and responsibilities.
- Pilot TVWS in select health facilities and source funding to support the rollout.
- If the HETA application is funded, pilot the proposed solar initiative in 10 health facilities with Crown Agents.
- Complete all project close-out activities required in the fiscal year.
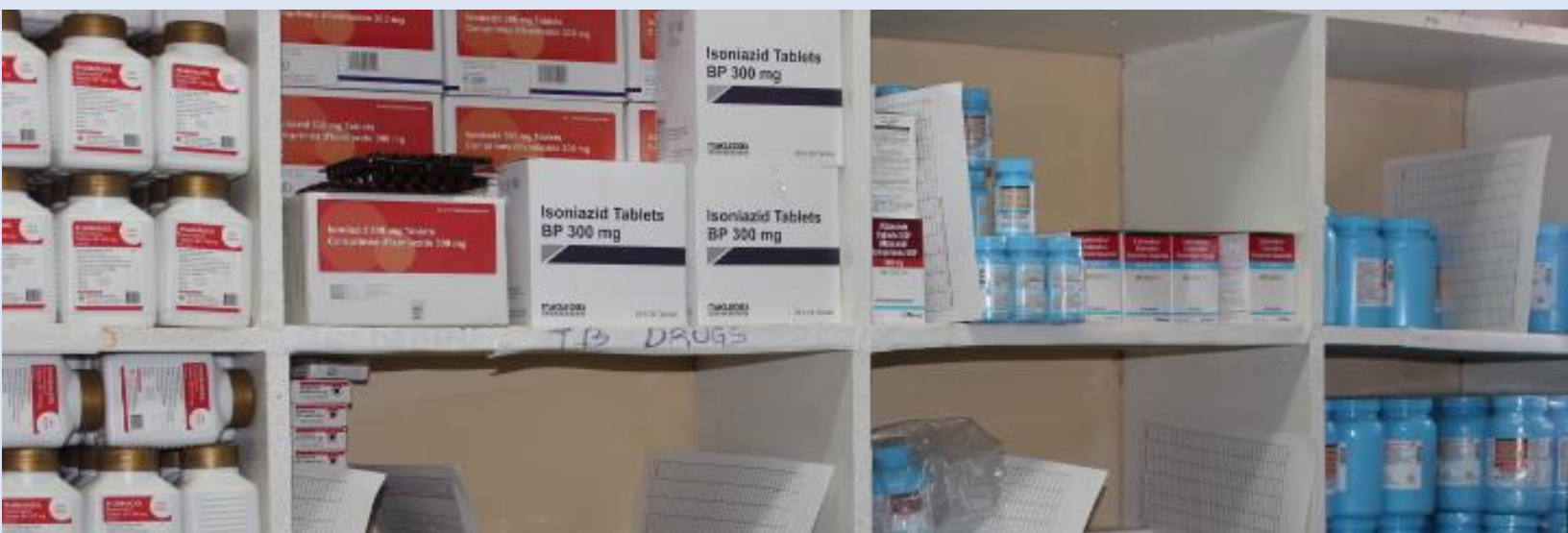
STORIES OF IMPACT

Leveraging Social Networking for Cascading Capacity Building in the Management of the Electronic Logistics Management Information System

Electronic health systems worldwide continue to standardize procedures and develop more efficient and effective services thanks to the combination of innovation and technology. To facilitate better, faster, and more accurate supply chain data reporting and decrease commodity stockouts, Zambia has switched from a paper-based system to an eLMIS to manage the logistics of its public health commodities. System maintenance depends on equipping MOH employees with the knowledge and abilities to run it at all levels, from the central office to individual facilities.
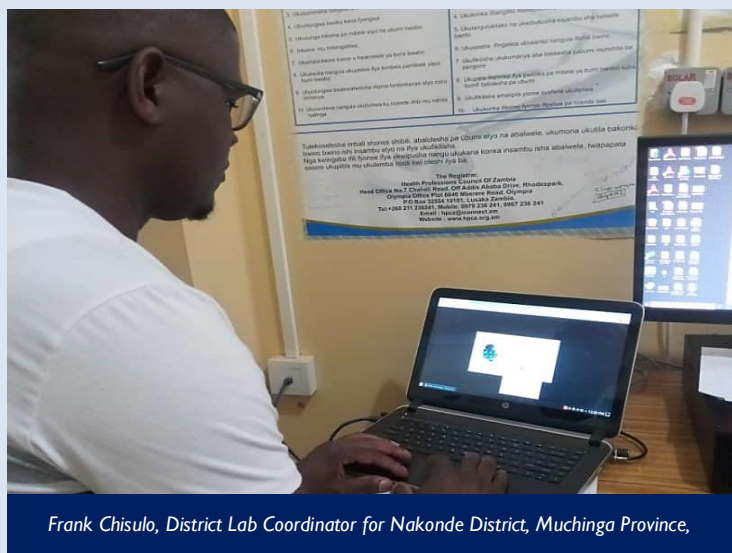
Frank Chisulo, District Lab Coordinator for Nakonde District, Muchinga Province,

The mission of the eSCMIS project, funded by USAID and PEPFAR, is to prepare the MOH to take over ownership of the system by enhancing the MOH's capacity to manage it. The project utilizes peer-to-peer orientation, which allows users who have already demonstrated proficiency with the eLMIS to train other MOH staff. The eLMIS helpdesk WhatsApp groups have been an invaluable resource for facilitating informal training among colleagues. These are provincial WhatsApp groups comprised of MOH staff from different health system levels who use the system and project support staff.
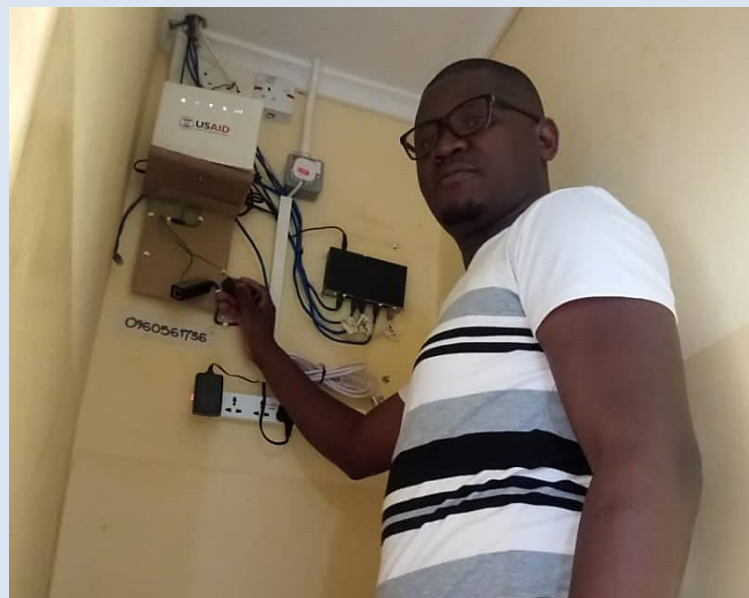
The project has always prioritized training MOH staff to implement, provide support for, and manage the system. By bringing MOH staff along on deployments and teaching them how to provide technical support and supervision for the system, MOH staff in various regions are increasingly providing remote support to other MOH staff using the provincial WhatsApp groups. Mr. Frank Chisulo of the Nakonde district in Muchinga province is one such example of a MOH trainer and eLMIS support person.

