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INJECTABLES ACCESS COLLABORATIVE

Family Planning Supply Chain Assessment in Zambia

Photo: PATH/Will Boase

Family Planning Supply Chain Assessment in Zambia

This report was produced by inSupply Health and JSI. It describes the findings of a comprehensive assessment of the supply chain system for family planning in Zambia to identify areas for improvement and provide recommendations for interventions to improve system performance. The assessment was funded through the Injectables Access Collaborative project, led by PATH in partnership with CHAI, Jhpiego, JSI, and inSupply Health.

Acknowledgments

We would like to thank all the respondents who participated in this assessment for their valuable inputs, including respondents from the Ministry of Health, Zambia Medicines & Medical Supplies Agency (ZAMMSA), Provincial Health Offices, District health offices, service delivery points, implementing partners, development partners and donors. Finally, this assessment would not have been possible without the support of PATH in Zambia, as well as dedicated efforts of the inSupply Health staff who were part of the assessment team.

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Acronyms and abbreviations

3PL	Third Party Logistics Provider
4PL	Fourth Party Logistics Provider
AC	Access Collaborative
AMC	Average Monthly Consumption
CHAI	Clinton Health Access Initiatives
COC	Combined Oral Contraceptives
DHIS2	District Health Information System
DHO	District Health Office
DMPA-SC/ IM	Depot Medroxyprogesterone Acetate Subcutaneous/Intramuscular
DTC	Drug Therapeutic Committee
eLMIS	Electronic Logistics Management Information System
EMLIP	Essential Medicines Logistics Implementation Program
EOP	Emergency Order Point
FE-eLMIS	Facility Edition- Electronic Logistics Management Information System
FGD	Focus Group Discussion
FP	Family Planning
GHSC - PSM	Global Health Supply Chain Program-Procurement and Supply Management
GFPVAN	Global Family Planning Visibility & Analytics Network
GRZ	Government of Zambia
HMIS	Health Management Information System
HC	Health Center
HSSP	Health Sector Strategic Plan
HTSS	Health Technical Support Services
Jhpiego	Johns Hopkins Program for International Education in Gynecology and Obstetrics
JSI	John Snow, Inc
LAN	Local Area Network
LMIS	logistics management information system
LMU	Logistics Management Unit
MAPE	Mean Absolute Percentage Error
mCPR	Modern Contraceptive Prevalence Rate
MOH	Ministry of Health
MOS	Month Of Stock
NSCCU	National Supply Chain Coordinating Unit
OJT	On-the-job training
PA	Provider Administered
PEPFAR	President's Emergency Plan for AIDS Relief
PHO	Provincial Health Office
POP	Progestin Only Pills
QAT	Quantification Analytics Tool
REMMS	Reports for Essential Medicines and Medical Supplies
RH	Reproductive Health
RHC	Reproductive Health Coordinator
RHD	Reproductive Health Department
RMNCAH	reproductive, maternal, newborn, child & adolescent health
SC	Supply Chain
SDP	Service Delivery Point
SI	Self Injection
SOH	Stock On Hand
SOP	Standard Operating Procedures
TA	Technical Assistance
TMA	Total Market Approach
TWG	Technical Working Group
UNFPA	United Nations Population Fund
UNDP	United Nations Development Program
USAID	United States Agency for International Development
WMS	Warehouse Management System
ZDHS	Zambia Demographic and Health Survey
ZPPA	Zambia Public Procurement Authority

Overview and Background

Project overview

The Injectables Access Collaborative

Led by PATH in partnership with CHAI, Jhpiego, JSI, and inSupply Health, the Injectables Access Collaborative (AC) provides data-driven technical assistance, coordination, and tools to ensure that women have increased access to DMPA-SC and self-injection as part of an expanded range of contraceptive methods, delivered through informed choice programming. Since 2017, the AC has been working with ministries of health and partners across public and private sectors to facilitate introduction and scale-up of the self-injectable contraceptive DMPA-SC. The AC provides dedicated technical assistance (TA) to integrate DMPA-SC alongside other methods in family planning programs—including support on monitoring and evaluation, health worker training and supervision, supply chain management, and advocacy and policy. The AC also shares data and information gathered across countries with international donors to help shape the global market for DMPA-SC, to ensure reliable supply is available to meet demand.

DMPA-SC in Zambia

As of Q2 2024, the national scale-up of self-injection (SI) in the public sector is still in progress. While 71% of facilities offer DMPA-SC, only 12% actively provide SI services. In 2023, self-injection made up just 11% of all DMPA-SC visits on average, highlighting the need for further expansion and targeted implementation.

Under the AC's short-term TA workstream, the inSupply/JSI team has undertaken supply chain assessments in select countries during Year 2. Zambia was selected following consultations with project leadership and key stakeholders in the country. Through collaborative efforts with the Zambia AC PATH team, MOH, and local supply chain stakeholders, the assessment aims to uncover challenges hindering the full-scale availability of contraceptives, with a focus on DMPA-SC. The findings and recommendations from this assessment provides crucial insights for promoting DMPA-SC as part of a comprehensive range of contraceptive options, thereby improving reproductive health outcomes in Zambia.

Executive summary

The Injectables Access Collaborative (AC), led by PATH in collaboration with CHAI, Jhpiego, JSI, and inSupply Health, aims to enhance access to DMPA-SC and self-injection as part of a comprehensive range of contraceptive methods. In Zambia, the AC has played a pivotal role in facilitating the scale-up of DMPA-SC and self-injection within the public sector. This report presents the findings of a supply chain assessment conducted to identify challenges and opportunities for improving the availability of contraceptives, with a spotlight on DMPA-SC. It builds on a previous National Supply Chain Assessment exercise led by USAID GHSC-PSM in February 2024.

The assessment utilized a mixed-method approach, including desk reviews, focus group discussions, and facility visits, to evaluate various aspects of the family planning supply chain system. Key findings reveal stock availability issues, with DMPA-SC accessible in 71% of facilities but self-injection services provided in only 12%. Some contraceptives, such as combined oral contraceptives (COCs), were overstocked while others, including male and female condoms, were understocked. Forecasting and procurement rely on outdated demographic data, leading to inefficiencies in supply planning. Inadequate logistics management information systems (LMIS) and inconsistent data reporting further challenge inventory management. Transport and distribution remain a concern, as delivery delays impact product availability, particularly in provinces without regional hubs. Additionally, storage constraints at lower-level facilities compromise product integrity, and supply chain staffing gaps persist, affecting operational efficiency. Family planning commodity procurement remains heavily donor-dependent, posing sustainability risks.

The report provides comprehensive recommendations to address these challenges and improve the efficiency and effectiveness of the family planning supply chain in Zambia. To address these challenges, key recommendations include strengthening data quality and reporting to enhance forecasting accuracy, expanding self-injection services, and improving last-mile distribution through infrastructure investments and better delivery coordination. There is a need to increase domestic financing to reduce reliance on donor support and ensure long-term supply chain resilience. Capacity-building efforts should focus on training healthcare providers on logistics management and self-injection delivery.

Implementation of these recommendations is essential to ensure uninterrupted access to contraceptives and improve reproductive health outcomes in Zambia. Collaboration among government agencies, development partners, and other stakeholders are crucial to successfully implement these interventions and sustain progress in the family planning supply chain system.

Summary findings

These findings highlight the strengths and challenges of the FP supply chain system. Findings were endorsed through a validation meeting with FP stakeholders.

Product availability	• Stock availability varied across different methods. Whilst DMPA-IM and Implanon reported adequate stocks, CoC was highly overstocked at 19.6 MOS following a long period of stock out. With a projected average monthly distribution of 300.9K DMPA SC in 2024 and a projected 18% growth in 2025, Zambia central store (ZAMMSA) maintained adequate stock for the larger part of the year 2024. By the end of November 2024, ZAMMSA had 2.6 MoS of DMPA.SC; slightly below the 3 months minimum level. However, the same could not be said for the sub-national level. Some of the facilities were reporting stock out.
Quantification and procurement	• Forecasts rely on store-issues data adjusted for stockouts or ZAMMSA distribution data; while DMPA-SC (3%) and Implanon (9%) had the least forecast error in 2024, Levoplant (56%), Male condoms (301%) and H-IUD (622%) had highest forecast error largely due to stock shortages or rapidly evolving demand. • In 2023, Zambia's DMPA-SC stock levels often fell below minimum thresholds due to inadequate orders; however, recent and planned shipments from UNFPA and USAID will bolster inventory through 2025—although ongoing currency fluctuations and procurement delays remain key challenges.
Inventory management	• Healthcare providers have insufficient skills to manage health commodities; for example inadequate skills to compute stock status of family planning products and using available data to manage stock levels within the recommended range. • Stock outs of family planning products that is attributed by an outdated and inadequately following of the distribution schedule by ZAMMSA leading to delays in delivery of the stocks. This has made the maintenance of the min - max inventory levels for FP products at the SDP impractical.
Logistics management information system	• Zambia has adopted an electronic LMIS in all 3550 (100%) health facilities where 53% use Facility Edition and 47% using the central edition. The rest of the facilities can still use the manual tools and submit reports to the DHO for entry into the Central Edition. There are skills gaps in the use of the eLMIS as most of the users have not received formal training. The eLMIS system faces various challenges including lack of standardisation on the Unit of Measure. Whenever updates are made there is no follow up to ensure all users update to the new version. Infrastructural challenges include inadequate IT equipment, old equipment that cannot support the newer versions and power issues
Transport and distribution	• The biggest challenge identified is the non adherence to the delivery schedule. ZAMMSA seems to be struggling with the on time delivery of commodities. This challenge is mainly due to insufficient number of vehicle to support distribution. Engaging a 3PL has alleviated the problem especially in provinces with regional hubs. The 3PL's contract is however a bit restrictive as they cannot deliver to provinces without a hub, causing further delays in delivery to these Provinces.

Summary findings

These findings highlight the strengths and challenges of the FP supply chain system. Findings were endorsed through a validation meeting with FP stakeholders.

Storage

- Most facilities across all levels adhere to good storage practices as outlined in the storage SOPs and guidelines which are also available in most facilities. ZAMMSA sometimes outsources storage from private warehouses to accommodate all the commodities held at the central warehouse.
- Insufficient storage space, especially in the lower levels has led to overcrowding of pharmacy stores and in some cases commodities have to be stored in makeshift storerooms which do not meet the recommended standards for storage of health products

Organization and staffing

- MOH through National Supply Chain Coordination Unit has been coordinating public health supply chain activities. The unit organizes and coordinates Health Technical Support Services working with different stakeholder to support the reproductive health program. MoH has policies, strategies, SOPs among other guidelines that support sub-national health management units and health care providers in health services delivery. However, the National Supply Chain Strategy (2024-2028) is yet to be operationalized. Training needs include training and follow-up support on eLMIS so as to work around staff attrition, inadequate staffing and task shifting

Organizational support for logistics

- At the provincial and district levels, the assessment revealed that, Local Government Authorities give lower priority to health management activities in comparison to other agendas and objectives within the local Government's overall priorities.
- The organizational structure for supporting logistics activities at the provincial level is insufficient, leading to work overload for the available staff and impacting the overall support provided at the district and facility levels.

Product use

- Facilities offering family planning services are experiencing frequent stock outs of family planning products, including DMPA-SC and DMPA-IM which limits choice of methods by some clients.
- Some healthcare providers and family planning clinics have limited knowledge and skills to some methods such as copper IUD and Levonorgestrel Intrauterine System (LNG IUS) hence limiting method choice by clients in some of facilities.

Finance and donor coordination

- FP program is co-funded by both donors and government (45% of 2024 procurement costs covered by government), There is currently no immediate funding gap for 2024–2025; however, budget allocations have dropped in 2025 due to drought response, highlighting inadequate long-term strategic planning, insufficient logistics funding, and the need for continued donor support and strong coordination mechanisms for sustained commodity security.

Summary recommendations

These recommendations were developed and validated jointly with all stakeholders through focus group discussion workshops held with subnational and national stakeholders.

Quantification and procurement

- Strengthen Zambia's quantification by providing targeted training on QAT, GFPVAN, and the condom estimator, identifying and training VAN planners, and—most importantly—incorporating dispensed-to-user data into eLMIS tools to significantly enhance data reliability and forecasting accuracy.

Inventory management

- MOH should conduct logistics training with emphasis on inventory data management and use for decision making. Additionally, the MOH should conduct technical supportive supervision and provide on-site mentorship on data use, and promote data culture for continuous improvement on supply chain performance and quality of data.
- The districts and provinces should continue to push the health services agenda at the local authority level by sharing work plan updates with the DHO and PHO with the councils and use opportunities available to demonstrate impact of the council's support evidenced by data.

Logistics management information system

- There is a need to leverage on automation by including consumption data on the electronic forms to ensure that dispensed-to-user data from FP register is captured on eLMIS and utilised. As such, there is a need to update the eLMIS, the MOH tools, and SOPs to adopt these changes. MoH, regional, local authorities, and partners must invest in the implementation process.
- There is a need to empower and support eLMIS champions to broaden the current pool of user support at the sub-national level. There is a need to motivate change from month-end users to super user. This will enhance the quality of data and institutionalize the data use culture.

Transport and distribution

- ZAMMSA should consider bringing a 4PL onboard to help with distribution of commodities in the provinces where the 3PL does not supply, i.e provinces without a regional Hub . It is also important to conduct an extensive warehouse assessment to assess ZAMMSA's inventory control procedures and warehousing capabilities with an aim of improving ZAMMSA's efficiency. The MOH and local governments through CDF should also consider increasing the budget allocation for vehicles dedicated to distribution of health commodities.

Storage

- There is need to expand and build new storage facilities across all levels to make sure that each level in the pipeline has sufficient space to hold the required commodities in the required quantities. Existing storage spaces should also be improved to meet the recommended storage requirements especially for temperature regulation.
- The Ministry of Health should also ensure that standard building plans, incorporating the provision for a pharmacy store are provided to architects during construction of new facilities

Summary recommendations

These recommendations were developed and validated jointly with all stakeholders through focus group discussion workshops held with subnational and national stakeholders.

Organization and staffing

- The foundation is set as Zambia has developed a strategic framework for their health supply chain management. The sub-national level as the implementers need to share this vision and goals of MOH so the urgent action is dissemination of the National Supply Chain Strategy (2024-2028). Consider logistics management training for all the commodity managers having established that some of the SDPs do have a pharmacist or pharmaceutical technologist. There is a need to encourage the use of available resources like the eSCMIS to empower HCPs and creating short term wins like enhancing data quality and proper inventory management

Organizational support for logistics

- The districts and provinces should continue to push the health services agenda at the local authority level by sharing the DHO and PHO work plan updates with the councils and use opportunities available to demonstrate the impact of the council's support evidenced by data
- The MOH should consider expanding the organizational structure for supply chain at the provincial level to address existing human resource gaps at the the PHO. identifying these gaps will help understand their implication, ensuring adequate staffing, improved efficiency, and better support of the programs, ultimately enhancing service delivery and commodity management.

Product use

- The FP service providers at the SDP should ensure all method mix are available. This can be achieved through proper reporting and ordering of FP commodities, followed by a comprehensive review of reports and orders by DHOs for completeness and quality. ZAMMSA and DHO should fulfill the requests as ordered and deliver on time
- The MOH program in collaboration with partners should capacitate FP providers through comprehensive training and mentorship on Long Acting Reversible Contraceptive and FP method mix to offer all method mix and thus widen consumer choices.

Finance and donor coordination

- Develop a sustainability strategy to gradually reduce reliance on donor funding by increasing domestic resource allocation for FP services and ensuring timely disbursement of funds—addressing longer-term gaps beyond the current two-year commitments to maintain consistent commodity availability.

To ensure sustainable progress, the Ministry of Health, in collaboration with development partners and relevant stakeholders, prioritized the implementation of the recommendations outlined in this report. This involved categorizing recommendations into high, medium, and low priority based on their urgency and potential impact. Once prioritized, the higher priority recommendations were selected for further breakdown into specific activities, which can then be integrated into the master plan for the Reproductive Health Directorate (RHD). By incorporating these activities into the master plan, the Ministry can ensure that they receive the necessary funding and resources for successful execution, leading to tangible improvements in the family planning supply chain system for Zambia.

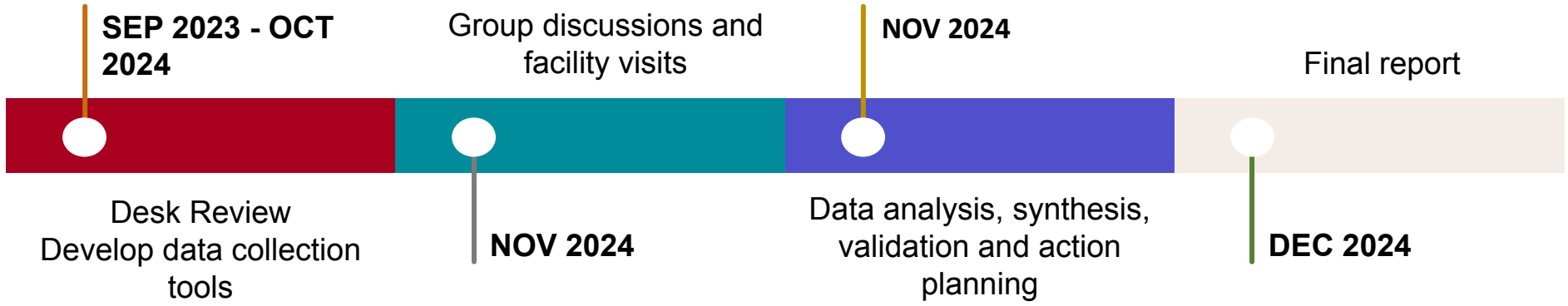
Methodology

Assessment timeline

This assessment was planned and conducted over a period of four months from September 2024 to December 2024. The assessment began in August 2024 by conducting initial engagements with the PATH Zambia team to understand the local context followed with a desk review of existing reports including previous supply chain assessments conducted (National Supply Chain Assessment), and FP logistics and service data. The team designed assessment tools for each level of respondents—central, regional and facility level—including questionnaires for focus group discussions and facility visits. The in-country data collection was conducted over a period of one and a half weeks from November 4–13, 2024 and included a one-day National-level focus group discussion, four one-day regional focus group discussion workshops, and facility visits to sixteen service delivery points and five district warehouses.

After the data collection phase, the results were analyzed, synthesized, and summarized, identifying key supply chain gaps and developing targeted recommendations to address them. A data validation workshop with selected stakeholders was conducted to review and validate the findings and recommendations. Following this, an action planning workshop was held to prioritize the recommendations and outline activities for high-priority areas. This report presents the validated findings, agreed-upon recommendations, and the corresponding action plan, which is included as an annex.

Figure 1. Assessment timeline



Objectives and methodology

Objectives

The main purpose of this assessment is to identify the key gaps, challenges, and opportunities for improvement of the FP supply chain system. The objectives of this assessment are:

- Map the flow of family planning commodities and logistics information in Malawi's public health (FP/RH) supply chain.
- Evaluate the performance of key logistics indicators of contraceptives at central and regional level.
- Identify supply chain bottlenecks from end-to-end affecting contraceptive product availability at the last mile.
- Develop key recommendations and an action plan for implementation to ensure undisrupted supply and availability of contraceptives at service delivery points.

Overall methodology

The assessment team collected data through a mixed-method approach including desk review of logistics data, reports and policies, group discussions with key national and subnational stakeholders, and field visits to service delivery points and district warehouses.

The following key elements of the supply chain system were assessed:

- Organization and staffing
- Logistics Management Information System (LMIS)
- Product Selection
- Forecasting
- Procurement
- Inventory Control Procedures
- Warehousing and Storage
- Transport and Distribution
- Organizational Support
- Product Use
- Finance / Donor Coordination / Commodity Security Planning

Assessment design

Desk Review: The assessment team obtained and reviewed existing supply chain policies, strategic plans, and previous assessments. Logistics data from the GFPVAN and facility levels for the last one year were collected to measure historical performance of key supply chain indicators.

Group Discussion Workshops: A National Focus Group Discussion was held in Lusaka along with four Provincial Focus Group discussions held in Kabwe (Central), Mansa (Luapula), Ndola (Copperbelt) and Solwezi (North Western). Critical components of the logistics system were assessed with the aim of identifying strengths, challenges and recommendations for each supply chain function. The National level FGD included participants from MOH, ZAMMSA, Implementing Partners and Development Partners. A list of participants can be found in the annex.
The team designed and administered a comprehensive questionnaire where participants were broken up into small groups to answer questions pertaining to each component of the supply chain system. All responses were captured electronically. Each group developed a list of strengths, challenges, and recommendations for their component and presented it to the larger group for feedback and validation.

Facility Visits: Field visits were conducted to government facilities at 21 service delivery points in eight districts across four regions: Copperbelt (Masaiti and Ndola), North Western (Kalumbila and Solwezi), Central (Kabwe and Serenje), and Luapula (Samfya and Mansa).. Each visit included interviews with facility supply chain staff, a physical count of sample FP commodities stock on hand (SOH), a review of logistics records and reports, and observations of storage conditions. All responses were captured electronically in an excel based tool.

Results Validation and action planning: Following the data collection phase, the team analyzed the data collected to develop preliminary findings and recommendations. A validation workshop was held with stakeholders to present and validate the the findings and align on the recommendations. Priority recommendations were then identified and an action plan developed for them.

Fig. 2 National Focus Group Discussion workshop, Lusaka. Photo: inSupply Health/ Victoria Kamau

Fig. 3 Facility Visit, Mansa District Warehouse, Luapula Province. Photo: inSupply Health/ Johnson Anyona

Fig 4 Copperbelt Province FGD, Ndola. Photo: inSupply Health/ Daniel Kinyanjui

Findings and recommendations

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55 IX. Organizational support for logistics	**60** X. Finance and donor coordination		

The findings and recommendations in this report are based on the observations and opinions of the respondents and the assessment team. Many of the assessment findings are based on information provided by respondents and are therefore affected by the knowledge, opinions, truthfulness, and biases of the respondents. Responses may have also varied by facility, as different facilities have varied opinions and knowledge with regards to the system. Some of the findings are based on data collector observations and interpretations. Any findings shown are based on desk review, interviews with a sample of facilities and individuals, and may or may not represent the situation in all facilities in Zambia.

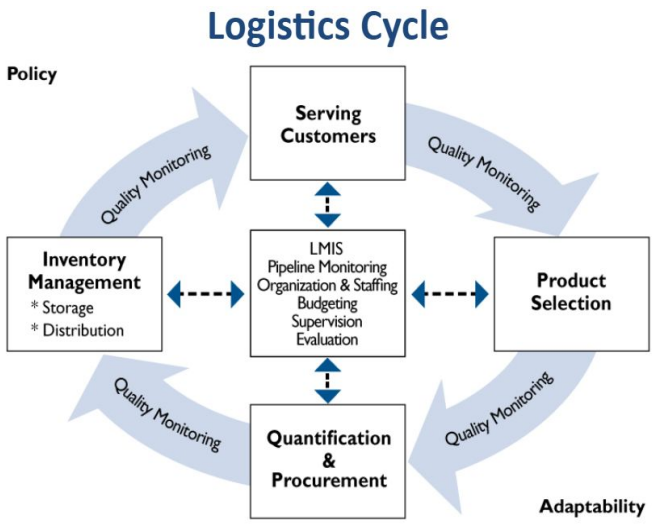
I. Product Availability

FP products availability at central level

In Zambia, the Ministry of Health ensures provision of quality reproductive health services to all eligible clients, with a particular focus on on making family planning (FP) products, classified as essential medicines, available and accessible.In collaboration with key partners such as UNFPA, warehousing and distribution agents like ZAMMSA, local authorities and health management teams and the provincial and district levels, the Ministry actively identifies the needs of women of reproductive age, mobilizes necessary resources and oversees the procurement, storage, and distribution of FP products to service delivery points across the country.

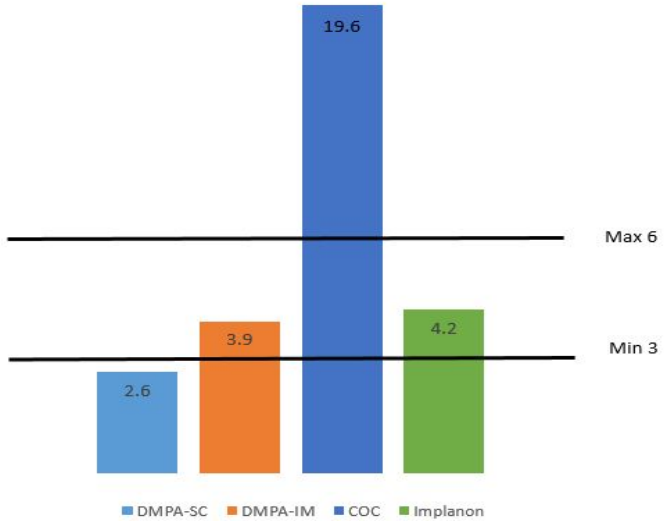
Among the contraceptive methods fully supplied in Zambia is DMPA-SC, which helps expand contraceptive options and increase access of family planning services, including community based delivery. Health facilities can easily place orders for FP commodities from the central and provincial warehouses, and trained healthcare providers are equipped to manage and administer DMPA-SC, ensuring that the method is readily available at all levels of health care.

Figure 5: The logistics cycle



The logistics cycle Source: USAID|DELIVER PROJECT.

Figure 6. Stock status of DMPA-SC, DMPA-IM, COC and Implanon at ZAMMSA



*Data source: ZAMMSA report: Essential Medicines and Medical Supplies Stock Status as of 31st October 2024

The assessment conducted evaluated the entire family planning (FP) supply chain, with a focus on selected tracer products: DMPA-SC, DMPA-IM, Combined Oral Contraceptives (COC), and Implanon. At the central level, some of the products with stock imbalances need to be redistributed to facilities to ensure that stocks align with the inventory levels and all facilities are well stocked.This will necessitate informed decision making regarding issue quantities, particularly where available data is insufficient to to support accurate resupply calculations.

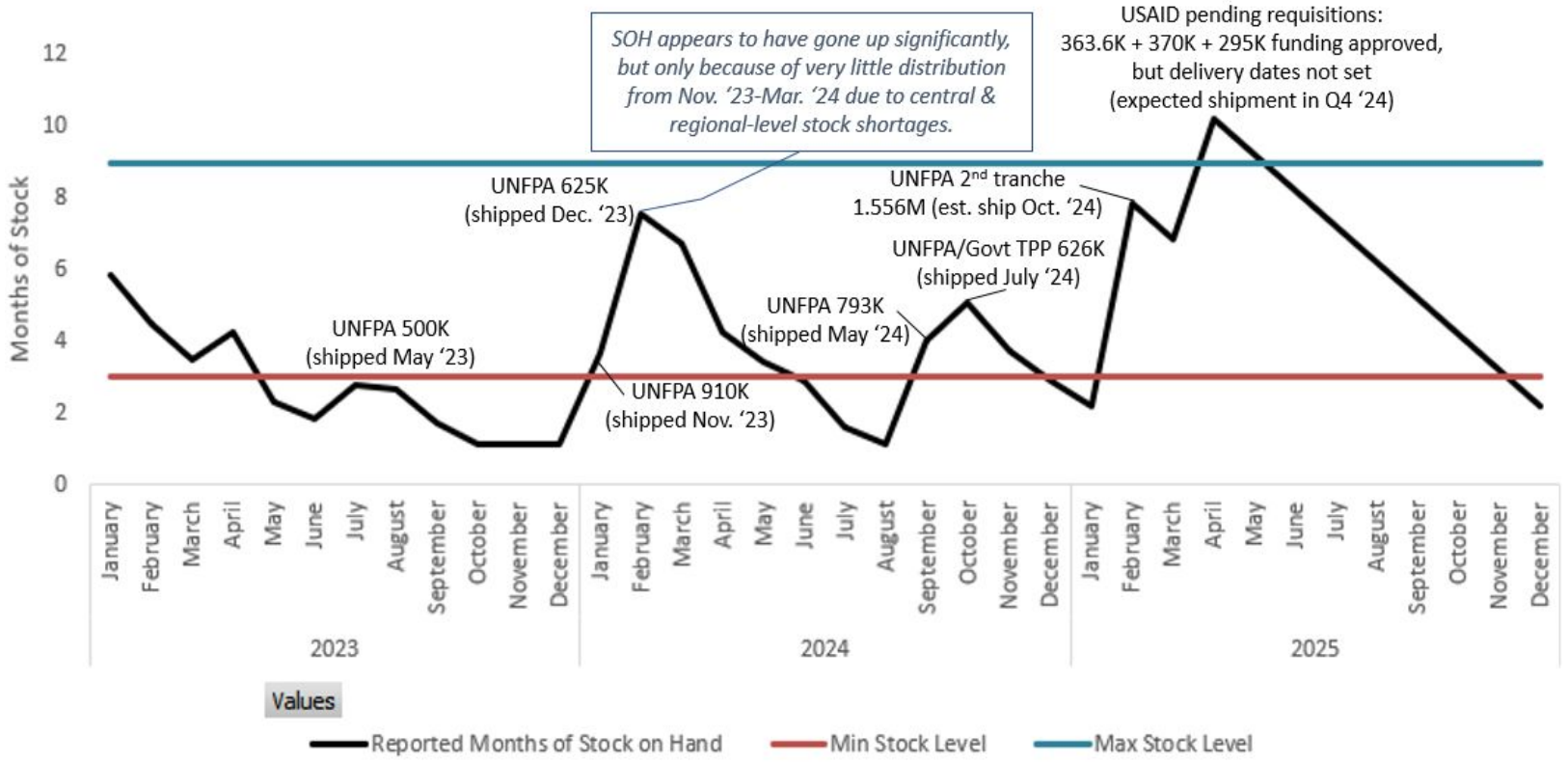
Overstocked FP products: COC was highly overstocked with 1,2K cycles (19.6 MOS) attributed by the erratic supply of which it experienced several months of stock outs prior to the assessment period, significantly impacted the average monthly consumption rate. Other products identified as overstock include POP (31.1 MOS), and Emergency Pills (12.5 MOS).

Stocked according to plan: ZAMMSA reported 47,463 (3.9 MOS) units of DMPA-IM and 66,557 (4.2 MOS) units of Implanon, which were considered as optimally stocked.

Undstocked FP products: ZAMMSA reported only 5262 units (2.6 MOS) of DMPA-SC, Female condoms 1.8 MOS, Male condoms 1.4 MOS, and the 2 rod implants 0.1 MOS. Immediate replenishment of these undestocked products is required to prevent stock outs and ensure uninterrupted service delivery.

Country stock status for DMPA-SC

Figure 7. DMPA-SC stock status based on approved and planned orders



* Data Source: GFPVAN & Zambia MOH Q4 2024 supply plan (VAN October 2024)

In 2024, with the exception of August when the stock fell below the minimum level, the DMPA-Sc stock generally remained within the optimal min - max range, maintaining a steady inventory. The country is expecting a second tranche of 1.556 million DMPA-Sc units from UNFPA, which will increase the stock level to approximately 8 months of supply, slightly below the maximum level of 9 months.

To maintain an inventory above the minimum and ensure a continuous DMPA-SC supply through December 2025 at an optimal level, the country needs to mobilize resources to cover the forecasted needs for Q3 2025, as outlined in the 2024 supply plan. The funding source for the following planned shipments is still to be determined:

- 572.2K units scheduled for July 2025
- 306.2K units scheduled for September 2025
- 330K units scheduled for November 2025

Stock status of FP at the facility level

Figure 8. Stock status at facilities visited

Product	North-West Province Stock status on the day of visit				
	Kalumbila District			Solwezi District	
	Kakaindu HP	Lumwana DH	Kalumbila DHO	Solwezi UHC	Wisdom HP
DMPA-SC	No AMC	12	4.2	0	0
DMPA-IM	2.4	2.8	1.9	0	0
COC	0.4	1.4	No Data	1.6	0
IMPLANON	No AMC	0	0	0	0

Product	Luapula Province Stock status on the day of visit					
	Samfya District			Mansa District		
	Kabongo	Samfya Stage II	Samfya DHO	Chilila HP	Mansa UHC	Mansa DHO
DMPA-SC	13.9	3.4	59.8	0	0	0
DMPA-IM	2	5.1	0.7	150	3.1	No AMC
COC	1.6	0.9	3.2	0	No AMC	No AMC
IMPLANON	No AMC	1.5	3.7	No Data	0	0

Key	Overstock	Optimal	Low Stocks	Stocked Out	No Data

* Data source: Data collected from sample facilities during the field visit in November

Observations

- Availability of stock depends on the reliability of supply chain
- Only 2 facilities were adequately stocked on Depo
- Only 1 facility was adequately stocked on COC
- Stock imbalance is common among facilities where in a district you find one facility is overstocked in a product while the next facility is running low or completely stocked out. The imbalance is also observed within a region, and between regions
- District should only hold a minimum of 0.5 MoS and a maximum of 1 MoS so when a District Store holds 337.6 MoS it means some of the SDP are running low or completely out of stock

Note that a facility with stocks available at the time of visit and no historical consumption over assessment period were considered to be overstocked

FP stock status at the facility level

Figure 9. Stock status at the facilities visited

Product	Copperbelt Province Stock status on the day of visit				
	Masaiti District		Ndola District		
	Masiti Boma	Kafulafuta	New Masala	Madando HC	Ndola DHO
DMPA-SC	1.3	29.9	0.6	1.2	0
DMPA-IM	0.3	10	1.5	3	1.9
COC	4.4	18	1.2	0	0
IMPLANON	0	48	2.1	0	337.6

Product	Central Province Stock status on the day of visit				
	Kabwe District		Serenje District		
	Makululu	Mahatma Gandi	Chibale RHC	Serenje DH	Serenje DHO
DMPA-SC	0	0	5	6	1.1
DMPA-IM	0	0	6	0	7.2
COC	0	2.2	0.4	0.9	2.1
IMPLANON	8.4	2.6	3	0	5.1

Key	Overstock	Optimal	Low Stocks	Stocked Out	No Data

* Data source: Sample facility data collected during facility visit

Interventions on product availability

- Districts are supposed to process emergency orders from the facilities to provide some supplies before the next order
- Facilities can institute inter-facility transfer. Overstocked facilities can redistribute to facilities with low or zero stocks
- Districts Health Offices have rights to central edition and should help in providing this visibility so work around the imbalances
- Regular data reviews can help in addressing some of these stocking issues

Note that a facility with stocks available at the time of visit and no historical consumption over assessment period were considered to be overstocked

II. Quantification and Procurement

Forecasting

Forecasting Process: The forecasting process for FP commodities in Zambia is led by the MoH through the National Supply Chain Coordinating Unit (NSCCU), in collaboration with ZAMMSA. This process is conducted annually during the first quarter of the year (January to March) lasting two weeks, followed by an annual review in September lasting two days.
Technical support for forecasting is provided by partners such as GHSC-PSM and ESCMIS (JSH). These organizations offer expertise and resources to enhance the accuracy and efficiency of forecasting exercises.