"The first time I got hands-on experience with technical support for the eLMIS was with another Ministry counterpart, Mr. Moono Chilinda. He had come to the district to migrate the eLMIS FE to the web-based version, and seeing how I had already been assisting my colleagues with issues I knew how to solve through the provincial WhatsApp groups, he asked me to tag along in assisting him in migrating the system," says Frank Chisulo, District Lab Coordinator for Nakonde district.

"I recall coming home for holidays in 2017 while I was in school upgrading my qualifications so I could move from laboratory technologist to laboratory scientist. I visited the district hospital where I work and learned that the hospital had been deployed with the eLMIS," Chisulo says. "I've long advocated for an electronic system to manage lab commodities, so this was very exciting. But it wasn't until I graduated in September 2019 that I learned how to use the eLMIS."

"I took a big interest in the system and even worked with other program areas aside from lab commodities so I could familiarize myself with it," Chisulo says. "I found myself doing transactions on the system on a daily basis, and before long, I was training staff at my facility on features they were unfamiliar with."

"The province has an eLMIS help desk WhatsApp group where you can find almost all eLMIS users in the province. I normally would go there to ask for assistance from my colleagues and project support staff. It is a community, and we all help each other," says Chisulo. "Before long, I was also helping anyone I could on issues I knew how to handle." Mr. Abraham Banda, the eSCMIS project key support person for Muchinga province, noticed this and asked me to accompany him on deployments in the district so I could get more hands-on experience with support and deployment of the system."

Frank Chisulo, checking the eLMIS router connection at Nakonde District Hospital.

Chisulo has since assisted with 12 deployments, nine system migrations, and the on-the-job training of more than 25 eLMIS users. "The system aggregates all data and makes information readily available." Chisulo says, "I enjoy seeing the WhatsApp group's community grow, and colleagues take a greater interest in the system, as these efforts help us build a robust supply chain system that serves our communities. I've trained two people in my district alone who are now assisting other facilities when they can; I even bring them with me when I do physical support visits, just as Mr. Banda did for me, so they can gain practical experience."

Shadreck Chinyanta, a nurse at Nakonde Urban Clinic and one of Chisulo's trainees, said, "I've been using the system since 2019 when we received training from Mr. Banda and Mr. Chisulo." Chinyanta states, "Frank has been extremely helpful, and he has always responded to, assisted, and supported us on the WhatsApp group with any queries we've had. Tagging along with Frank to provide technical support has taught me a great deal about the system. Because some places are hard to reach in my district, I sometimes assist with drug distribution using a motorcycle, and I make it a point to provide eLMIS support to any facility I visit that needs it. The WhatsApp groups are a good initiative because we all help each other."

Since its inception, the project has trained over 4,000 MOH eLMIS users. Zambia's ten provinces have ten provincial WhatsApp eLMIS help desk groups with an average of 350 members per group. As the groups have evolved and grown, the project has taken on a more supportive role, empowering MOH staff to take the lead in eLMIS management. The project anticipates that the eLMIS may be managed and supported by MOH staff members like Frank and Shadreck by the end of 2024.

Accelerating Knowledge and Skills Transfer for a Successful and Sustainable eLMIS

The sustainability of an innovative change to the health program can be challenging. All healthcare projects involve risks and challenges. However, the key to project success and sustainability is anticipating, monitoring, and managing the full range of risks and challenges throughout the project lifecycle and building capacity that can continue beyond the project. That is precisely what the USAID Electronic Supply Chain Management Information System project has been doing while implementing the Zambia Ministry of Health's eLMIS System.
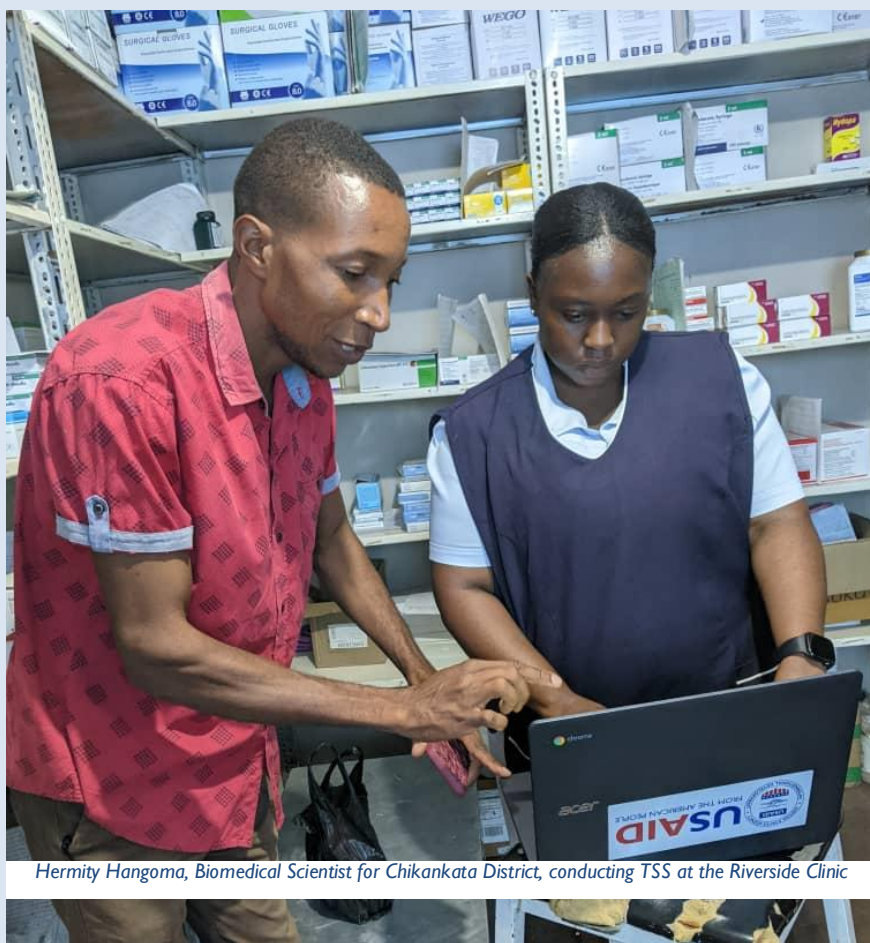
Hermity Hangoma, Biomedical Scientist for Chikankata District, conducting TSS at the Riverside Clinic

Funded by USAID and implemented by John Snow Health Zambia, the USAID eSCMIS project aims to improve Zambia's health logistics system. The project has, to date, deployed the eLMIS system to over 2,600 health facilities and has been managing its maintenance, including the replacement of equipment and software updates. The entire system will be handed over to the MOH at the end of the five-year project, which is now in its final year of implementation. The government will take ownership of deployment, training, and funding technical supervisory support. TSS enables those entities (health facilities, pharmacies, etc.) to use the system to learn how to use it and troubleshoot challenges encountered.