The forecasting process incorporates multiple factors, such as, program growth, historical consumption trends, and service statistics. Seasonal and regional variations are also accounted for, along with tools like the condom estimator, which projects demand based on multipurpose use beyond family planning. Forecasts also align with programmatic plans, including the expansion of service outlets, upcoming training sessions, and behavior change campaigns, ensuring responsiveness to national priorities. Key challenges in the forecasting process include reliance on outdated demographic data, limited availability of dispensed-to-user data, and low data quality from some facilities.

Data Sources for Forecasting: Forecasting relies on various data sources to estimate demand accurately. Since dispensed-to-user data is not yet captured in the current Essential Medicines Logistics Implementation Program (EMLIP), distribution/issues data from ZAMMSA serves as a proxy for consumption. Additional data inputs include demographic information from the 2018 Zambia Demographic and Health Survey (ZDHS), census data from 2022, and service statistics from the MoH's DHIS2 platform (HIA2). These sources are triangulated to produce forecasts, though the reliance on outdated demographic data until the dissemination of ZDHS 2023 results presents a challenge.

Forecast accuracy: Forecast validation involves comparing forecasted consumption against actual consumption data to identify discrepancies and refine future forecasts.

Figure 10: Forecast error of FP methods in 2024

Product	Forecast 2024	ZAMMSA issues 2024	Forecast error
DMPA SC (medroxyprojesterone) 104mg Inj	2,369,076	2,291,400	3.39%
Etonogetrel Implanon	207,024	189,519	9.24%
Combined Oral Contraceptives (Microgynon or Oralcon F) Each cycle	1,937,004	2,339,355	17.20%
Female Condoms	120,000	101,586	18.13%
DMPA IM (medroxyprojesterone) 150mg Inj	1,579,380	1,994,815	20.83%
IUD Copper T	68,315	105,049	34.97%
Noristerat (100)	3,096	4,852	36.19%
Microlut	172,224	314,622	45.26%
Levonogestrel 750mcg (Jadelle)	165,624	111,330	48.77%
Levonorgestrel 750 mcg 3 Year Efficacy (Levoplant)	41,400	93,200	55.58%
Male Condoms	170,507,040	42,523,068	300.98%
HIUD (Levonorgestrel-Releasing Intrauterine Device 52 mg w/ Inserter, 1 Each)	18,905	2,620	621.56%

Figure 11: Forecast error interpretation

Forecast error	Intepretation
10% or less	Highly accurate. Excellent forecast
10-20%	Good - Acceptable accuracy
20-30%	Moderate - Somewhat reliable but needs improvement
30-50%	Poor - Needs significant improvement
>50%	Very poor - Highly unreliable forecast

Forecasting

Since actual consumption data is not collected or reported in the e-LMIS, and pharmacy store issues recorded in the system had data quality inconsistencies, ZAMMSA distribution data was used to assess forecast accuracy for the period between January and December 2024 (see Figures 10-12).

Forecast error, calculated as the absolute percentage error between annual forecasted consumption and annual ZAMMSA distribution data, was determined for all family planning products in 2024. The most accurate forecasts were for DMPA-SC (3%) and Implanon NXT (9%), while Levoplant (56%), male condoms (301%), and H-IUD (622%) had the highest forecast errors, indicating poor reliability (Figure 12). The high forecast errors, particularly for H-IUD, can be attributed to inadequate stock levels at ZAMMSA and the product's rapidly evolving demand as a relatively new method.

These findings underscore the need to collect actual dispensed-to-user data and enhance forecasting methods to better align with real consumption trends.

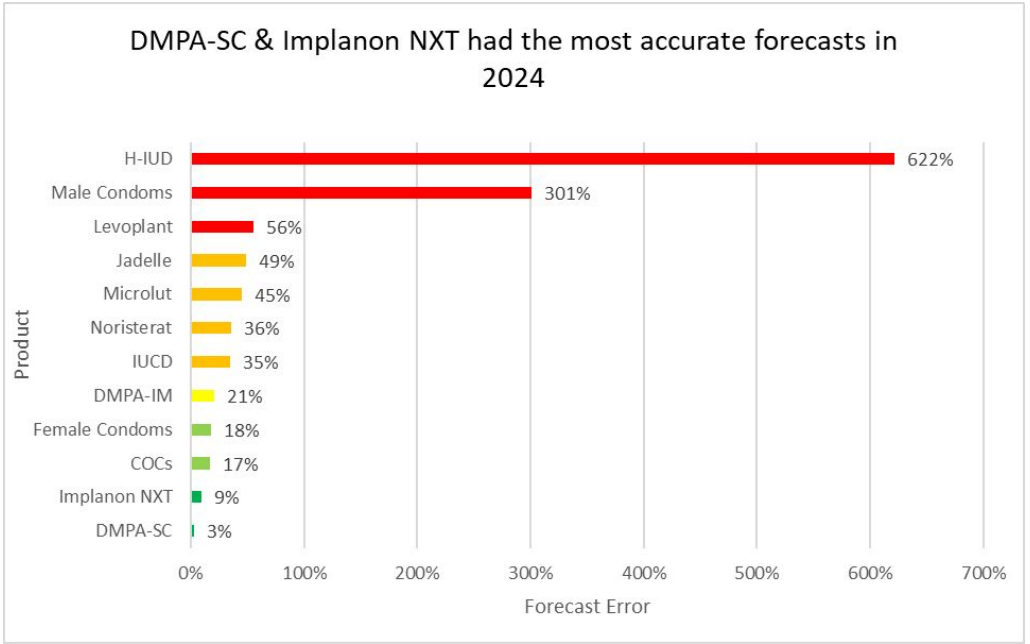
Role of Regional and Lower Levels: Regional and lower-level staff play an integral role in the forecasting process. They are involved in data validation, generating the data used for forecasts, and implementing recommendations. Their participation ensures that local insights and needs are incorporated into national forecasts.

Private Sector Involvement: Private sector participation in the forecasting process is limited, with the focus primarily on public sector needs. Expanding private sector engagement could enhance the comprehensiveness of forecasting efforts.

Costing and Advocacy: Once forecasts are prepared, supply plans are developed to identify both funded and unfunded requirements. The MoH, ZAMMSA, and development partners such as UNFPA, PEPFAR, USAID, and the Global Fund collaborate to secure funding commitments. Regular advocacy efforts, including monthly supply plan review meetings and engagements through the Pharmaceutical Services Unit, aim to address funding gaps.

Future Directions: Plans to decentralize the quantification process to the provincial level are underway to enhance efficiency and ownership. Addressing data quality issues and expanding the integration of private sector players into the forecasting process are critical for improving accuracy and sustainability.

Figure 12: Forecast error of FP methods in 2024



Procurement planning

Procurement planning, ordering, and scheduling are managed by MoH, ZAMMSA, and supported by GHSC-PSM, UNFPA, and GF. To facilitate collaboration between logistics and procurement staff, monthly supply review meetings are held to review the pipeline and update supply plan based on latest information available. The QAT and GFPVAN are used. Procurement plans are based on forecasted needs and account for stock on hand, consumption, losses, lead times, stock levels, and safety stock (6 months at the central level). Procurements are mostly limited to pre-qualified suppliers and products on the national essential drugs list, except for specific items like condoms.

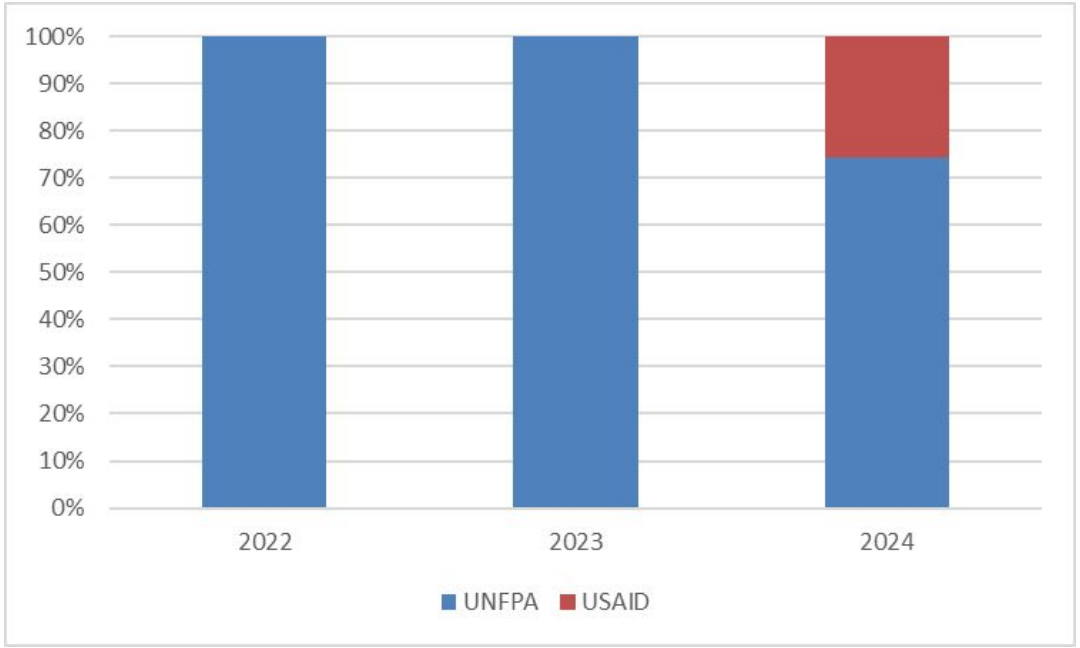
Delays occur at all levels (central, regional, district, and SDP), with products like condoms facing procurement and delivery challenges due to supplier issues. The allocation of budgets in local currency (Kwacha) while procurement occurs in USD poses challenges, particularly due to unaccounted-for foreign exchange fluctuations.

Data source: Zambia Q1 2025 Supply Plan

DMPA-SC procurement planning

An analysis of the source of funding for procurement of DMPA-SC unveils UNFPA as the most important source in the past three years as shown in Figure 13 below.

Figure 13. Source of funding for DMPA-SC procurement



However, based on total Q1 2025 supply plan projections: 72% would come from USAID, 25% from UNFPA, and 3% from Govt funding. It is important to note that none of the funding for these 2025 orders had been confirmed yet.

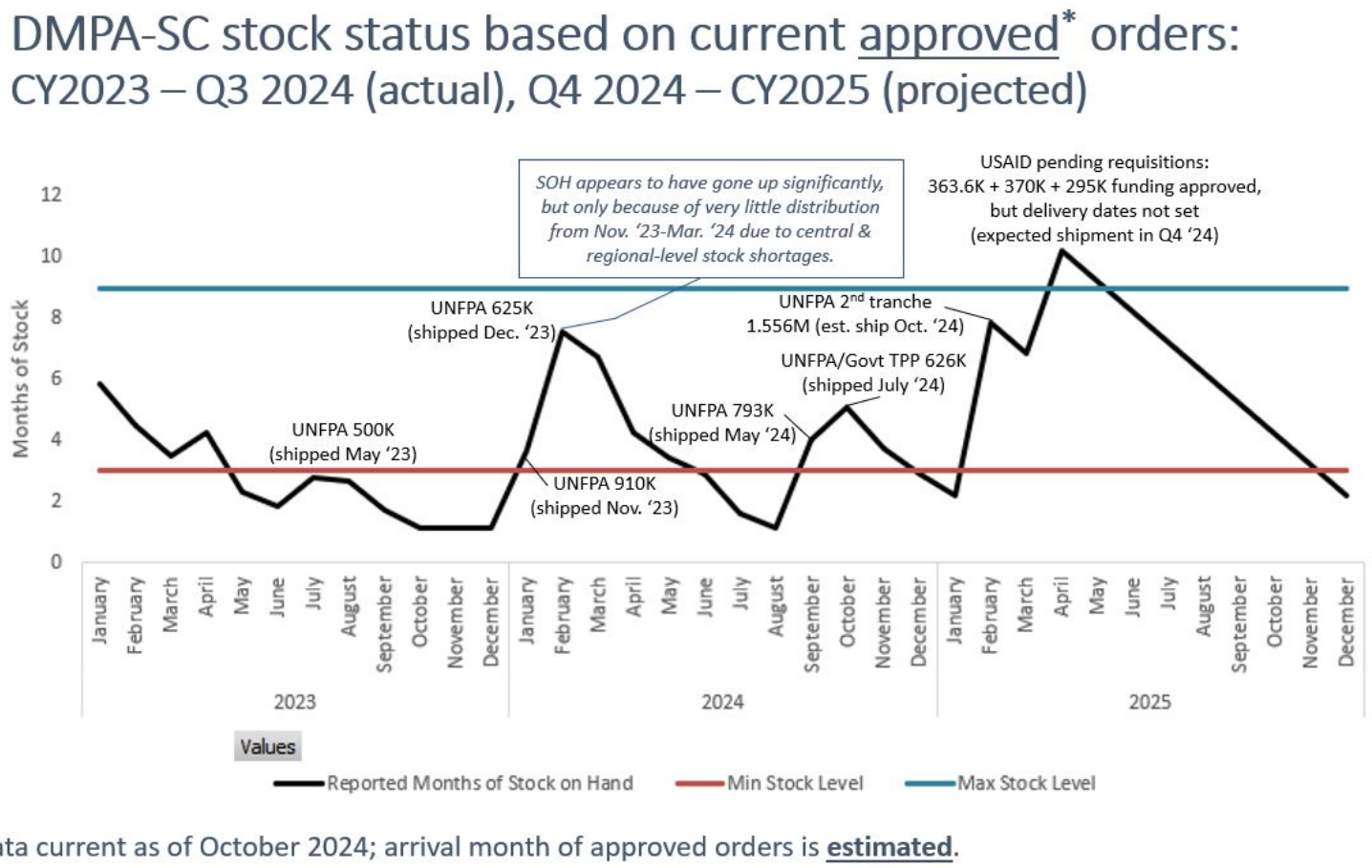
Procurement planning

In 2023, the National Stock Status for DMPA-SC was below minimum stock level for more than half the year indicating that the approved orders for the product were inadequate to maintain inventory levels at the desired optimum levels.

The supply outlook in 2024 has been optimal for the first half of the year due to the arrival two UNFPA shipments of 910,000 units and 625,000 units of DMPA-SC at the beginning of the year. Two other shipments received in September and October also from UNFPA helped shore up supplies which had dipped below minimum stock levels between June and August.

Looking ahead, USAID has 3 requisitions for a total of just over 1M vials for release in Q4 2024. In addition, UNFPA shipped 1,556,000 vials for the MOH in October from the 2nd tranche of funding, which was approved to meet their needs for early 2025. Taken together with the USAID orders, these volumes will keep them well stocked into 2025.

Figure 14. Zambia stock status based on approved and planned orders



*Data current as of October 2024; arrival month of approved orders is **estimated**.

Data Source: GFPVAN & Zambia Q4 2024 National Supply Plan

Gaps and recommendations

Gaps	Recommendations
Knowledge gaps exist among some core team and control tower staff regarding the use of quantification tools like QAT.	Provide targeted training for the MoH Quantification Team on tools such as QAT, GFPVAN, and the condom estimator tool to enhance their proficiency and efficiency.
Transitions of MoH GFPVAN planners into other roles disrupt continuity and expertise in supply planning.	Identify and train VAN planners to maintain expertise and ensure routine updates are effectively managed.
ZAMMSA issues and pharmacy store issues data are used as proxies for consumption, reducing the accuracy of forecasts.	Incorporate the collection of dispensed-to-user data into eLMIS tools to improve data reliability and forecasting accuracy.
High forecast error for Levoplant (56%), male condoms (301%), and H-IUD (622%)	Incorporate the collection of dispensed-to-user data into eLMIS tools to improve data reliability and forecasting accuracy.
Outdated demographic data from ZDHS 2018 continues to be used for forecasting as the 2023 ZDHS results are yet to be published.	Advocate for the prompt publication and dissemination of ZDHS 2023 to provide updated demographic data for forecasting and planning.
The Public Procurement Act (PP Act) imposes bureaucratic hurdles, such as emergency procurements taking up to 21 days, limiting responsiveness to urgent needs.	ZAMMSA should seek a waiver from the Zambia Public Procurement Authority (ZPPA) to expedite procedures during emergencies. Advocate for revisions to the PP Act to enable faster emergency procurements.

Gaps and recommendations

Gaps	Recommendations
Some suppliers notify ZAMMSA of shipments only after products arrive at the border, leading to late coordination and costly demurrage charges.	ZAMMSA should optimize contract management by improving coordination and communication with suppliers to minimize delays and improve contract execution.
Timely disbursement of committed funds from the Government of Zambia (GRZ) to ZAMMSA for FP procurement is not consistently ensured, causing procurement delays.	The Ministry of Finance should ensure timely disbursement of funds for FP procurement. Introduce quarterly updates from the FP program on disbursement progress to improve accountability and transparency.

III. Product Use

Product use

The primary objective of any logistics system is to ensure that the needs and demands of its customers are met efficiently and effectively. In the context of family planning (FP) services, this means providing a range of contraceptive options that are readily available, accessible, and tailored to the individual needs of the clients. In the public sector, FP clients are offered a diverse selection of ten different family planning methods, which include both traditional and modern contraceptive options. Some of these methods even offer multiple product variations, such as different formulations or delivery options. This variety enables clients to have greater autonomy in selecting a method that aligns with their personal preferences, lifestyle, reproductive goals, and health conditions, ultimately empowering them to make informed choices about their reproductive health.

The 2024 Zambia DHS shows a continued increase in modern contraceptive use, with the mCPR among married women moving from about 48% (in 2018) to around 51–52% in 2024 as seen in figures 15 and 16 respectively.

Among modern contraceptive methods, injectables (53.6%), implants (21%), and pills (10.7%) are the most commonly used, whereas female sterilization (0.8%), IUCD (0.3%), and other modern methods such as female condoms and the Standard Days Method (0.2%) are the least commonly used.

The preference to injectables is attributed to factors such as their ease to use, long acting nature, and the ability to administer without daily attention. The performance highlights the success of FP program initiative in collaboration with partner projects such as the Access Collaborative Project 3.0

Figure 15. Trends in use of, need for, and demand for family planning

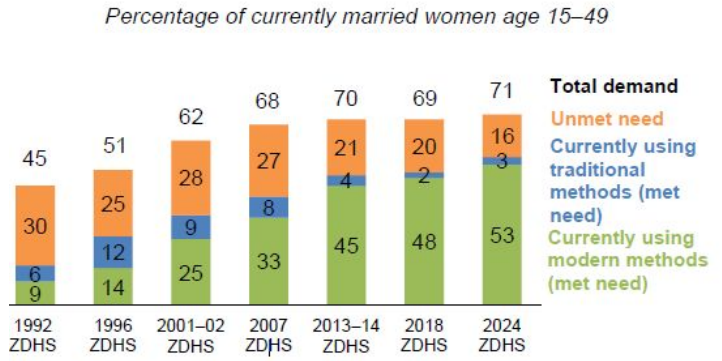
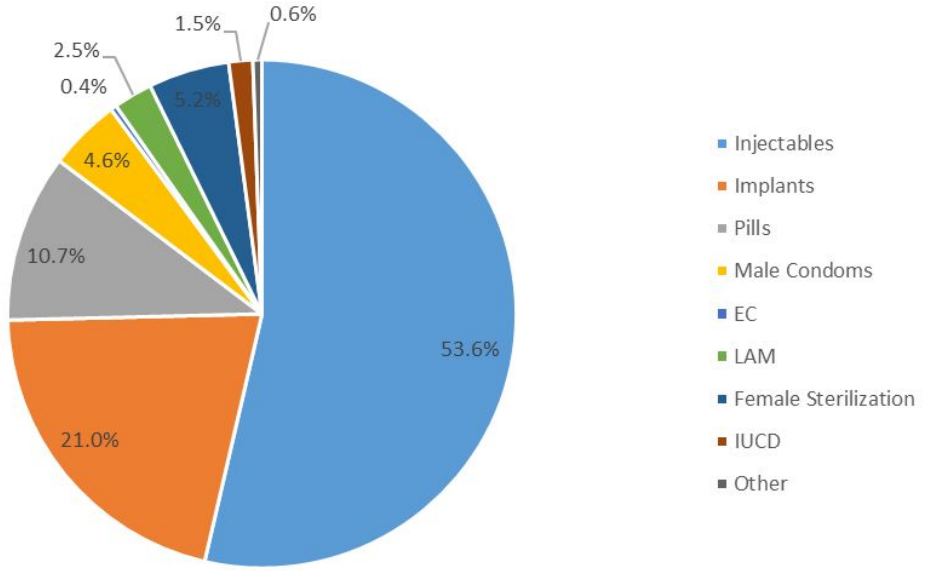


Figure 16. Modern Contraceptive Method Mix for Zambia, 2024

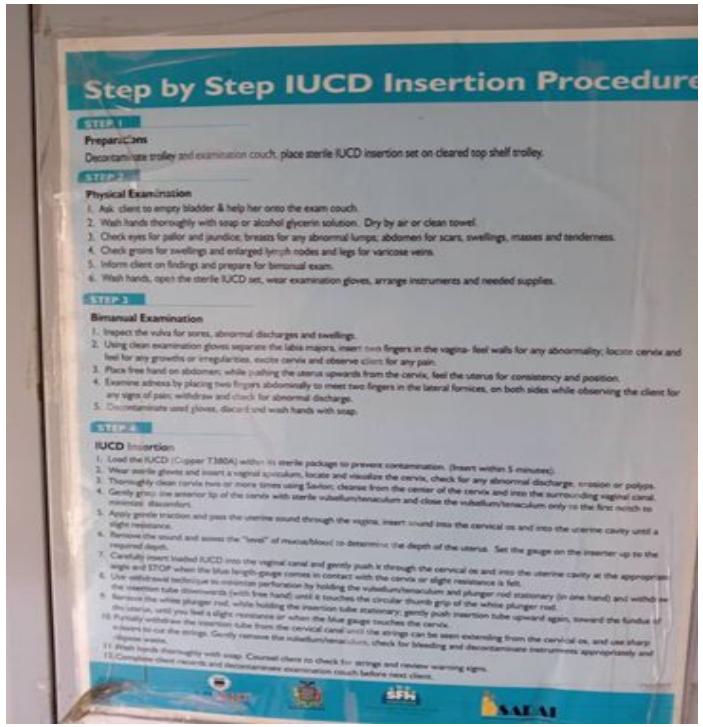


Source: ZDHS 2024

Product use

FP Guidelines and Tools: FP guidelines, job aids and checklists are distributed to most of the Service Delivery Points, but some facilities lack copies, limiting consistent implementation. While self care guidelines are available, they are not uniformly implemented across provinces. MCH services providers are using the updated FP registers introduced in 2022/23, although some prefer exhausting the old registers before transitioning to the new ones, causing delays in full adoption and contributing to data capture errors.

Contraceptive Method Mix: Facilities are encouraged to offer a minimum of three family planning methods, with common options including injectables (DMPA-SC/IM, oral contraceptives, implants, condoms and IUCDs. Preferences and availability of these methods vary by region and the available providers, ensuring that choices align with the local needs and resources.



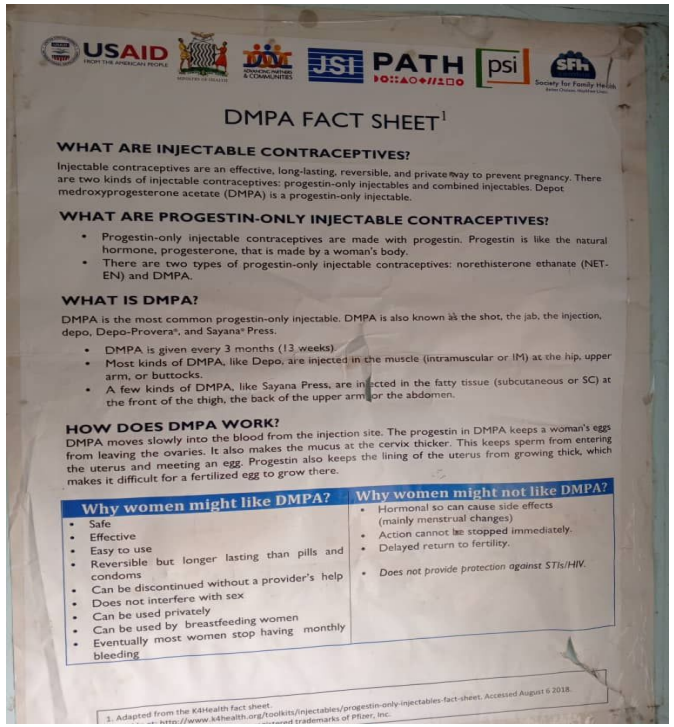


Figure 17. Job Aids to guide FP providers at New Masala HC

Product use

Behaviour Change Campaigns: Campaigns, led by the MOH in collaboration with partners, promote product use through public addresses, radio programs, roadshows and community health workers. These activities aim to increase awareness, educate the public and address cultural and religious barriers, ultimately encouraging the adoption of family planning methods and improving health outcomes.

Commodities and Trained Staff: Commodities requiring specialized training (e.g., IUDs) are ideally supplied only to trained facilities, but in practice, some untrained facilities may receive them due to centralized distribution practices or keeping them for use during outreach programs by higher level supervisors.

Barriers to Access: Access to family planning services is limited by factors such as stock out, transport challenges, myths, and cultural or religious beliefs. For example, the assessment found out that Catholic facilities may not offer family planning services, and rural areas often face significant infrastructure limitations. These barriers hinder individuals ability to obtain necessary reproductive health services, further exacerbating issues related to accessibility and availability.

Figure 18: Field Visit at Mahatma Gandi.
Photo: inSupply Health/ Victoria Kamau

Gaps and recommendations

Gaps	Recommendations
Limited client's choice of family planning method mixt due to frequent stock outs of FP methods including DMPA-SC and DMPA-IM	The FP service providers at the SDP should ensure all method mix are available. This can be achieved through proper reporting and ordering of FP commodities, followed by a comprehensive review of reports and orders by DHOs for completeness and quality. ZAMMSA and DHO should fulfill the requests as ordered and deliver on time
Religious, socio-cultural beliefs and myths that do not support the provision of FP services leading to lower uptake in some communities. For instance, Catholic owned facilities are not supposed to offer FP services as they believe in natural methods, and some community leaders are against the initiatives suggesting that clients using the FP services may end up losing their fertility.	The DHOs should train more CBDs in areas affected by socio-cultural and religious beliefs to improve access of FP services to clients. Services from public facilities around these communities should be strengthened by ensuring uninterrupted availability of FP products strengthen outreach and FP health promotion services.
Knowledge gap by some service providers to some methods such as copper IUD and Levonorgestrel Intrauterine System (LNG IUS) hence limiting method choice in some facilities	The MOH program in collaboration with partners should capacitate FP providers through comprehensive training and mentorship on Long Acting Reversible Contraceptive and FP method mix to offer all method mix and thus widen consumer choices.
Old FP registers are still in use in some facilities and few are using the new versions. Unfortunately all versions do not capture uptake by self-injection.	The MOH should update the current version of registers to disaggregate the providers and self injections, print and distribute the updated version to all facilities followed by orientation of the providers, M&E, and program officers, supervisors on the revised registers and the reporting tool. Also, the MOH in collaboration with other stakeholders should reinforce migration from old to revised registers, by retrieving the old ones

IV. Inventory Management

Inventory control system

An inventory control system plays a crucial role in managing family planning product stock by informing the storekeeper when to order or issue products, how much to order, and how to maintain optimal stock levels. This helps prevent both shortages and oversupply, ensuring a continuous supply of necessary items. For the system to function effectively, it must provide clear guidance on the ordering process, outline minimum and maximum stock levels, and define the frequency at which service delivery points receive their FP supplies. A well managed system ensures that adequate products are available when needed, improving service efficiency and reliability.

SOPs and guidelines: Zambia has an SOP Manual for the Essential Medicines Logistics Improvement Program (EMLIP) Version 2021, which has standardized and streamlined the management of family planning products at all levels of the supply chain. The assessment found that most Provincial Health Office (PHO) and District Health Office (DHO) supervisors, as well as staff at the majority of visited facilities, were aware of the SOP, although printed copies were limited in some locations. The SOP covers stakeholder roles and responsibilities, stock status assessment, reporting, receiving, storage, monitoring, and supervision. It is recommended that the MoH print, distribute and reinforce adherence to the SOPs guidelines. In addition, facilities displayed job aids on their walls, offering quick-reference guidance for various logistics activities.

Inventory control system: The inventory control system in Zambia uses a forced ordering approach, whereby facilities prepare monthly logistics reports for review by the District Health Office (DHO) and Provincial Health Office (PHO) before being processed by ZAMMSA. All orders are submitted electronically through eLMIS. Facilities with the necessary infrastructure—such as computers, reliable electricity, and internet access—report directly through the system, while those without submit paper-based reports, which are then entered electronically at the district level.

Each facility records essential data (e.g., beginning balance, quantities received and issued, ending balance, losses and adjustments, and stock-out days). The system automatically calculates the required order quantity. After the reports are compiled, they undergo final reviews at the district and provincial levels before reaching ZAMMSA for processing.

Minimum and Maximum stock: The forced ordering approach helps the District Health Office (DHO) and Service Delivery Points (SDPs) maintain minimum and maximum stock levels, although inconsistent family planning (FP) product availability has occasionally prevented full adherence to these standards. The assessment showed that min–max levels are generally higher at lower-tier facilities (e.g., health centers and health posts) and lower at higher levels. The emergency order point was uniform across all facility categories.

Level	Maximum Months of Stock	Minimum Months of Stock	Emergency Order Point
Hospitals (District Level 1, and Level 2 & 3)	3 months	2 months	2 weeks (0.5 months)
Health Centres	4 months	3 months	2 weeks (0.5 months)
DHO (top up or emergency commodities)	1 months	0.5 months	2 weeks (0.5 months)

Figure 19: Inventory levels at different levels as per EMLIP Hybrid Ver 2021

Ordering and redistributions

Ordering and redistributions are vital elements of an inventory management system, allowing facilities to adjust stock levels of family planning products by adding or removing quantities as required to meet demand

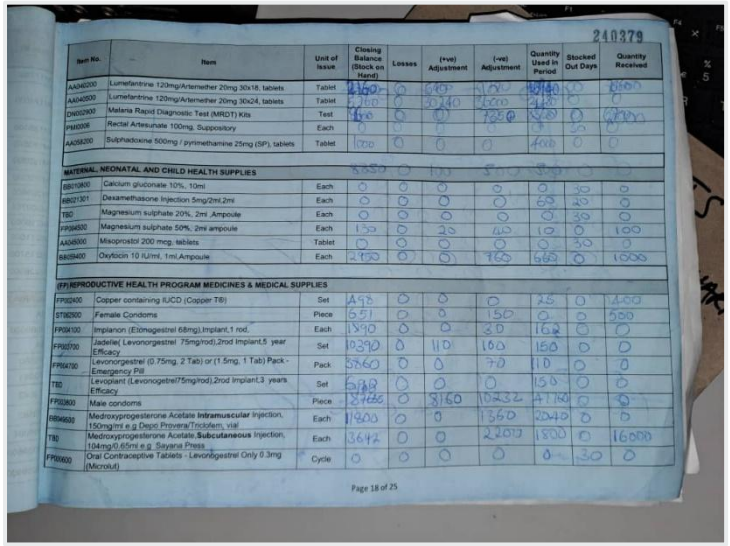
Routine ordering: Family planning (FP) products are reported monthly—together with other essential commodities. Deliveries occur bimonthly at health centers (HCs) and health posts (HPs), and monthly at hospitals and District Health Offices (DHOs). Facilities submit reports either electronically via eLMIS or in paper form; these are then reviewed at the district and provincial levels before reaching ZAMMSA.

Through routine ordering, facilities aim to maintain optimal stock levels and prevent both stockouts, which disrupt service provision, and overstocks, which risk wastage from expiry. However, the assessment noted that these targets are sometimes unmet due to supplier shortages or delivery delays. All interviewed facility staff were aware of the monthly reporting schedule and reported adhering to it.

Emergency ordering. Emergency orders at SDPs are placed with the DHO when potential shortages that could lead to stockouts are identified. To support these emergencies, district warehouses maintain a one-month supply of FP products. Although the DHO is responsible for delivery, limited vehicle availability often necessitates partner support.

Emergency orders are triggered once the Emergency Order Point (EOP) of 0.5 months of stock is reached, with a target three-day delivery window. However, many commodity managers at the visited SDPs do not routinely track stock status or lack the skills to calculate it accurately. Consequently, emergency orders are frequently placed too late, sometimes only after stockouts have already occurred.

Figure 20. LMIS monthly report form



Redistribution: Redistribution is used to address stock imbalances among facilities—whether due to understocking, stockouts, or overstocks. In Zambia, the district pharmacist monitors stock status through eLMIS and shares updates weekly at the commodity tracking meeting hosted by the District Health Office (DHO). Facilities receive stock status information via WhatsApp groups, where a Google Sheet lists the affected facilities, specifies the family planning (FP) products involved, and outlines required actions.

However, limited visibility from facilities reduces the effectiveness of redistribution, and dependence on partner or DHO transport further complicates the implementation of redistribution measures.

Gaps and recommendations

Gaps	Recommendations
Stockouts of FP products due to ZAMMSA's non-adherence to the distribution schedule, resulting in delivery delays. Consequently, maintaining the minimum-maximum inventory levels for FP products at SDPs has become impractical.	ZAMMSA in collaboration with other stakeholders should ensure that stocks of FP products at SDP are maintained within min - max levels through; I. On time ordering by SDPs, review of their stocks and proper review of the orders at the DHO and PHO. II. ZAMMSA to review and update the delivery schedule, disseminate it to the PHO, DHO and SDPs III. ZAMMSA should implement the revised schedule and stick to it. IV. ZAMMSA should conduct Fleet capacity assessment and consider the use of 4PL if necessary
Healthcare providers may not have sufficient skills to manage health commodities for example using available data to manage stock levels	MOH should conduct logistics training with emphasis on inventory data management and use for decision making. Additionally, the MOH should conduct technical supportive supervision and provide on-site mentorship on data use, and promote data use culture for continuous improvement on supply chain performance, quality of data and proper inventory management to ensure uninterrupted delivery of services..
Inadequate logistic support and lack of dedicated utility vehicle for transportation and redistribution of health commodities	MOH should Invest in logistics at the provincial, and the district level by lobbying the availability of a vehicle to support logistics activities. This vehicle should be dedicated for distribution, redistribution of health commodities, and logistics for supportive supervision activities. The MOH should lobby for the Procurement of motor bikes at the DHO to support distribution, redistribution and onsite supportive supervision.