The USAID eSCMIS project embarked on a deliberate transition plan that involves skills transfer to MOH staff at all levels—facility, district, provincial, and national, to ensure its smooth running and sustainability. The project increased workforce support and accelerated the deployment process by training MOH staff and ensuring their involvement in all TSS visits over the last few years.

TSS is a critical part of the deployment process as it not only ensures the smooth running of the system but also provides an opportunity for capacity building for facility staff. During TSS, facility staff are taken through identifying and addressing problems in their ordering process. By doing so, the project prudently reduces transportation costs and saves time on travel to facilities for every situation.

In March 2023, the MOH conducted its own fully funded TSS in Kalomo District, led by the District Pharmacist, Alaiva Chibambo, and supported by the District Health Director, Kalaluka Malungwe. The facilities that were visited include Nameto, Sipatunyana, Mabuyu, Teranova, Nanduba, Nkandanzovu, Habubile, Chilala, Bulyambeba, Dimbwe, Choonga, and Mukwela rural health posts and Kasiye Gorge hospital.

As Chibambo put it, "The district team managed to resolve problems they found at the health facilities they visited by applying the skills they had learned through the various deliberate on-the-job training platforms the eSCMIS project provided during joint deployments and TSS activities."

In the first quarter of 2023, facilities in the district faced various challenges with submitting data and reports using the eLMIS system due to network issues and outdated computer systems, among other reasons. The MOH, through timely TSS visits, identified these issues and resolved them, allowing facilities to submit data.

Hermity Hangoma, Biomedical Scientist for Chikankata District

"The eLMIS system has allowed us to get rid of the tedious paperwork. It has eased and hastened the reporting process and has enhanced the quality of reporting. We no longer have to make several phone calls to follow-up on reports as requests for commodities are now submitted at a click of a button and commodities are now delivered on time," expressed the Biomedical Scientist for Chikankata District, Hermity Hangoma.

Hermity recommends that the project continue with routine visits to ensure knowledge and skills transfer within the facilities.

## Building a Community of Software Developers in Zambia to Support Public Health

"The internship opportunity as a Junior Software Developer under the USAID eSCMIS project kick-started my career in ICT. The internship boosted my confidence and gave me the courage to continue exploring the world of ICT. During my internship, I learned about relevant software and technologies, how to use them, and how to solve end-user problems, among other skills. Also, through this internship, I came to the realization that despite being a male-dominated field, females can also excel in software development if they are dedicated and have the right people to guide them. The project laid a strong foundation for me, and I am proud to have contributed to the eLMIS system, which is saving lives in health facilities across the country," **Kashiya Mwape, graduate intern.**

Software development has been a growing industry over the last two decades; software development for health, on the other hand, is relatively new—growing in some regions and unformed in others. It is advanced in settings like Kenya, Ethiopia, and India, whereas Zambia is in an early phase.

The USAID eSCMIS project is a digital solution to supply chain management for health. The project envisions an automated health logistics system from procurement at the national level to client dispensation at the facility level, with an architecture adapted to Zambia's health logistics system. This system relies on software developers to create and iterate—to grow its use and effectiveness across the over 2,600 health facilities it serves.

The USAID eSCMIS project has been incredibly effective at managing the supply chain information for health in Zambia. It creates real-time data to inform stock decisions and to deliver quick access to needed products. It customizes delivery based on demand and offers real-time data on product batch expiry and quality–giving health facilities certainty around the quality of products they're using to treat patients while reducing wastage and associated costs nationally.

The USAID eSCMIS project has a personal stake in growing a community in software development for health to sustainably maintain this high-functioning digital solution in Zambia. Skills building in software development and maintenance is also an area where many young professionals aim to develop skills that can offer them growing career opportunities.
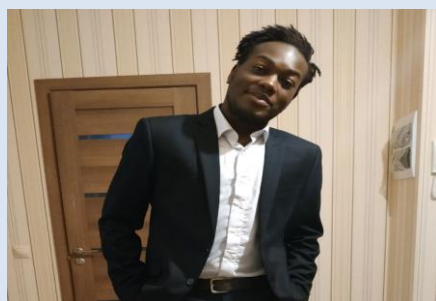
"This internship program was an excellent way to gain practical experience in the field of software development and apply my skills in a real-world setting. Working on a real project and interacting with professionals has left a lasting impression on me," **Mchanga Kutemba, graduate intern.**

"We realized we had an opportunity to create a digital health solution for the global good and invest in a community of software developers to learn to code, develop, and maintain this system. Those skills could offer them greater economic advancement and career opportunities. They would also be available sources of support to the Ministry of Health as Zambia takes complete ownership of this system," said Wendy Bomett, Director for Management Information Systems on the USAID eSCMIS project.

The project began investing in a six-month internship program and is in its third cohort. Each cohort of about 2-4 interns has included mostly women—intentionally recruited to ensure their growth in STEM career opportunities. Interns learn to code and iterate in six months on an open-source system. They then put those skills to use, adapting this management tool to the evolving supply chain demands of the Zambian health system.

Ensuring the sustainability of this system, creating a locally-grown Zambian workforce of software developers, and creating a community of developers for health that the Zambian ministry can tap into in the future have all become the merged effect of this investment.

"We now have a broader community that understands basic logistics, data structure, and coding, and they can come in and code when an innovation comes to mind. It's open source. If they want to hop in and write code to progress this supply chain solution, lead developers will publish their work, attributing it to them." Continues Bomet, "We have these relationships now. And they have these skills: every single one of them has moved on to an exciting job opportunity—they're going wherever their career takes them now, but they will always have a home here, too."

"Internship programs can leave a lasting impression on an organization, especially if interns are given meaningful projects and are able to make significant contributions, as has been the case for me working on the USAID eSCMIS project. The skills and knowledge I gained have been used to help improve processes, the system, and overall performance while allowing my own growth," **Kondwani Mtonga, graduate intern.**

eLMIS Facility Edition Roll-out Continues: USAID eSCMIS Project on Course to Meet Deployment Target

Dorothy Mukosa, Community Health Assistant, Kipoheshi Health Post

"We are very happy to finally have the eLMIS deployed to our facility. We will now be able to see in the system when specific medicine is running out, track consumption, and submit reports in a timely manner. Before the deployment of eLMIS, we would fill out paper-based reports, which had to be submitted to the District Health Office (DHO) for entry into the system. This would cause delays in reporting and delivery of commodities to our facility because sometimes we did not have transport to deliver our report and requisition (R&R) to the DHO," expressed Dorothy Mukosa, Community Health Assistant, Kipoheshi Health Post. She shared her excitement about the recent deployment of the eLMIS to her facility and the challenges the facility faced before its deployment.