V. Logistics Management Information System

Logistics management information systems

Electronic and paper based system: Zambia relies on both electronic and paper-based systems to manage logistics data. The eLMIS operates in facilities equipped with reliable internet, electricity, and necessary hardware—covering about 53 percent of all SDPs. Facilities without these resources submit paper-based reports, which are then digitized at the district level. While this ensures some level of data capture across the country, the dual approach can introduce delays and data inconsistencies. Higher level supply chain decision makers at the district, province, national and ZAMMSA have access to the central level edition of the e-LMIS, with a coverage of 47%

Data Collection, tools and Flow: Facilities typically collect essential logistics information, including the beginning balance of commodities, quantities received, quantities issued, ending balances, losses or adjustments, and days of stock-out. Zambia's LMIS relies on several key forms to ensure effective commodity management at all levels of the supply chain including registers, stock control cards, Reports for Essential Medicines and Medical Supplies (REMMS), Return Authorization Form and Supply Vouchers to effectively manage commodity inventory, reporting, returns, and redistribution across the supply chain. Of the facilities visited during the assessment, 100% had stock cards, 90% were using the e-LMIS while 90% were using the paper based REMMS, 100% had supply vouchers, 74% had FP registers while 11% were using counter books as illustrated on figure 21. Once these data are entered into the e-LMIS, the system automatically calculates resupply quantities.

Each facility compiles its logistics report monthly and forwards it to the District Health Office (DHO) and the Provincial Health Office (PHO) for review and approval. Finally, the reports are sent to ZAMMSA, which processes the orders and arranges for replenishment.

Figure 21: Availability of LMIS tools among sampled facilities

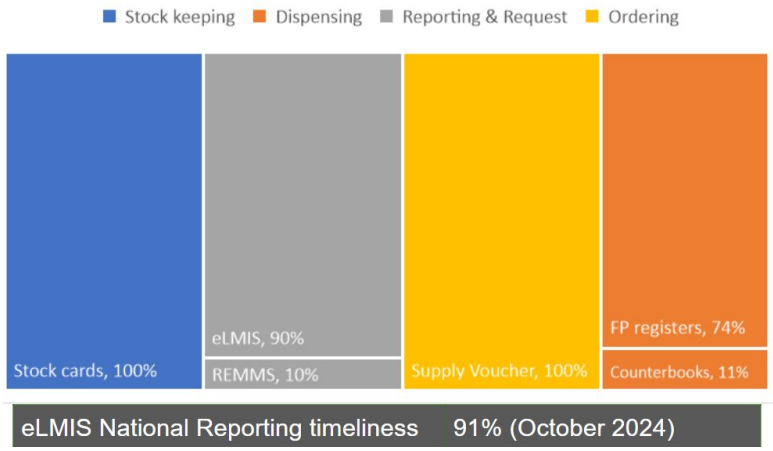
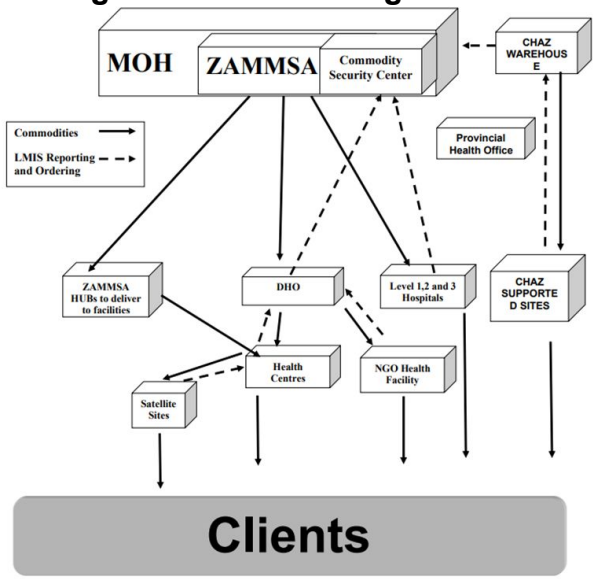


Figure 22: Flow of Logistic information

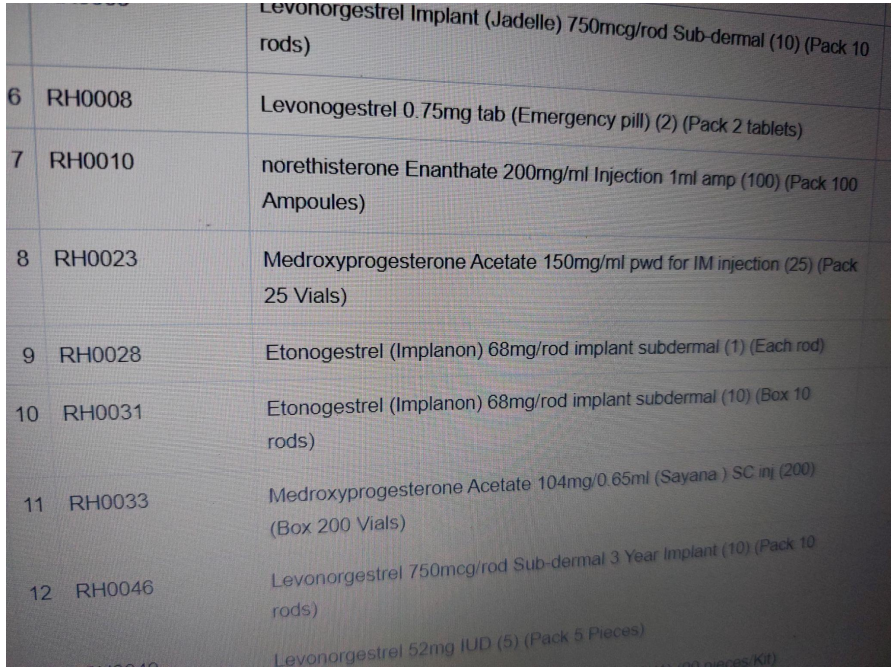


Data Visibility, Quality and Data Use: Automation through eLMIS has greatly improved visibility into the FP supply chain, though lower-level users still lack access rights to monitor stock levels above them. The Central Edition (CE) offers flexible, customizable reports that support commodity management, administrative functions, and equipment tracking. By automatically generating key supply chain reports—including those needed for emergency orders and redistribution of overstocks—eLMIS provides critical data for more efficient decision making, reducing reliance on manual calculations and minimizing errors.

However, the overall accuracy of routine orders depends on the quality and timeliness of data submitted into the system. Currently, dispensed-to-user data are documented in FP registers but not uploaded into eLMIS, meaning storeroom “issues” data serve as a proxy for consumption. Facilities lacking adequate technology continue to use a paper-based version of the reporting tool, which can omit some commodities. To foster a stronger data-use culture and institutionalize continuous improvement, FP supply chain indicators should be discussed in routine data review meetings, and feedback on reporting practices should be shared more broadly—even via existing WhatsApp groups—to encourage best practices and motivate teams.

The recent integration of the electronic Logistics Management Information System (eLMIS) with the Warehouse Management System (WMS) now allows central edition users to access central-level stock data, enhancing ordering decisions. However, this transition has introduced some initial challenges, particularly in the standardization of units of measure for stock reporting. Despite guidance to report stock in the smallest unit of measure, the assessment revealed inconsistencies in how products are recorded in the eLMIS. Products were reported in varying pack sizes corresponding to stock-keeping units (SKUs). For instance, as shown in Figure 23, DMPA-SC is reported in packs of 200 units. Additionally, duplicate entries for the same product were identified, such as etonogestrel 68mg rod implant (Implanon), which appeared multiple times in the system. These inconsistencies risk compounding data quality issues, undermining the reliability of the system for decision-making.

Figure 23: eLMIS FP report



Gaps and recommendations

Gaps	Recommendations
Despite collection on FP register, dispensed-to-user data is not reported on e-LMIS. Consequently, issues data is used as proxy yet it does not represent the actual consumption.	MoH to issue memo/directive on collection and reporting of dispensed-to-user data. MOH to promote the use of eLMIS and expedite the process of transitioning to transactional record where dispensed-user-data is entered in eLMIS as the the HCP serve clients
The lack of quality review of data collected manually and/or electronically affecting supply chain performance	Have a quarterly review of FP SC performance presented to RH TWG to ensure there are specific interventions
Staff supporting the LMIS function are inadequate across the different levels	Recruitment of dedicated pharmaceutical personnel to run and support supply chain activities
Network and connectivity breakdown continue to affect the use of eLMIS. Facility Edition (FE-eLMIS) System failure also affects the use of eLMIS	Identify facilities that have limited LAN infrastructure. Improve the infrastructure of LANs to ensure that the laptops/machines are connected foe successful upload of the reports on the e LMIS. MOH to assign a dedicated IT person in every district health office to handle technical issues
Inability to introduce eLMIS FE in some facilities due to lack of power and internet connectivity. Network constraints, power blackout, and inadequate power back ups rendering the eLMIS inaccessible.	DHOs to include power and internet installation in the annual work plans and budget for the same including maintenance Engage national government local authorities and partners to invest in alternative power sources and backup plans for example solar panels, inverters, and battery packs
There is no uniform/standard understanding and reporting of a unit of measure. The smallest unit of issue is not used in logistics management at all levels	Establish a standard unit of measure and harmonize the same in the eLMIS to ensure that stocks are reported using the smallest unit of measure (e.g. vials, cycles, sets, amps). There is need to communicating to staff at SDP level on appropriate units of measure

VI. Transport and Distribution

Transport and distribution

Zambia Introduced last mile delivery for all health commodities in October 2024. ZAMMSA is responsible for transporting all health commodities from the Central stores to all service delivery points, District Health Stores (as buffer stock), and Regional hubs. Efforts are ongoing to decentralize ZAMMSA through construction of regional hubs in each province. So far, hubs have been established in 6/9 provinces. The Regional hubs deliver routine and emergency orders directly to the facilities. These regional hubs have played and important role in reducing the lead time for delivery of commodities to the facilities.

Routine distribution: Transportation of FP commodities from the central ZAMMSA stores to Provincial Hubs and facilities is done using ZAMMSA trucks and an outsourced 3PL. Deliveries are guided by a delivery schedule developed by ZAMMSA. The delivery schedule is normally shared with the lower levels, although more recently, ZAMMSA has stopped sharing the printed copy of the schedule. One of the observed challenges leading to shortage/ stock outs at facility level, is non adherence to the delivery schedule by ZAMMSA. Some reasons for non adherence to the schedule are a lack of sufficient vehicles for distribution and sometimes facilities may take a longer time to offload orders-causing delays.

Facilities report monthly through the eLMIS and are supposed to be supplied bi monthly- therefore, there are 6 delivery cycles in a year. Delays in the delivery of family planning products often lead to disruptions and mismatches in the delivery cycles, for example, ZAMMSA could be supplying cycle 6 for some provinces and cycle 4 in other provinces. This results in unequal supply of commodities where some provinces are stocked out more often than others. Also, since ZAMMSA does not usually indicate which cycle's orders they are fulfilling, facilities often don't know which orders they are receiving, especially when there is a delay that causes an overlap in the supply cycles. A recommendation here would be to align the delivery cycle.

ZAMMSA has engaged a 3PL to support with routine distribution. The 3PL currently covers close to 90% of the routine distribution orders. The 3PL only delivers to Provinces that have Provincial Hubs as per their contract, contributing to delays in distribution to the provinces with no hubs as they can only be supplied using ZAMMSA trucks which are not enough, hence not readily available to distribute as per the schedule. This can be seen in Figure 24 where for example, out of the 5 facilities visited in Central province, 4 had a lead time of more than 2 months, while in Northwestern, only 1 facility had a lead time longer than 2 months- Northwestern province has a Hub, while Central province does not have a Hub.

Figure 24: Average lead time per province

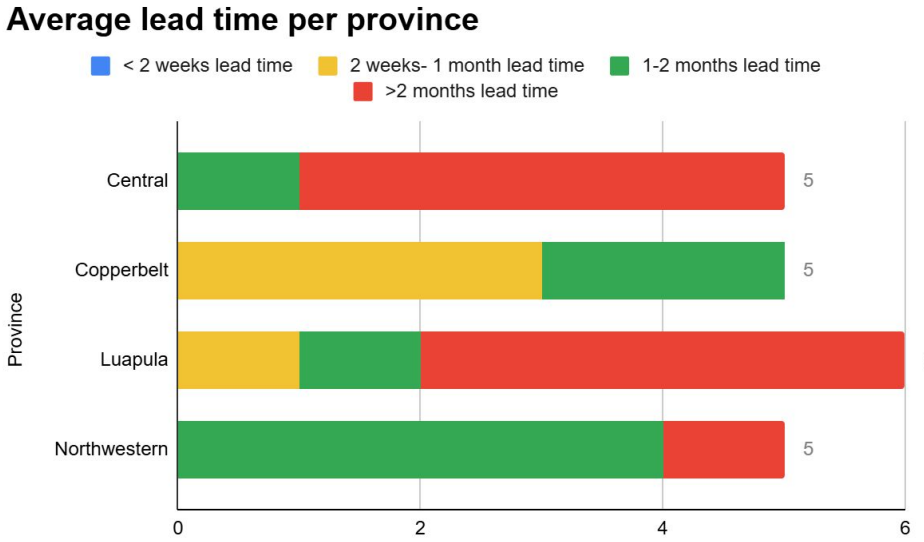
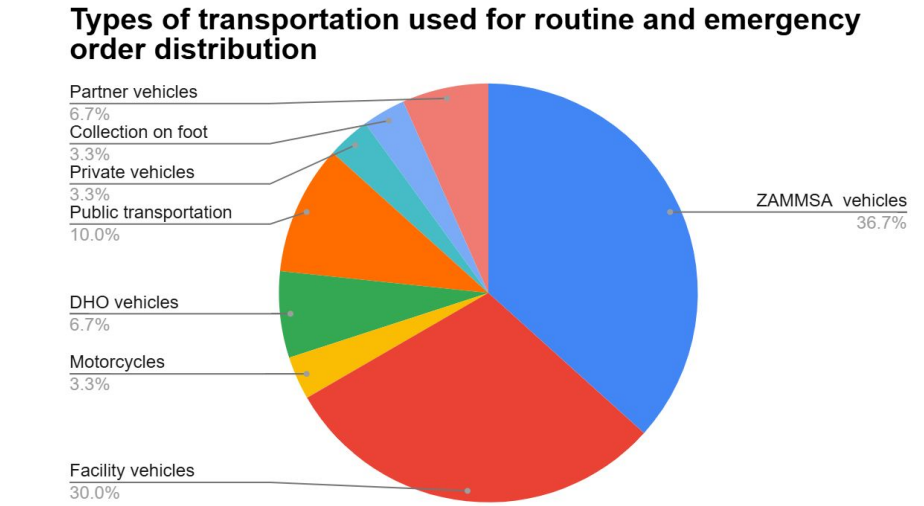


Figure 25: Modes of transportation used



Transport and distribution

Redistributions: The process is in most cases initiated by the pharmacist at the District Health Office.The District pharmacist has visibility over facility stock status through the eLMIS. Transport for redistribution is heavily dependent on partner support, although the District Health Office also does redistribution using District vehicles - often done together with support supervision.

Emergency ordering and transportation of emergency orders: Emergency distributions are usually coordinated by facilities. The ordering process is initiated by the facilities when they reach the emergency order point (0.5 MOS). Deliveries are made using facility or partners' vehicles. Sometimes, due to the lack of sufficient vehicles, facilities use motorcycles or public vehicles to collect commodities from the DHO or regional hubs Figure 25 shows the modes of transportation commonly used. There is no lead time for emergency orders since the facilities collect the orders from the District Health Offices or regional hub. On average, it takes 1-3 days for emergency orders to be delivered to the SDPs. Sometimes order pick up may be delayed due the unavailability of facility vehicles.

Out of the 21 facilities visited, 6 had placed an emergency order within the 3 months prior to the assessment. A total of 10 emergency orders had been placed by these facilities indicating that some facilities made more than one emergency order within this period.

There is a general over-reliance on Emergency distribution, with some facilities having an equal number of emergency and routine orders. Emergency orders are fulfilled most of the time indicating that there is enough commodity in the pipeline and the reason for stock outs is related more to the commodity distribution and not a lack of commodity. Figure 27 shows a breakdown of a few facilities orders within the 6 months prior to the assessment.

Figure 26: Emergency orders

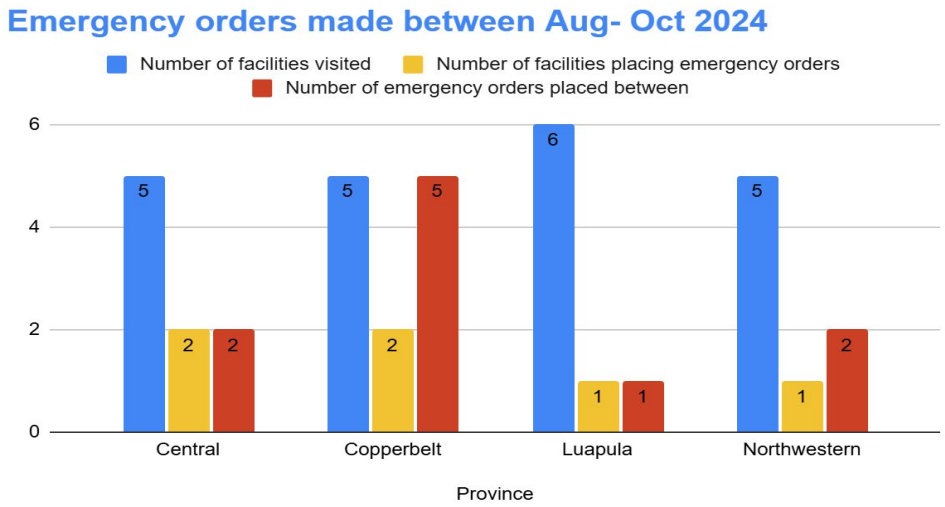
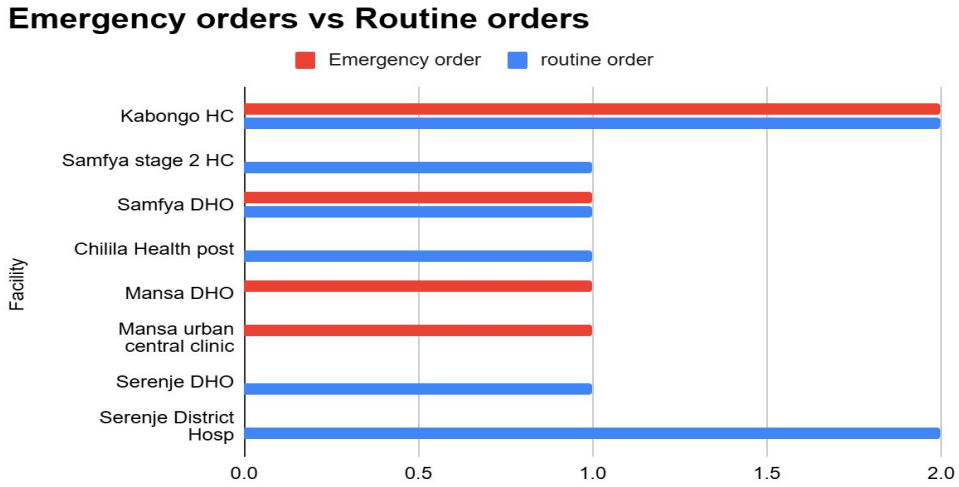


Figure 27: Emergency vs routine orders



Gaps and recommendations

Gaps	Recommendations
Donor dependence, high risk if they pull out. The 3PL partner engaged to support transport and distribution at the national level (ZAMMSA) is donor funded. The provinces and Districts also rely on other donors and implementing partners such as Global fund to support distribution and redistribution.	Develop a sustainability plan for post-donor support. There is need to strengthen ownership across all levels, ensuring that provinces prioritize funding for transport while they continue lobbying for more funds to streamline distribution with minimal donor dependence
Nonadherence to the distribution schedule. ZAMMSA has not been adhering to the monthly/ bi monthly distribution schedule as it is supposed to. During the assessment it was noted that some facilities have not received any shipment from ZAMMSA for the past 6 months, while they should have received at least 2 orders within these period based on the current distribution schedule that provides for 6 delivery cycles. There are significant delays in distribution of orders by ZAMMSA.	ZAMMSA to stick to the delivery schedule- ZAMMSA should ensure that orders are delivered as per the schedule.
	Conduct an assessment of ZAMMSA's inventory control capacity to understand the root cause of the delivery delays. A root cause analysis to understand the challenges barring ZAMMSA from fulfilling the orders a required should be undertaken.
Inadequate utility vehicles to support on time distribution to all facilities. Currently, there are insufficient number of vehicles dedicated to transport and distribution across all levels. This delays the distribution process as all provinces cannot be served at once by ZAMMSA.	Engage more partners (4PL) to support transport and distribution, especially last-mile distribution. This might help streamline ZAMMSA operations, ensuring there are no delays in order distribution.
Limited operational funding for vehicle maintenance significantly hampers the ability to keep transportation resources such as vehicles in good condition, affecting service delivery and efficiency.	MOH and ZAMMSA should increase the budget allocation for vehicle maintenance is essential to ensure that transportation resources remain functional, reducing downtime, improving service delivery, and preventing costly repairs, thus enhancing overall operational efficiency.

VII. Storage

Storage guidelines and storage infrastructure

Products are stored at every facility in the pipeline. These facilities include ZAMMSA central warehouse and regional hubs, district warehouses and at the service delivery point level.

SOPs and guidelines: The program has written guidelines and SOPs for storage and handling of all products, applicable to all levels of the system. However, some lower level facilities do not have written copies of these guidelines.

Storage space: Respondents mentioned that the storage space at the central stores (ZAMMSA) and regional hubs are adequate to keep the usable stock, but the accumulation of unusable stock due to expiries and damages restricts storage.In the lower levels (from DHO to SDPs), the storage capacity is inadequate to handle the quantities of product required.This has resulted in overcrowding of the stores and in some instances, the facilities ae forced to use makeshift storage by utilizing offices and rooms meant for other purposes. This poses a risk to product quality as the makeshift storage spaces may not meet the desired storage conditions, for example temperature regulation.In some cases, the DHO holds stock for health facilities that do not have enough storage. To cope with the inadequate space, at the regional hubs, orders are tailored according to storage capacity and usage although family planning orders are supplied to max since they are not bulky. There is a need to expand storage space at these levels to ensure adherence to good storage practices. It was also noted that during construction of new facilities such as hospitals, the provision for a pharmacy store is not prioritized and is instead considered as an afterthought. To avoid the issue of inadequate storage space, it is critical that the MOH provides standard building plans (which include the provision for a standard pharmacy store) to architects during construction of new health facilities. The plans to construct and expand regional hubs in all the provinces will alleviate the storage situation especially at the central and regional warehouses.

Storage temperatures: At the central, provincial, and district stores, temperature regulating mechanisms such as air conditioners are available. However, not all lower level facilities have functional air conditioning. Even where air conditioners are available, they are unreliable due to the frequent power outages (load shedding). This leaves the commodities at a risk of degradation and damage due to continuous storage at high temperatures. There is a need to invest in adequate temperature control and monitoring systems as well as power backup systems.

Figure 28: Pharmacy store, Chilila Health Post

Figure 29: Pharmacy store, Madando Health Post

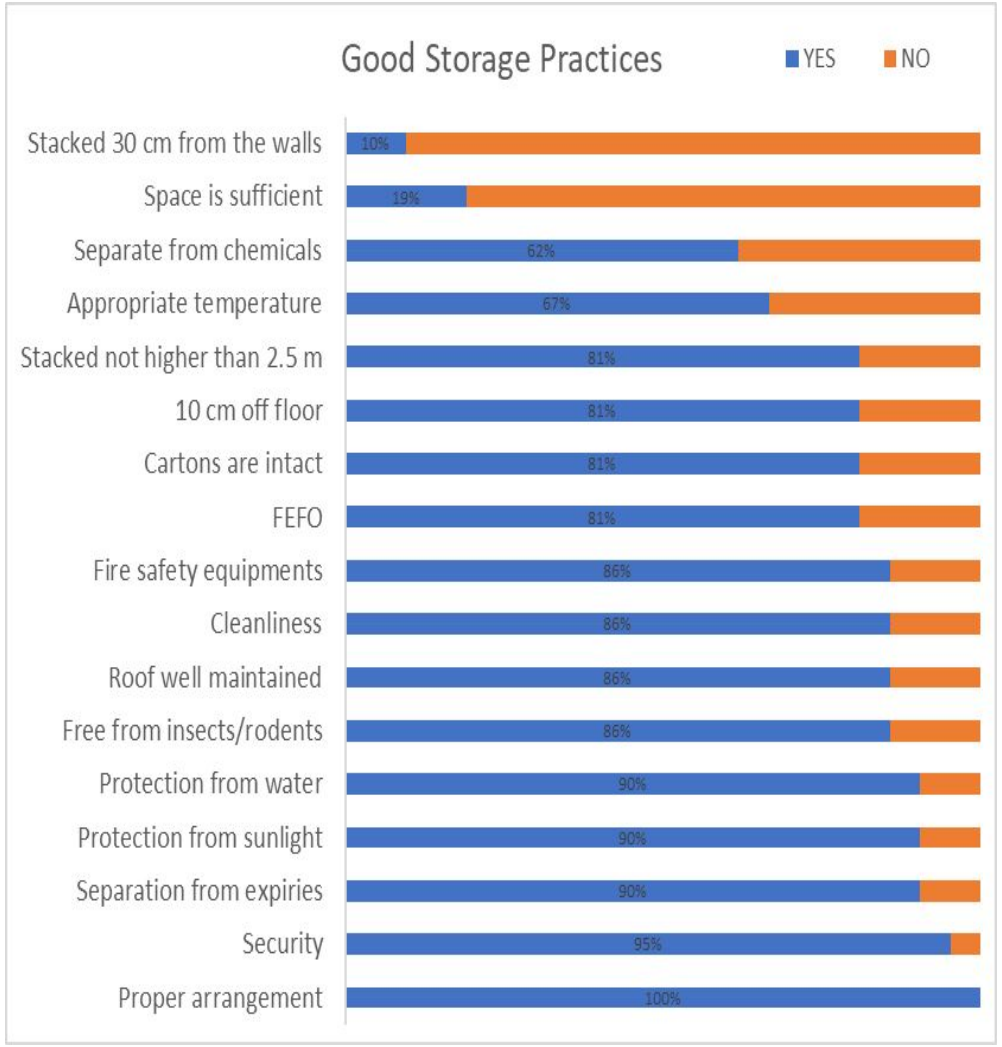
Store management

Generally the stores and warehouses at all levels are managed by following the storage guidelines and SOPs despite the fact that copies of the manuals were not found in some of the facilities visited.

Handling of wastages: According to the available guidelines on waste disposal, once FP products expire/ become damaged they are removed and separated from usable stock, removed from stock cards and recorded on an improvised expired pharmaceutical product list. Observation at facility pharmacy stores indicated that expired products were separated from the usable stock. Once the damaged/ expired commodities are separated and recorded, the pharmacist does a valuation of the products and then writes to ZAMRA, ZAMMSA, local council, state police, and ZEMA to notify them about the expiries. Upon inspection and verification by these stakeholders, the commodities are transported to the relevant disposal sites. Facilities usually take their expired commodities to the DHOs. There are no disposal charges incurred by facilities except for transportation of the expired commodities.

Good storage practices: All levels conduct monthly physical inventory and record the stock on hand on the stock cards and FE- eLMIS as observed on the day of the visit. Other good storage practices such as cleanliness, securing store rooms, product arrangement and labelling, and fire safety equipments were available/ implemented. Common challenges included unavailability of alternative power source when there are power cuts, unavailability of Air conditioners, and insufficient pallets/ shelves for storing commodities. One of the facilities visited had a leaking roof. Although fire safety equipment is available, the facility staff have not been trained on fire safety and do not know how to properly use these equipment.

Figure 30: Performance on good storage practices



Gaps and recommendations

Gaps	Recommendation
There is limited storage capacity noted at all levels While all facilities visited had a pharmacy store, the stores were small and overcrowded with commodities being stack up too high and other commodities being stored in makeshift storage areas. This puts the commodities at a risk of damage due to improper storage conditions	Provision of standard storage facilities and expansion of existing storage spaces where space is available at all levels There is a need to expand the current pharmacy stores at all levels and perhaps build new ones where space is available. This will allow the levels to stock all the commodities required in the right conditions.
Some facilities at the service delivery point do not meet storage conditions Good storage conditions include good temperature control, cleanliness, absence of leakages and rodents, security of the storeroom, etc. Most facilities demonstrated a few good storage practices but some had a few areas that still need improvement	Procurement of AC systems in all facilities to maintain the quality of FP commodities. Leadership level (PHO, DHO, Facilities) to lobby for this AC systems will ensure that commodities are stored within the right temperatures by regulating the store's temperature especially during the hot season.
	Have in place temperature monitoring tools and processes It is important to track storeroom temperatures to ensure that commodities are not exposed to highly fluctuating temperatures that could result in damage. The district, facility and central level staff can keep temperature records and routinely monitor them to ensure adherence to provided temperature guidelines.
	Have a budget line for maintenance. Facilities across all levels should have a budget line specific to the maintenance of storage structures within the facility.
	Have policies on maintenance of storage facilities
Lack of power backup. The country experiences a lot of load shedding, with some provinces not having power for more than 8 hours in a day. When this happens, facilities with no power back up have no power hindering functions such as temperature regulation	Have functional power backup system at lower levels With the constant load shedding in the country, it is paramount that all pharmacy stores have power backup systems

VIII. Organization and Staffing

Organization structure

To provide effective quality healthcare services, Zambia Ministry of Health has a health care system structure identifying administrative levels, roles and responsibilities. The Ministry also assumes coordination role to ensure that the national vision, mission and goals are shared across. The structure serves to support the logistics cycle as the framework to achieving health program roles
Zambian reproductive health is organized in a hierarchical structure.
National Level The program is led by the Ministry of Health. The ministry runs the family planning program. They provide governance by developing policies and guidelines, setting strategic objectives, providing an enabling environment and monitoring the implementation process to deliver the service as part of broader health service. The goal is to promote commodity security, accessibility, acceptability and affordability. To support all this the government invests in people, supply chain network, service delivery mechanism, information technology and instituting health financing to keep the supply chain operational. The Ministry oversees safety, efficacy, and quality of health products including the contraceptives.
At the national level we have different stakeholders supporting regulation, rational use, financing, procurement, warehousing and distribution. ZAMMSA Commodity Security Center (CSC) for example is an integral part of the reproductive health pipeline and FP supply chain management
Provincial level. At regional level, we have provincial health office providing regional leadership, implementing reproductive health in the different regions. They monitor the implementation process and support the staffing function in the regions. Zambia has 10 provinces. Other than health administrative function, the provinces host 7 hubs which supports ZAMMSA distribution network
District Level. The third layer is the the district health office that manages health centres, NGO health facility at the district level. It not only supervise health facilities but also supports with logistics including processing of emergency orders and coordinating redistribution within the districts
Facility Level. The service delivery points include Health centers, hospitals (level I, II, III).
Community level. This level complements the facility level. It serves to promote access by linking the community to primary health care.

However, the program is not limited to the formal structures. MOH has instituted other bodies for example the TWGs, and MTCs.
Technical Working Groups (TWGs) at various levels supports the ministry in monitoring the program, coordinating program activities, providing logistical and technical assistance in implementation of policies and guidelines.
Medicines and Therapeutics Committee (MTC) seeks to address issues related to Supply Chain, Medicine Utilization, Commodity Security and eLMIS Data Quality.

Enabling policies

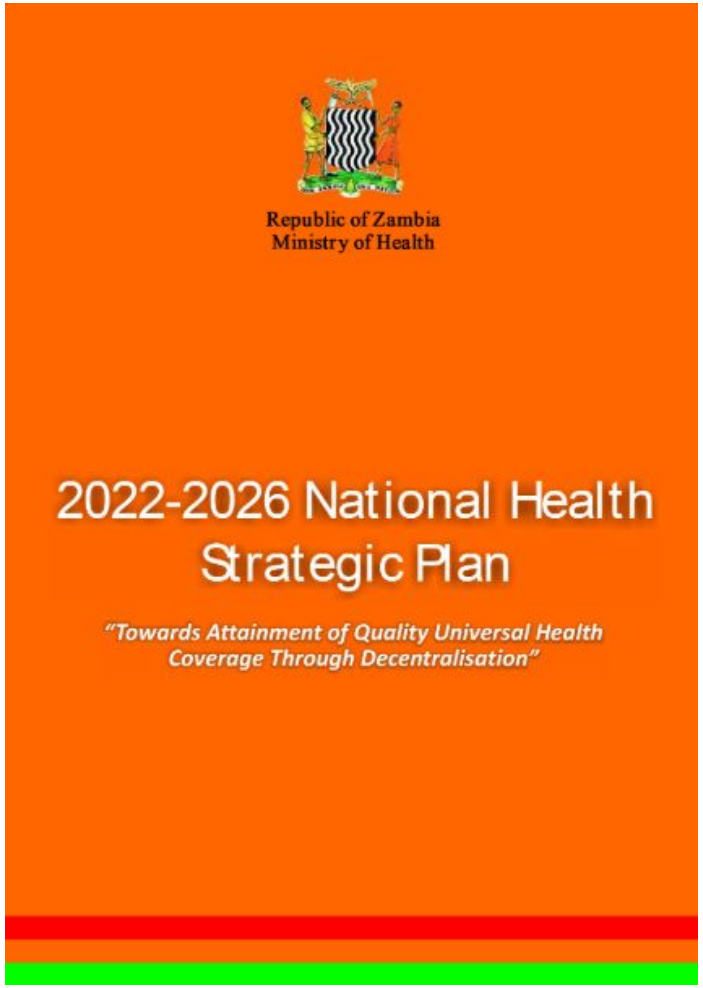
Global strategy. Zambia adopted global strategic goals and targets including SDG Target 3.7 which envisions that by 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

National strategy. Zambia is committed to Universal Health Coverage and has established a strategic framework to provide equitable access to cost effective, quality health making it accessible to all. The framework that focuses on decentralization, prioritizes preventive health, and primary health, mternal, neonatal, child and adolescent health and nutrition, control of communicable and noncommunicable diseases and integrated health support systems.