As one of its objectives, the USAID eSCMIS project, together with the Zambia Ministry of Health, has continued to deploy the eLMIS to health facilities in Zambia. The USAID eSCMIS project aims to rapidly deploy the eLMIS FE to more than 1,000 additional health facilities by the end of the project. To date, the project has deployed the eLMIS FE to 827 facilities in addition to the 638 facilities deployed in previous projects, making the cumulative number of sites with eLMIS FE in the country 1,465.

Some of the most recent deployments were in the Copperbelt Province, where 14 new eLMIS FE deployments were done. Previously, facilities would travel long distances to submit handwritten reports and requisitions to their district hospitals or the DHO, among other challenges. Staff from some facilities shared the challenges they faced before system deployment and what they expected to gain with introducing the eLMIS FE to their facilities.

What challenges did you face at the facility before the deployment of eLMIS FE?

"Sometimes, we would use personal funds to travel to the DHO to submit reports and requisitions for commodities due to limited transportation at the facility. The delays in the process would sometimes result in the facility not being restocked for up to three to six months. Fortunately, at times, we would get some supplies from overstocked facilities. When undersupplied, we could not meet client demands, hence denying some clients access to quality health services," said Ackim Kabaghe, in Charge of Chipese Health Post.

"For essential drugs and laboratory commodities, we would use report and requisition booklets, which we filled out by hand. We also used handwritten supply vouchers, which were submitted to Kamuchanga District Hospital and the DHO. We would travel 18 kilometers to get to the DHO for order placement. Once DHO finishes packing our requested commodities, they would call us for collection, then we would have to travel again. With regards to tracking consumption, we would use stock control cards to check what we have in store at the facility; this was a lot of work," said Webby Mulenga, Nurse at Chiwele Health Post.


Ackim Kabaghe, In-Charge, Chipese Health Post

"Most of the work was paper-based. This would cause delays because most rural health facilities are understaffed, and with the few staff having so many other things to do, there were not enough people to help with the preparation of reports. Moreover, we would travel 58 kilometers to submit reports and order or collect supplies. Sometimes, we would run out of supplies mid-month, and we would not have transport to go to DHO, so we would wait until month end for salaries to be in, and we would combine our trip for home groceries with the trip to DHO for supplies requisition, in order to save costs," said Davies Kunda, Clinician, Ipumbu Rural Health Center.

How has the introduction of eLMIS FE changed the way you work?

"With the system in place, my work has been simplified as I now take less time to check what we have at the facility and when it will expire. This is because I do not have to flip through stock cards; I can check for the information in the eLMIS system with the click of a few buttons. The compilation of reports has also been made easier compared to when we would write handwritten reports. With the system, I am able to create batch numbers for products received, place orders, do transaction reversals and adjustments, and compile reports," said Webby Mulenga.
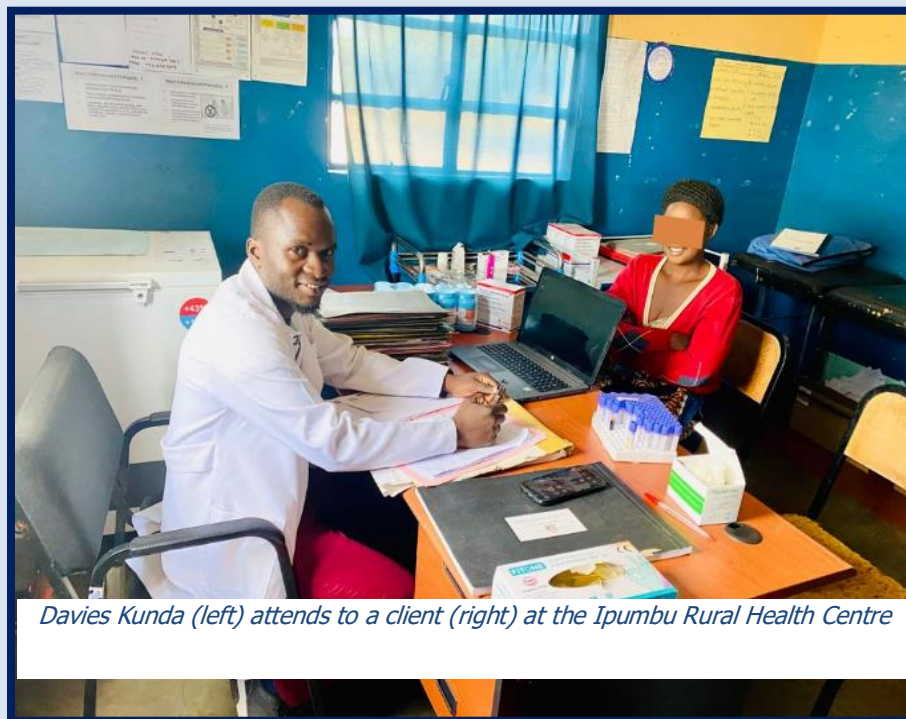
Ackim Kabaghe also shared, "The system has made the process accurate because we no longer have to do physical counts of commodities. It has also helped the overall handling of commodities—that is, the arrangement
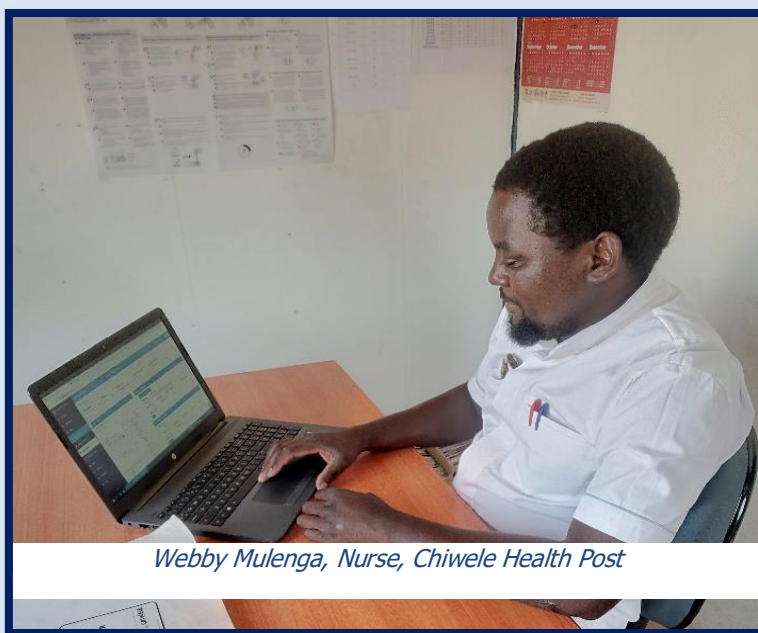
Webby Mulenga, Nurse, Chiwele Health Post

of products according to batch numbers, the ability to easily identify which batch to issue first, and so on. This is because of the batch numbering system and expiry dates made available through the system."

"The new way of reporting and requesting commodities through eLMIS will help with the timely delivery of commodities as we will no longer have to prepare time-consuming handwritten reports or travel to DHO to order supplies and submit reports," added Davies Kunda.