Strategic plans. The Ministry is looking forward to operationalizing National Supply Chain Strategy (2024–2028) which has been finalized ready for approval (signing off) and dissemination.

Product use. Zambia is also reviewing its National Drug Policy.

Figure 31: National Health Strategic Plan



Staffing

Roles and responsibilities. Whilst there are clear roles and responsibilities across the different cadres, most facilities continue to face staffing challenges.
Most of the supply chain functions are delegated as not all facilities have a pharmacy personnel or a dedicated commodity manager. In other instances, healthcare provider has to take up a task off their job description or double-up as a provider and supply chain personnel to work around the staffing gap.

Staff support. The ministry provides the much needed support to keep the staff motivated and strengthening their capacity as they assume various roles

- **Program updates**. New guidelines are shared whenever there are updates.
- **OJTs** and **Technical Support Supervision** are provided on need basis as the supervisors from the province or the district amake the regular supervision visits.

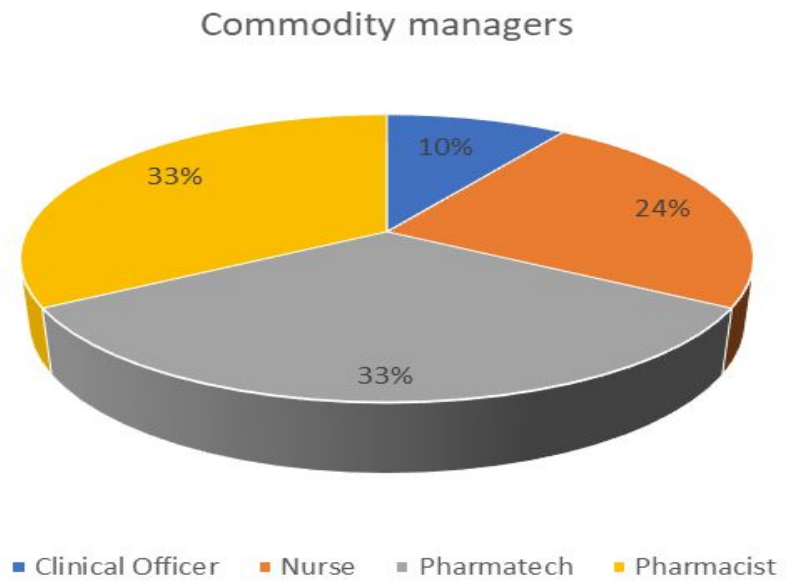
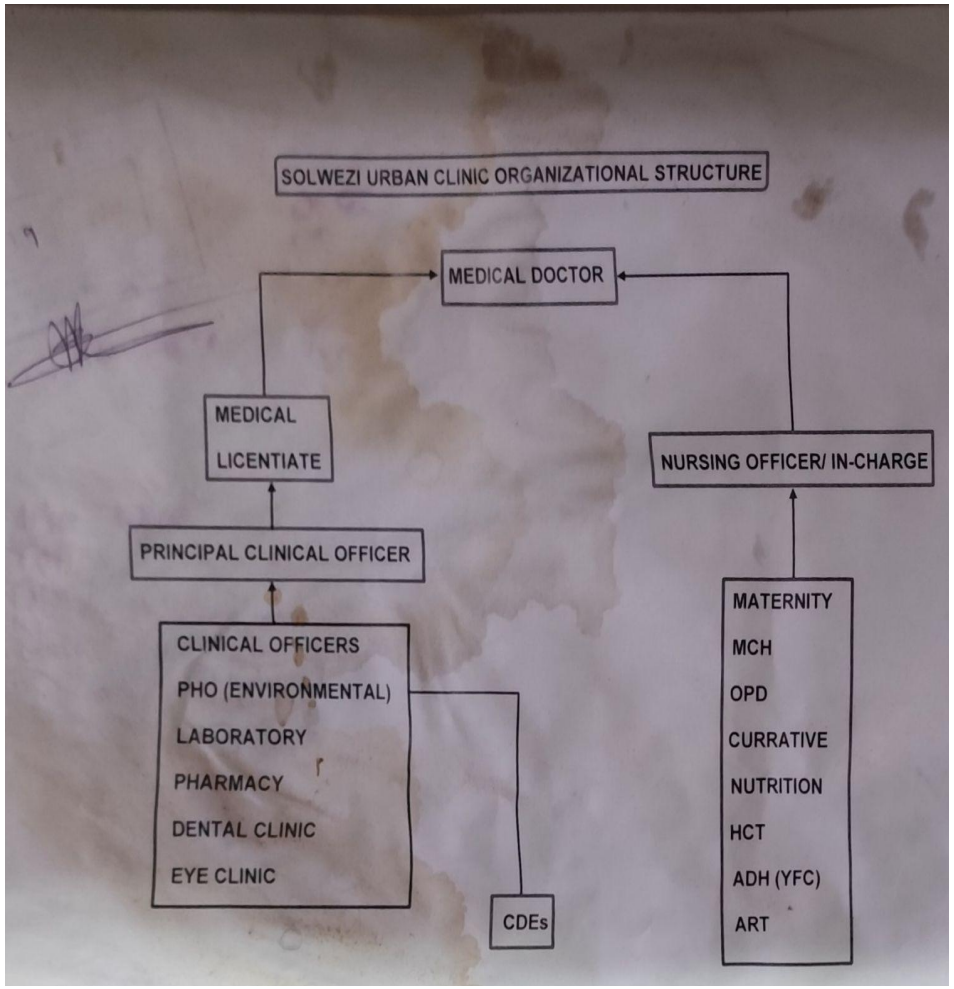


Figure 32: Breakdown of commodity managers

Figure 33: Solwezi Organizational structure



Gaps and recommendations

Gaps	Recommendations
The percentage of staff trained in eLMIS and supply chain management is low, most of the new hires have learnt the system on the job	Training workshops/on-site mentorship organized by PHO in eLMIS followed by onsite support. Training of staff in the full package of commodity management will support the preservice training. Pre-service training on LMIS including eLMIS for cadres managing health commodities (not limited to pharmacists). Cascading training/ mentorship within facilities (trained personnel should train peers)
Staff transfer and high staff attrition has affected the distribution of trained staff as well as availability of trained staff in some of the facilities	Considering that training workshop is resource intensive activity, healthcare providers at SDPs can utilize Electronic Supply Chain management Information System (eSCMIS) which includes e-learning package on e-lmis to bridge the knowledge gap
Not all facilities can fill all the positions and as such there is work overload in facilities with no pharmacists/pharmacy technologists	There is need to invest in human resource so as to employ more pharmacists/pharmacy technologists enough to meet the need and address commodity management challenge
National Supply Chain Strategy (2024-2028) in place but yet to be operationalized	There is a need to advocate for the launch, dissemination, and operationalization of the National Supply Chain Strategy Plan (2024-2028)

IX. Organizational Support for Logistics

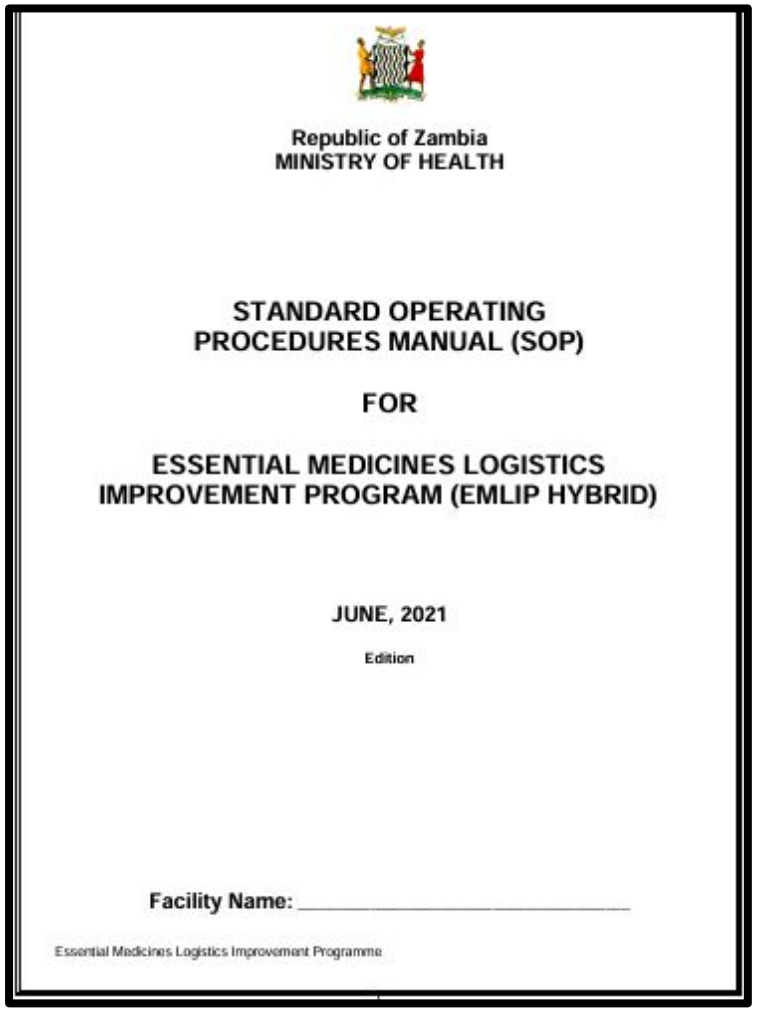
Supply chain policies, guidelines, and SOPs

Effective management of supply chain activities requires staff to have a deep understanding of their specific roles and responsibilities, along with the necessary knowledge, skills and tools to perform their jobs proficiently. This understanding allows healthcare providers to execute their tasks in a way that ensures the smooth flow of FP products, services and information within the supply chain. Organizational support for logistics is crucial because it directly impacts the ability of staff to do their jobs well and it goes beyond staffing structure to include clear operational guidance and tools.

Guidelines, Tools and SOPs: Guidelines and tools are essential for as they provide specific instructions for how tasks should be carried out ensuring consistency and standardization in the supply chain. SOPs, along with other tools such as checklists, job aids, inventory management systems and applications must be widely available, clearly communicated and used by all healthcare workers. In addition of having the right procedures and tools in place, it is also essential for healthcare providers to receive ongoing training and continuing education. Regular training help reinforce knowledge, update healthcare workers on procedures and ensure they are compliant with the set standards.

Focus group discussions and facility visits revealed that, most SDPs have received training on eLMIS, and communication platforms between SC levels are functioning well allowing both top-down and bottom-up interactions. Additionally CBDs are trained in injectable family planning methods. A well organized management unit for coordinating logistics activities exist at the MOH to the subnational level supported by the availability of SOPs, job aids, guidelines and reporting tools. Health facilities also benefit from dedicated human resources and external assistance from NGOs, donors and partners enhancing the effectiveness of the FP program

The sustainability of knowledge and skills in logistics management is undermined by staff attrition and poor attitudes leading to underutilization of eLMIS particularly at the facility level. Supervisory visits conducted are erratic, and there is siloed support from MOH and partners. Other challenges leading to inefficiencies in support include; no dedicated funds for supportive supervision, limited support from partners and low prioritization of supply chain activities by the local Government Authority.


Republic of Zambia
MINISTRY OF HEALTH

STANDARD OPERATING
PROCEDURES MANUAL (SOP)

FOR

ESSENTIAL MEDICINES LOGISTICS
IMPROVEMENT PROGRAM (EMLIP HYBRID)

JUNE, 2021

Edition

Facility Name: _____

Essential Medicines Logistics Improvement Programme

Figure 34: EMLIP hybrid SOP

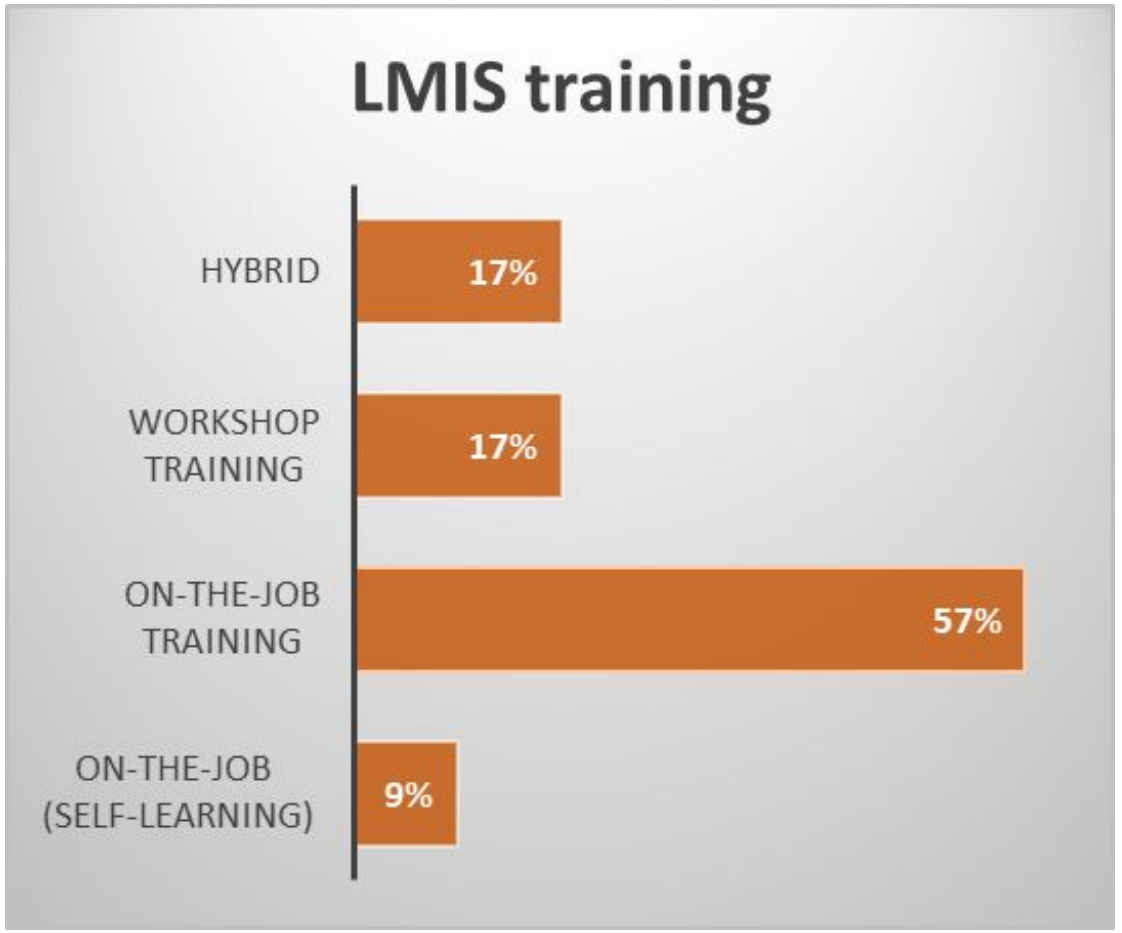
Supply chain SOPs, training and supervision

Supervision System: Supportive supervision is conducted quarterly or according to operational frameworks, but resource constraints limits its effectiveness. While supervisory guidelines are available, their use is inconsistent, affecting the quality of supervisions and follow-up. This lack of regular and thorough supervision hampers the overall effectiveness of management and support systems. At facility level the assessment revealed that 85% of the visited facilities had received supportive supervision from the higher level in October - November 2024 and 71% of the visits covered assesspect of commodity management.

Capacity Building: Training, mentorship and technical support are provided at all levels though their implementation is limited by resource constraints and competing priorities. While training on eLMIS, storage, stock management and reporting has been conducted, it needs to be expanded to ensure new staff are adequately trained. This expansion is crucial to maintaining consistent standards and improving logistics management across all levels of the health system, ensuring better service delivery and efficiency. The assessment indicated that OJT is the predominant mode of orientation used at the facility level, though it is not standardized.

Written Procedures and Guidelines: Standard Operating procedures and job aids for logistics responsibilities are available but some are either misplaced or underutilized. This limits their effectiveness in guiding staff and ensuring consistent logistics practices, impacting overall supply chain efficiency and performance.

Figure 35: Training approaches used to capacitate commodity managers at the SDP level



Supply chain performance improvement, communication and resources

Performance Improvement: The assessment revealed that staff with unsatisfactory logistics performance receive training, mentorship and written instructions to improve, with the on the job training being the most common intervention. These efforts aim to enhance their skills and address performance gaps, ensuring better logistics management and service delivery.

Communication on Supply Issues: Coordination between Family Planning and MNCH coordinators and pharmacy personnel occurs regularly at all levels of the health system through verbal communication, WhatsApp groups and reports, ensuring effective collaboration and timely sharing of information to support program implementation and logistics management. At facility level these communications and guidance from the MCH unit has helped commodity managers pull the right FP products during reporting and ordering.

Logistics Resources: Supervisory visits and logistics operations at the district and SDP levels are inadequate due to fiscal limitation, insufficient transport, and human resource shortages. These challenges hinder effective oversight and the smooth operation of logistics activities impacting overall service delivery and the management of health commodities. In most cases pharmacists from the DHO aligns their supervision schedule with the ZAMMSA direct delivery to facilities to take advantage of transportation but no sufficient due to time limitations.