What is the expected impact of using the system on your work and the community you serve?

"This will improve the delivery of services and help save time. Instead of having to travel to DHO for report and requisition submission, I will do it from the comfort of my office, thus minimizing my movements and allowing me to have more time to serve patients and plan for other activities at the facility," expressed Webby Mulenga.

Davies Kunda (left) attends to a client (right) at the Ipumbu Rural Health Centre

Davies Kunda added, "This will help to ensure the availability of commodities at all times and result in quality and improved access to health services for our clients. Additionally, the reduced paperwork and time spent on writing reports will give us more time to focus on serving clients."

The eLMIS is a next-generation digital logistics management system that equips the government of the Republic of Zambia to make data-driven supply chain decisions. A safe, secure, reliable, and sustainable supply chain will ensure the availability of essential medicines, laboratory commodities, malaria, HIV and AIDS, and family planning products at health facilities throughout Zambia. The eLMIS covers the reporting needs and disbursement of medical supplies to approximately 3,000 health facilities across Zambia using electronic data management to capture end-to-end supply and demand data. The results of this innovative supply chain system include reduced wastage from product expiry and increased efficiency in product availability in Zambia.

Changing the Way We Move Medical Goods in Zambia Results in Faster Access and Less Cost

Over the last decade, Zambia has invested in a nimbler, more responsive, and efficient supply chain. Funded by USAID and implemented by John Snow Health Zambia, the USAID eSCMIS project enables the Zambia Medicines and Medical Supplies Agency to move products not just efficiently but with visibility and strengthened security.

The eLMIS is a next-generation digital logistics management system that equips the Government of the Republic of Zambia to make data-driven supply chain decisions. A safe, secure, reliable, and sustainable supply chain will ensure the availability of essential medicines, laboratory commodities, malaria, HIV and AIDS, and family planning products at health facilities throughout Zambia. The eLMIS covers the reporting needs and disbursement of medical supplies to over 2,600 health facilities across Zambia using electronic data management to capture end-to-end supply and demand data. The results of this innovative supply chain system include reduced wastage from product expiry and increased efficiency in product availability in Zambia.
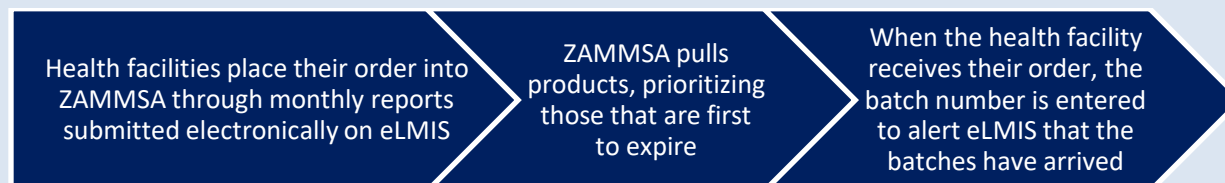
How did ZAMMSA prevent wastage before introducing batch codes?

In 2015, ZAMMSA ensured the delivery of products based on expiry (first to expire, first out to health facilities)—sending out products for immediate use that would soon run through their expiration date. Although this enabled less wastage of medical products across the health system, it resulted in little understanding of how they used products or where they were in the system once delivered.

"Supplying medical entities with products is not a one-size-fits-all model; it requires transparency to understand where products are, how they are being used, and how they can be shared to improve access," says Mwila Lukonde, Monitoring, Evaluation, and Learning Specialist at USAID's eSCMIS project. "Medical products are also sensitive and temperamental. With some frequency, batches of medical products are recalled, but how can we immediately pull those batches from shelves of thousands of health facilities if we don't have clarity around where they are and how many are still out there?"

How has the introduction of batch codes and their incorporation into eLMIS helped?

Queue batch numbering: a subtle adjustment to the eLMIS that entails identifying each batch by code and tracking those batches through the eLMIS. The eLMIS digital database has been outfitted with an alert system, which sends the eLMIS user a notification when products are close to expiry and where they are. Suppose insufficient use of that product occurs at select health facilities. In that case, the provincial/district supply chain supervisors call the under-consuming health facility to ask if they have enough overage to supply a different facility (one consuming that particular product at a higher volume). If the health facility over-supply agrees to stock another facility with greater potential to use it, an exchange and transport are organized. As soon as that batch is received at the high-consumption facility, its batch number is again entered into the eLMIS, updating its whereabouts.

Health facilities place their order into ZAMMSA through monthly reports submitted electronically on eLMIS → ZAMMSA pulls products, prioritizing those that are first to expire → When the health facility receives their order, the batch number is entered to alert eLMIS that the batches have arrived

And it works both ways. If a health facility is running low on supplies, the system again alerts users that a supply shortage is forthcoming, giving the user a chance to reconfigure supplies from locations where an overage is occurring. This system has become more adaptable and agile than ever.

"We know with greater accuracy now where products are and how close they are to expiry, or where specific batches are and where we need to pull them from shelves when recalled." Wendy Bomett, Management Information System Director, USAID eSCMIS project, says, "We can now guarantee to health facilities that their products are not too close to expiry, and we're managing and moving them as soon as they are. Expiry assessment used to fall on health providers. Busy clinicians had to check first if it was okay to use the products they had on hand, but now we can guarantee them that it is, and this is no longer time they need to waste."

"Batch number tracking led to better transparency, and our digital solution (eLMIS) to monitor them led to greater security," says Lukonde.

MOH Leads eLMIS Training in Southern Province

The USAID eSCMIS project has been supporting the implementation of the Zambia Ministry of Health's electronic Logistics Management Information System. The five-year project is scheduled to close out by the end of 2024, so as the project draws to its end, it is more important than ever to ensure that capacity is built among MOH staff to continue implementing the system. Skills and knowledge transfer are crucial to ensure a smooth transition and sustainability of the project's goals. The USAID eSCMIS project trained MOH staff, who later became super users and champions. The super users and champions were targeted as recipients for skills and knowledge-building through various on-the-job trainings during technical support and supervision and system deployment so that they could also train others and conduct deployment and TSS on their own.

After MOH recruited health workers, there were a lot of staff movements in health facilities such that, in some cases, all staff members who received training were moved to other facilities. This left a knowledge and skills gap in facilities, and providing remote OJT could not address the challenge at once or promptly. For this reason, the MOH in Southern Province saw the need to identify staff to be trained in eLMIS functionality. A four-day training was held in Mazabuka in May 2023, fully funded by the MOH, and was conducted in collaboration with MOH super users from the province and the USAID eSCMIS project staff. The main objective of the training was to train more champions to broaden the pool of facility staff that can later train other staff and provide technical support and supervision. The training drew 29 participants—each of the 15 districts was represented by either pharmacy or laboratory staff.

Two district pharmacists who participated in the training shared some of the essential takeaways, including how it has enhanced their eLMIS knowledge and skills and how it will help them make a valuable contribution to the supply chain.