Figure 36: The Assessment team leading the group work during the FGD (Copperbelt Province)

Gaps and recommendations

Gaps	Recommendations
Erratic supervisory visits due to inadequate resources	The MOH should plan and conduct scheduled and effective supportive supervision. This can be achieved by; ● Developing a technical supportive supervision schedule which entails the cadence and the team involved, and share the schedule with the PHO, DHO, facilities and partners for efficient use of resources and better preparations ● Mobilize resources by coordinating with other FP stakeholders ● Identify other activities for a possibility of integration.
Low prioritization of health management activities in relation to local government agenda and objectives	The districts and provinces should continue to push the health services agenda at the local authority level by sharing with the DHO and PHO work plan updates with the councils and use opportunities available to demonstrate the impact of the council's support evidenced by data
Challenges in dissemination of guidelines at the SDP	The MOH should develop, update, print, and disseminate SOPs and logistics guidelines. Additionally, they should reinforce their use across all levels of to ensure consistency, improve efficiency and standardize logistics practices, ultimately enhancing the effectiveness of health service delivery.
The organizational structure for supply chain is too lean at the provincial level-resulting in work overload	The MOH should consider expanding the organizational structure for supply chain at the provincial level to address existing human resource gaps at the the PHO. Identifying these gaps will help understand their implication, ensuring adequate staffing, improved efficiency, and better support of the program, ultimately enhancing service delivery and commodity management.

X. Finance and Donor Coordination

Funding for Procurement of FP: The FP program is financed by both donors and the government, with 45% of product procurement costs covered by the government in 2024. As at the time of this assessment, there was no funding gap for Family Planning commodities in 2024 and 2025 due to annual funding commitments from GRZ, UNFPA and USAID as illustrated in figure 37 . Projections are unavailable beyond two years, indicating a lack of strategic long-term financial planning.
Budget allocations for FP commodities showed progressive increases from 2022 to 2023 but decreased in 2025 as summarised below:

- 2022: ZMW 31,141,542.07
- 2023: ZMW 213,000,000
- 2025: ZMW 125,000,000

The decrease in allocation in 2025 is due to drought response, highlighting the need for continued donor support for logistics and commodity security.

Funding for Logistics: Funding for supply chain components is largely inadequate, with critical gaps in products, warehousing, transportation, and waste management, while funding for LMIS, staff development, and salaries remains unclear.

Coordination: Coordination mechanisms include committees such as the Family Planning Technical Working Group (FPTWG), involving diverse stakeholders (donors, government, NGOs, private sector) that meet periodically to address commodity security and planning.There exists a 5-year National CS strategic plan that prioritizes commodity security, with ongoing national and regional implementation supported by donor and government funding, though full execution requires consistent financial commitments.

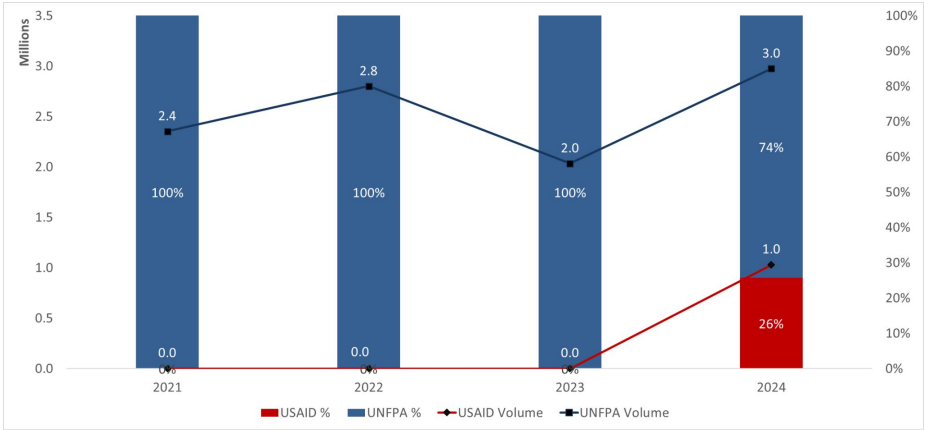
Figure 37: National FP Funding Estimates for 2024-2027

Family Planning				
	2024	2025	2026	2027
Govt	$ 5,396,909	$ 4,819,943	$ -	$ -
UNFPA	$ 5,008,151	$ 1,719,718	$ -	$ -
USAID	$ 1,756,542	$ 1,964,608	$ -	$ -
GAP			$ 11,014,051	$ 13,005,473

Funding for DMPA-SC procurement: As shown in Figure 38, UNFPA has historically procured 100% of Zambia MOH's DMPA-SC needs, with USAID joining as a contributor in 2024. Procurement volumes have increased from nearly 2.4 million units in 2021 to approximately 4 million in 2024. However, only 1.2 million units have been forecasted so far for 2025. The MOH's 2025 forecast includes a planned government procurement of 40,000 units, leaving just under 1.2 million units currently unfunded.

Source: Q1 2025 supply plan, GFPVAN, Jan. 2025.

Figure 38: DMPA-SC procurement funding



Gaps and recommendations

Gaps	Recommendations
There is an overdependence on donor funding for FP, making the program vulnerable to funding cuts and sustainability challenges.	Develop a sustainability strategy to gradually reduce reliance on donor funding by increasing domestic resource allocation for FP services.
Delayed release of committed funding towards procurement by donors & Government, which results in late procurements hence affecting commodity security at the SDPs	Donors and Government to ensure timely disbursement of funds to allow for timely procurement of health commodities

Conclusion and Way Forward

Conclusion and way forward

The supply chain assessment conducted in Zambia under the Injectables Access Collaborative Project has provided valuable insights into the challenges and opportunities for improving overall supply chain performance and improving the availability of contraceptives. The findings underscore the need for urgent actions to address supply chain gaps and enhance the efficiency of family planning commodity distribution in the country.

To ensure sustainable progress, it is vital for the Ministry of Health, in collaboration with development partners and relevant stakeholders, to prioritize the implementation of the recommendations and activities outlined in this report and the developed action plan. High priority activities can be integrated into the Strategic plan implementation plan; medium and lower priority recommendations can be addressed as resources allow and/or at a later time. Successful execution of the action plan will lead to tangible improvements in the family planning supply chain system for Zambia.

As a next step, a monitoring plan should be developed and maintained by the MOH to track the progress of implementation of the recommendations and action plans. This report will be shared with the Ministry of Health and cascaded down to the lower levels for complete ownership.

Appendix

Group Photo

Figure 39: Validation & Action Planning workshop, Lusaka.
Photo: PATH Zambia/ Nothulu Nyekele

List of respondents: National Focus group discussion

Name	Position	Organization
Sinyangwe Kalizya	Pharmacist	NSCCU- MOH
Mathews Sichone	Supply planning officer	ZAMMSA
Amos Mwale	ED	CRHE
Linda Kaposhi	Pharmacist	MOH-PHO
Mulenga Chingambo	Programs manager	CRHE
Phiri Astone	Clinician	PPAZ
Saini Kennedy	Vice Chair	HFZ
Jessie Nalungwe	P.O DISC	Jhpiego
Chileshe Banda	FASP Manager	GHSC-PSM
Lester Banda	QI Specialist	Zam Health
Dyness Kalusa	CSMO	MOH-HQ
Samson Mukage	Pharmacist	ECPG

List of respondents: National group discussion

Name	Position	Organization
Monica Mutesa	D.D PHC	PATH
Makuzi Nyambe	M&E PHC	PATH
Nothulu Nyekele	Senior P. Assistant	PATH
Johnson Anyona	Supply Chain Advisor	inSupply Health
Juma Ikombola	Supply Chain Advisor	inSupply Health
Daniel Kinyanjui	Supply Chain Analyst	inSupply Health
Victoria Kamau	Supply Chain Associate	inSupply Health

List of respondents: Regional group discussion—Copperbelt

Name	Position	Organization
Lorent Kabamba	Pharmaceutical Technologist	Ndola PHO
Evelyn Phiri	Pharmacist	MOH
Mukuka Musonda	Pharmacist	MOH- DHO
Delilah Musonda	Pharmacist	MOH- Ndola
Christine Clara Chimbamanga	District Nursing Officer	MOH- Ndola
Saphira Mulenga Moyo	Nurse in charge	Masaiti HC
Simon Kumwenda	Pharmacist	MOH- Mpongwe
Mutale Malama	Facility incharge	MOH
Kafuko Mwakamui	Nursing officer- MCH	MOH Masaiti HC
Mukuka Allen	Pharmacist	MOH- Masaiti
Namalambo Siavwapa	Nurse in charge	Kitwe
Datney Lubwekese	Pharmacist	Kalulushi

List of respondents: Regional group discussion—Copperbelt

Name	Position	Organization
Anthony Mwansa	Pharmacist	Kitue
Frank Chishala	Prevention coord	
Bernadette Mpundu	Nursing officer	MOH
Beatrice Mandabe	Nurse incharge	MOH
Joan Manda	Senior nursing officer	MOH
Salome Mwansa	Pharmaceutical Technologist	MOH
Simuwelu Chimwemwe	Pharmacist	Chingola DHO
Lawrence Simovwe	Pharmacist	Copperbelt PHO
Eric Kangwa	Pharmacist	MOH- DHO
Mulemba Soul	Pharmacist	MOH-DHO
Beatrice Makasa	MH officer	MOH
Charity Chilando	Team Leader	Mariestopes

List of respondents: Regional group discussion—Copperbelt

Name	Position	Organization
Priscilla Muzyamba	PNO	MOH
Josephine K Kapobe	PNO	MOH
Chibi Miyanda	Senior Supply Chain Advisor	
Makuzi Nyambe	M&E PHC	PATH
Daniel Kinyanjui	Supply Chain Analyst	inSupply Health

List of respondents:Regional group discussion—Northwestern

Name	Position	Organization
Eunice Zulu	Registered Nurse	MOH
Given Maidoni	Registered Nurse	MOH
Kasoka C Kennedy	Pharmacy Technologist	MOH
Evelyn Phiri	Pharmacist	MOH
Makuzi Nyambe	M&E PHC	PATH
Vernon Sankowa	Registered Nurse	MOH
Hillary Goma	Pharmacist	MOH
Mary Kwanja	Pharmacy technician	MOH
Racheal Samakupa	Registered Nurse	MOH
Ephraim Mbene	Nursing Officer	MOH
David Sefu	MCH Coordinator	MOH
John Mfupa	MCH coordinator	MOH

List of respondents:Regional group discussion—Northwestern

Name	Position	Organization
Kajorogo Collins	Pharmacist	MOH
Mwtale Shadrick	MCH Coordinator	MOH
Monde Mubanga	Pharmacist	MOH
Banda Vincent	Pharmacist	MOH
Joseph Chintu	Pharmaceutical Technician	MOH
Mable Habanyama	Pharmaceutical Technician	MOH
Mwale Enock	Hub Manager	ZAMMSA
Lupiya Banda	Pharmacist	Solwezi DHO

List of respondents: Regional group discussion—Luapula

Name	Position	Organization
Rosemary Imange	Healthcare Provider	Samfya DHO
Lloyd Chama	Healthcare Provider	Lunga DHO
Moreen Nyirango	Healthcare Provider	Chienge DHO
Andrew Mulenga	Healthcare Provider	Chembe DHO
Charity Nachalwe	Facility in charge	MOH
Abigail Manda	Facility in charge	MOH
Jacob Banda	Facility in charge	MOH
Sakala Humphrey	Facility in charge	MOH
Chilufya Rita	Healthcare Provider	ZAMMSA
Thelma Musango	Healthcare Provider	MOH
Raphael Mandevu	Healthcare Provider	PHO- Luapula
Olivia Banda	Healthcare Provider	Nchelenge DHO

List of respondents: Regional group discussion—Luapula

Name	Position	Organization
Chama Moses	Facility in charge	MOH
Bernety Kabwela	Pharmacist	Samfya DHO
Chungu Chama	Facility in charge	MOH
Catherine Chiba	Healthcare Provider	Kawambwa DHO
Ngonga Mwansa	Healthcare Provider	Mwense DHO
Mbewe John	Healthcare Provider	Mwansabombwe DHO
Yvonne Namutambo	Healthcare Provider	Mansa DHO
Manase Mwanza	Healthcare Provider	Mansa DHO
Banda Whiteson	Healthcare Provider	MOH-DHO
Patricia Afowe	Healthcare Provider	Luapula PHO

List of respondents: Regional group discussion—Central

Name	Position	Organization
Twaambo Mupango	Registered Nurse	MOH
Chileshe Bwalya	Systems support Officer	
Chipo Simunchembu	Nurse	MOH
Susan Matunda	Ag Nursing officer	MOH
Poline Monde	Pharmaceutical Technologist	MOH
Trevor Cheela	Pharmacist	MOH
Mwila Mwansa	DNO	MOH
Mwangata Goma	Pharmacist	Kabwe DHO
Bridget Mwiya	EM-KWNCH	MOH
Bertha Khondowe	Pharmacist	MOH
Danny Kaluba	Pharmacist	MOH
Muke Collins	Pharmacist	MOH

List of respondents: Regional group discussion—Central

Name	Position	Organization
Daliso Ng'ombe	RNM	MOH
Linganiko Phiri	CLO	MOH
Ruta Mkandawire	Pharmacy technologist	MOH
Linda Kaposhi	Pharmacist	MOH
Florence Mwape	Chief Pharmacist	MOH
Angela Banda	Pharmacy technologist	MOH
Martha Chabinga	Nurse in charge	MOH
Obbery Mwila	Pharmacy technologist	MOH
Mulenga Maxwell	Facility incharge	MOH
Sarah Silume	Registered Nurse	MOH
Clara Chewe	Pharmacist	MOH
Talent Maluka	DNO	MOH

List of respondents: Regional group discussion—Central

Name	Position	Organization
Eunice Banda		Marie Stopes
Francis Mukwasa	Pharmacy Technology	MOH
Elina Mukosha	RN	MOH
Sinyangwe Kalizya	Pharmacist	MOH HQ
Godfrey Mulunga		MOH DHO
Teddy Labwekeso		MOH
Monica Mutesa	PD PRC	PATH

List of participants: Consensus building meeting

Name	Position	Organization
Monica Mutesa	PD PRC	PATH
Sinyangwe Kalizya	Pharmacist	NSCCU- MOH HQ
Linda Kaposhi	Pharmacist	MOH
Florence Mwape	Chief Pharmacist	Central Province
Bernety Kabwela	Pharmacist	Samfya DHO
Makuzi Nyambe	M&E PHC	PATH
Nothulu Nyekele	Senior P. Assistant	PATH
Johnson Anyona	Supply Chain Advisor	inSupply Health
Juma Ikombola	Supply Chain Advisor	inSupply Health
Daniel Kinyanjui	Supply Chain Analyst	inSupply Health
Victoria Kamau	Supply Chain Associate	inSupply Health
Evelyn Phiri	Pharmacist	MOH

List of participants: Consensus building meeting

Name	Position	Organization
Chileshe Banda	FASP Manager	GHSC-PSM
Lupiya Banda	Pharmacist	Solwezi DHO
Sarah		ZAMMSA
Corrine		MOH

List of participants: Action Planning meeting

Name	Position	Organization
Monica Mutesa	PD PRC	PATH
Sinyangwe Kalizya	Pharmacist	NSCCU- MOH HQ
Linda Kaposhi	Pharmacist	MOH
Florence Mwape	Chief Pharmacist	Central Province
Bernety Kabwela	Pharmacist	Samfya DHO
Makuzi Nyambe	M&E PHC	PATH
Nothulu Nyekele	Senior P. Assistant	PATH
Johnson Anyona	Supply Chain Advisor	inSupply Health
Juma Ikombola	Supply Chain Advisor	inSupply Health
Daniel Kinyanjui	Supply Chain Analyst	inSupply Health
Victoria Kamau	Supply Chain Associate	inSupply Health
Evelyn Phiri	Pharmacist	MOH

List of participants: Action Planning meeting

Name	Position	Organization
Chileshe Banda	FASP Manager	GHSC-PSM
Lupiya Banda	Pharmacist	Solwezi DHO
Sarah		ZAMMSA
Corrine		MOH

List of facility respondents

Name	Position	Organization
Martha Chabinga	Nurse	Mahatma Gandhi HC
Jambo Eunice	Pharmaceutical technologist	Mahatma Gandhi HC
Petronila Mwansa	Nurse in charge	Makululu HC
Muganje Tembo	Pharmaceutical technologist	Makululu HC
Makwaza Scrivina		Chibale Rural HC
Musonda Mutale	Pharmacist	Serenje DHO
Kabenda Carren	Registered midwife	Serenje District Hospital
Kalinga Wiliam	Pharmaceutical technologist	Serenje District Hospital
Schone Aubrey	Nurse	Chilila Health Post
Yvonne Namutambo		Mansa DHO
Mwiche Nankamba		Mansa Urban Central Clinic
Mwansa Kafwanka		Mansa Urban Central Clinic
Isaiah Kalusa	Pharmaceutical technologist	Samfya DHO
Chomba Charity		Kabongo rural HC
Stanslous Mushili	Pharmaceutical technologist	Samfya stage 2 rural HC

List of facility respondents

Name	Position	Organization
Collins Katongo	Pharmacist	Kalumbila
Lupiya Banda	Pharmacist	Solwezi
Makuka Allen		Masaiti

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