Ms. Lungowe Nakwebwa, District Pharmacist – Zimba

"The training was informative and educational. It was also a refresher course for me after being away from school for some time. I found the content of the training very relevant.

It was an opportunity to learn the new features added to the system, making the logistics system easier. We can now see which facility is overstocked or understocked and can use the data available in the system to make decisions. With the system being able to flag commodities that are about to expire, we can move the drugs to facilities that might need them sooner or have more demand for the commodities to avoid

expiries/losses. Overall, the system and the knowledge we have gained on the data it makes available and its different features have made it easier for us to manage commodities and avoid logistics challenges in the supply chain. It has helped to stabilize the system.

Having undergone the training, I have trained new recruits at our facility on how to use the Central Edition, and I will also train them on how to use the Facility Edition so that they can provide TSS in the district.

I learned that there is so much we can do with eLMIS. I would not have known all of its functions and features if I had not attended the training. However, I have also been able to discover some functions and features on my own because I invested some time in learning the system. Therefore, I encourage other users to take a keen interest and use the system regularly to learn about its functionality and various enhancements.

Mr. Luckson Tembo District Pharmacist – Itezhi-Tezhi

"The training went well; I learned a lot of new things. I have been using the Facility Edition since 2015 and the Central Edition since 2017. Previously, I would only use the reporting platform in the Central Edition to create and approve reports and check the timing and reporting rates. However, thanks to the training, I now know how to use the data in the system for decision-making. As a manager, this will help me make important supply chain decisions and improve the supply chain to track consumption issues. We do not have to physically go to the facility to check for stock; we can do that from the comfort of our office through the eLMIS system. This has also helped us reduce transportation costs.

During the training, I also learned how to troubleshoot various system issues. Since we had the training, I have not called the eLMIS Helpdesk, but I have been able to resolve issues on my own. For example, one of our big facilities (Masemo) had an issue, and I was able to resolve it, thanks to the knowledge gained through the training. If we had waited for the eSCMIS team or MOH to travel to the facility, the facility would have been crippled, especially since it is a big facility that serves a lot of people.

This experience indicates that facilities need training for them to run smoothly. Reporting rates have improved—we have been recording 100% reporting rates. This is not only a result of the training but also because the system has been deployed to a lot of facilities in the district. Also, the eLMIS system's performance has greatly improved over the years, compared to the period between 2017-2018. It has become very reliable as it is hardly down and can be accessed at any time."

Transforming Zambia's Healthcare Supply Chain: USAID eSCMIS project and ZMA Partner to Empower Medical Doctors with eLMIS Expertise

Efficient management of medical supplies is crucial to ensure patient's well-being and the success of healthcare systems. In August 2023, the USAID eSCMIS project partnered with the Zambia Medical Association (ZMA) to train 32 medical doctors on how to use Zambia Ministry of Health's eLMIS system. ZMA chose the doctors to represent each of the ten provinces of Zambia. The two-day training in Livingstone was a shining example of how collaboration and innovation can strengthen the supply chain backbone of the healthcare system.

Why the training?

The introduction of eLMIS, a next-generation digital supplychain management tool in Zambia, revolutionized medical supply, reducing inconsistencies in the availability of essential medicines and commodities and improving cost-effectiveness within the system. However, healthcare professionals must understand and utilize the system as intended for this digital innovation to succeed. Recognizing this need, the USAID eSCMIS project forged a strategic partnership with ZMA to build eLMIS capacity across the health system.

"As ZMA, we cannot overstate the importance of this training. In an era where technology plays a pivotal role in healthcare, our collaboration with the USAID eSCMIS project to train our medical doctors in

eLMIS usage is a game-changer. It empowers our doctors to harness the potential of the eLMIS system, making them not just healthcare providers but also proficient managers of our medical supply chain. This is a significant step toward healthcare sustainability and resilience. Healthcare excellence requires continuous learning and adaptation, and we are proud to contribute to this transformative journey," said Dr. Crispin Moyo, Zambia Medical Association President.

What did the training encompass?

Facilitated by experts from the USAID eSCMIS project, the training focused on the functionality of the eLMIS. The doctors were trained to navigate the eLMIS platform, ensuring they could efficiently access and input crucial data. Another fundamental aspect of the training was helping them understand the importance of data accuracy and how the data within the system affects the supply chain.

Dr. Diniwe Tembo, Senior Resident Medical Officer, Levy Mwanawasa University Teaching Hospital, reflecting on the training, elaborated, "Navigating the eLMIS system was initially daunting, but now we see its tremendous value. It's equipped us with real-time insights into our medical supply chain. We can prevent stockouts, reduce wastage, and allocate resources more efficiently. We're no longer just clinicians; we're supply chain champions. This training has given us the confidence to lead change in our healthcare facilities, enhancing our capacity to provide comprehensive care to our patients."
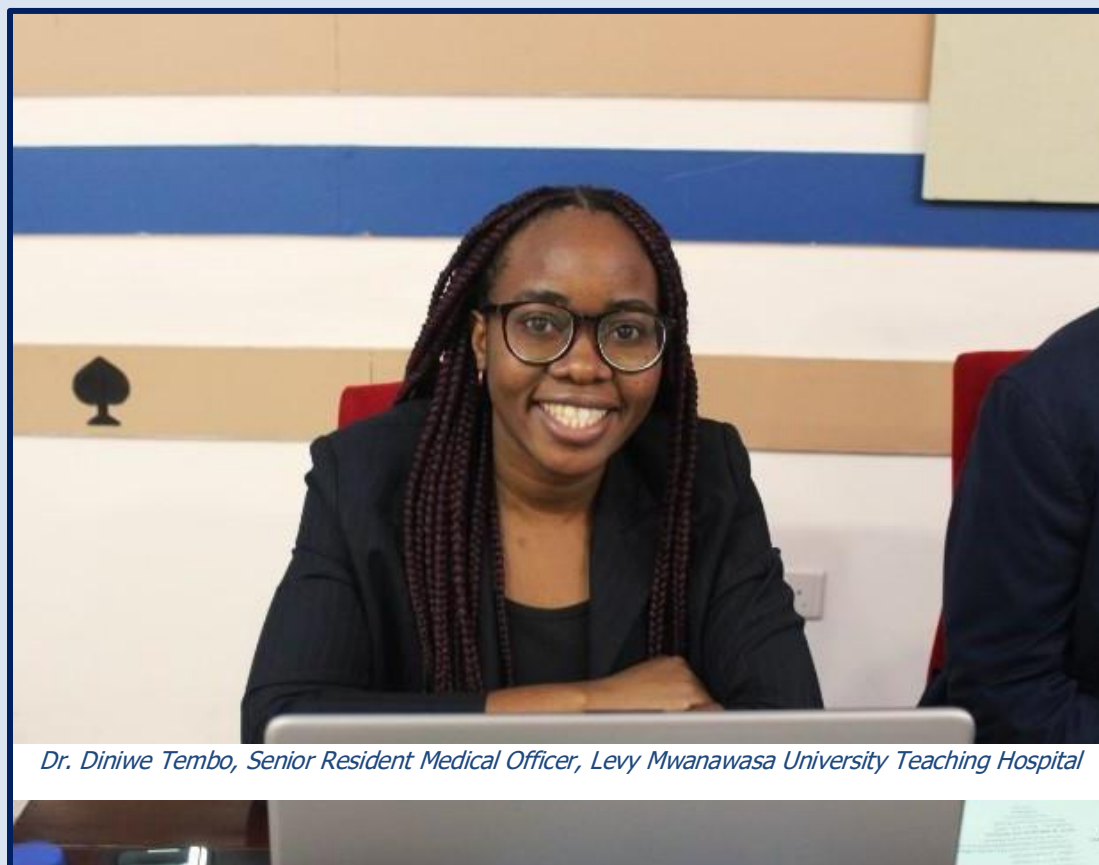
Dr. Diniwe Tembo, Senior Resident Medical Officer, Levy Mwanawasa University Teaching Hospital

What is the expected impact?

Having successfully completed the training, the thirty-two medical doctors returned to their respective healthcare facilities armed with the knowledge and skills to transform how medical supplies are managed. These doctors were strategically trained to be change agents among other doctors- , who will be trained in due course either virtually or in person by the trained doctors and other eLMIS champions. They now advocate for the eLMIS system, encouraging their colleagues to embrace the technology.

"The eLMIS system isn't just software; it's a solution to our logistical challenges. Through this training, we've gained a deep understanding of how it works and its potential. We can monitor inventory and optimize our supply chain because, as doctors, we've become integral to the smooth functioning of our healthcare system. This training empowers us to make data-driven decisions and, ultimately, improve patient outcomes," Dr. Jonathan Musompa, another trainee, shared.

Its immediate impact is a growing understanding of the system nationally: The trained doctors will now mentor and train their peers, ensuring the sustainability of the eLMIS system's success. The ultimate intended impact is that clinicians, healthcare administrators, and policymakers will also have access to accurate and real-time data through eLMIS, enabling informed decisions on resource allocation and procurement.

What next?

The USAID eSCMIS project will continue to forge collaborations that lead to transformative changes in Zambia's healthcare system. The project accelerates progress in the supply chain by equipping doctors with the skills to use the eLMIS system effectively. It also contributes to better patient outcomes and sustainable healthcare delivery in Zambia.s The success of eLMIS in Zambia serves as a beacon of hope for other nations seeking innovative ways to enhance their healthcare systems.

Dr. Jonathan Musompa, Senior Resident Medical Officer, Solwezi General Hospital

Minister of Health Extends Honored Invitation to USAID eSCMIS Project for eLMIS Discussion and Orientation

In a pivotal moment for healthcare in Zambia, the USAID eSCMIS project met with Zambia's Minister of Health, Hon. Sylvia T. Masebo, to engage in a meaningful dialogue about the challenges and opportunities presented by the eLMIS and to advocate to the Minister how eLMIS can transform the healthcare system. This encounter marked a significant step toward enhanced healthcare logistics and supply chain management in Zambia.

Mr. John C. Sikasote, USAID eSCMIS project Chief of Party, noted, "Together, we are laying the foundation for a more efficient and impactful healthcare system." He continued, "eLMIS not only enhances transparency and accountability but also empowers healthcare providers with the tools they need to deliver quality care. It's a powerful step forward for Zambia's healthcare journey."

The Meeting

The meeting between the USAID eSCMIS project team and Zambia's Minister of Health, Hon. Masebo, was a testament to the commitment of both parties to improve healthcare outcomes in the country. Chief of Party, Mr. John C. Sikasote, shared a presentation on the USAID eSCMIS project and discussed critical topics with the Minister – including challenges addressed by eLMIS and the need for capacity building for MOH staff. The USAID eSCMIS project team also provided an in-depth introduction to the eLMIS system, explaining its features and functionalities, highlighting its benefits for Zambia's healthcare system, including reduced wastage, improved data accuracy, enhanced decision-making, and ultimately, better healthcare delivery for citizens.

Zambia Minister of Health, Hon. Sylvia T. Masebo (right) shares insights with USAID eSCMIS project Chief of Party, Mr. John C. Sikasote (left)

The session progressed into a candid exchange regarding the challenges confronting Zambia's healthcare supply chain, including pilferage and capacity gaps. The project team and the Minister engaged in an open dialogue, exploring the precise obstacles and intricacies of the current supply chain system. The focal point of discussion revolved around exploring how eLMIS could effectively address these challenges, with a strong emphasis on its potential to significantly reduce stockouts.

To ensure that Hon. Masebo could seamlessly navigate the system, two MOH eLMIS champions—Corrine Zulu, Sub District Pharmacist for Chipata, and Kendo Simaimbula, District Pharmacist for Kalingalinga Hub—conducted a practical, hands-on demonstration of eLMIS. Corrine and Kendo received comprehensive training from the USAID eSCMIS project team, which ensured a thorough and expert-guided introduction to the system. This user orientation allowed the Minister to gain practical knowledge on navigating the system effectively.

The Outcome

The Minister of Health, Hon. Masebo, expressed her enthusiasm for the work that the USAID eSCMIS project is doing and the potential of the eLMIS system to transform healthcare supply chain management in Zambia. Once oriented and registered on the system, the Minister and senior staff will log in to the system and use it to monitor the health supply chain and interact with facilities. She recognized the critical role eLMIS now plays in

achieving the government's healthcare objectives and committed her full support to its continued and further implementation. With support and commitment from the Minister, the project will continue to deploy eLMIS to healthcare facilities across the country.

Hon. Sylvia Masebo emphasized, "eLMIS is pivotal for our health supply chain as it grants us real-time visibility, reduces pilferage, and enhances our ability to provide quality healthcare. It's imperative that our health staff fully embrace this system and that we prioritize the training of more health professionals in eLMIS use to ensure its success and the well-being of our citizens."

Through our collaboration, Zambia is poised to enhance the availability of essential medicines and medical supplies, ultimately improving its citizens' healthcare outcomes and well-being.

Ministry of Health Taking Ownership of eLMIS: The USAID eSCMIS Project Triumphs in Empowering Local Healthcare Heroes

In Zambia's health supply chain, the USAID eSCMIS project continues to demonstrate remarkable impact. This transformative project is currently unfolding to implement an efficient electronic Logistics Management System and also build the capacity of Ministry of Health staff to take ownership and control of the system and use the data available in the system for continuous improvement of the supply chain performance. This progression of the project from initial implementation to the point where MOH staff are now starting to own and manage eLMIS deployment, conducting training, and updating critical tools like the eLMIS Central Edition and its client resource management (CRM) is nothing short of inspirational.

Ownership and Empowerment

Following several trainings to equip MOH staff with the skills and knowledge required to manage the eLMIS system effectively, the most transformative phase of the USAID eSCMIS project is underway, as MOH staff are beginning to take charge of the eLMIS system. The project team is working hand-in-hand with MOH to ensure a smooth transition. This process includes:

1. **Equipment Maintenance:** MOH staff have learned how to maintain the physical infrastructure of the eLMIS system by ensuring its continued operation and maintenance. This reduces dependency on external support and instills a sense of pride and responsibility.

2. **Training and Knowledge Transfer:** MOH staff are becoming trainers conducting training sessions for new personnel and other stakeholders. This cascade model ensures that knowledge is disseminated widely and continuously.

3. **Tool Updates:** The MOH staff is now updating the eLMIS system CE and CRM tools, which are critical for system optimization. This marks a turning point, showcasing the capability of GRZ (Government of the Republic of Zambia) talent to maintain and improve the system.

Lorent Kabamba, Pharmacy Technologist at Ndola District Health Office

Mr. Lorent Kabamba, Pharmacy Technologist at Ndola District Health Office, shares how his recent work has reflected this process. Following the Zambia Electricity Supply Corporation (ZESCO) management's decision to close the ZESCO Clinic of Ndola, Mr. Kabamba deactivated the ZESCO Clinic on eLMIS Central Edition. He redeployed eLMIS Facility Edition (FE) equipment from the closed clinic to Madando Health Post, as Madando Health Post did not have eLMIS FE. Mr. Kabamba says that details of Madando Health Post have since been entered into CRM as a newly deployed facility, and the activity report has also been created. He says, "I also oriented Madando Health Post staff on eLMIS system use, and this helped them to start using the system immediately after deployment."

Mr. Kabamba received formal training during the eLMIS pilot in 2014. He gained more capacity through on-the-

job training (OJT) while working with the project staff and also through user manuals. He has since gained capacity in eLMIS deployment, troubleshooting, and training, becoming an eLMIS champion.

"Learning takes interest. There are people who receive training but do not level up. I always go the extra mile to research various aspects of my work, including how to download network drivers and browsers for the eLMIS network. This, coupled with enough training and mentorship from the USAID eSCMIS project, helped me deploy eLMIS to Madando health post on my own without any challenges," adds Kabamba.

Benefits and Achievements:

The USAID eSCMIS project's commitment to capacity building and empowering MOH staff is bearing remarkable fruits:

1. **Sustainability:** The eLMIS system is becoming a sustainable and self-reliant entity within the MOH, reducing dependence on external support and guaranteeing its longevity.

2. **Cost-Efficiency:** By reducing the need for continuous external support, the project saves costs and enables the MOH to reallocate resources to other critical healthcare activities.

3. **Improved Service Delivery:** The efficiency and effectiveness of the eLMIS system, combined with the MOH's data-driven supply chain decision-making, significantly enhance healthcare delivery in Zambia. This data-driven approach enhances accountability and ultimately leads to better healthcare services for the people of Zambia.

4. **Local Expertise:** MOH staff are developing expertise in managing eLMIS, creating a pool of talented individuals who can continue to innovate and improve the system.

"Instead of waiting for project staff to organize training or travel to our facilities, I have been going around facilities to conduct in-house training and orientation for facility staff, using AnyDesk (a remote desktop software application that allows users to access and control a computer or device from another location) for facilities I cannot visit physically. I use data quality to assess which facilities need training," says Kabamba. He adds, "This has helped improve the data quality as the number of facilities submitting inaccurate data has reduced. There has also been an improvement in antiretroviral therapy. Previously, antiretroviral medicines would easily run out due to wrong reports and requisitions as facilities would request for less than they needed as a result of not knowing how to use some features in the system."

Mr. Kabamba urges health staff to take an interest in the system to completely phase out paperwork and the tiresome double-entry system, which affects data quality. Most people make entries on paper and let them pile up. Still, they sometimes forget to make the entries on the eLMIS system or eventually become overwhelmed and panic at the end of the month when they have to submit reports, resulting in poor data quality.

The USAID eSCMIS project is a success in Zambia's healthcare system. By fostering actual ownership and empowerment, it improves the logistics management of medical commodities and transforms the Ministry of Health.

Anseli Inambao: A Self-Made eLMIS Expert

Anseli Inambao, a Registered Nurse from Kaande Health Post, Mongu District

Many remarkable successes have emerged along the USAID eSCMIS project's journey of supporting Zambia's Ministry of Health (MOH) in transforming the healthcare system by implementing the electronic Logistics Management Information System (eLMIS). One such story is that of Anseli Inambao, a Registered Nurse from Kaande Health Post, Mongu District, Western Province. Amidst the various challenges that create capacity gaps in eLMIS system use, Anseli, a dedicated MOH staff member, took it upon himself to independently become an expert in the eLMIS system without requesting support from the USAID eSCMIS project. His journey is a testament to the power of self-motivation, dedication, and a hunger for knowledge.

Anseli recognized the importance of the eLMIS system in ensuring the uninterrupted supply of life-saving medications and equipment. He saw an opportunity to make a difference and embarked on a journey to transform himself into an eLMIS expert.

Self-Motivation and Determination

Having identified gaps at his health facility, including missing reports and critical data not being adequately captured due to insufficient capacity, Anseli decided to orient himself on using eLMIS. Armed with the eLMIS manuals provided by the USAID eSCMIS project, he dove headfirst into learning the system.

Remarkably, within just one week of reading the manuals, he gained a comprehensive understanding of how to use the eLMIS system. The manuals, he noted, were incredibly user-friendly, making the learning process accessible and efficient. He believed the true power of becoming an eLMIS expert lay in self-motivation and hands-on experience. Mastering the eLMIS system would enable him to serve his community better.

Putting Knowledge into Practice, Sharing and Inspiring Others

As Anseli started assisting in data entry and inventory management at his healthcare facility, he gradually contributed to improvements in its supply chain operations.

"I have been able to contribute to improvements in our eLMIS system use, including data quality and reporting rates at the health facility," shares Anseli.

Anseli's dedication has not gone unnoticed. His colleagues have seen his passion and the tangible improvements he has brought to their facility's operations. Recognizing the potential, Anseli has begun conducting informal training sessions for his coworkers, sharing his insights and expertise. He has become a mentor, guiding others in mastering the eLMIS.

He says, "I took it upon myself to train two of my colleagues, passing on the knowledge I acquired and ensuring that the benefits of eLMIS extend beyond myself."

An Emblem of Inspiration

Anseli's journey from a dedicated health staff member to an eLMIS expert without formal training is an inspiring testament to the power of determination and self-motivation. His efforts not only improved the efficiency of his health facility but also contributed significantly to the broader implementation of eLMIS in Zambia.

His story reminds healthcare workers across Zambia that with unwavering dedication and a thirst for knowledge, anyone can become an eLMIS expert and make a lasting impact on their community and the country. Anseli urges other health staff to be self-motivated and take a keen interest in learning how to use the eLMIS system. He emphasized that the manuals are readily available and also incredibly user-friendly. His journey proves that sometimes, all you need to succeed is a manual, a dream, and an unshakable belief in yourself.

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