MINISTRY OF HEALTH

ANNUAL PHARMACEUTICAL SERVICES PERFORMANCE REPORT

FINANCIAL YEAR 2023/2024

Annual Pharmaceutical Services Performance Report
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USAID

FOREWORD

It is my privilege to present the Annual Pharmaceutical Services Performance Report for the Financial Year 2023/2024, a comprehensive review of Uganda's pharmaceutical services over the past year. This report highlights key achievements, challenges, and emerging trends, reflecting the crucial role of pharmaceutical services in enhancing public health and ensuring equitable access to quality medicines.

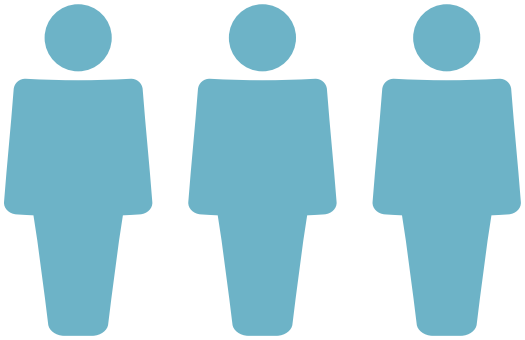
As we continue to advance, it is important to assess progress in critical areas such as drug availability, regulatory improvements, warehousing, and innovations in healthcare delivery. The availability and proper management of medicines remain fundamental to Uganda's health system, and this report underscores the collective contributions of government agencies, development partners, private entities, and health professionals in strengthening pharmaceutical services.

Looking ahead, we recognize both the opportunities and challenges that lie before us. Strengthening collaboration, refining strategies, and addressing systemic issues will be essential in building a more resilient and responsive pharmaceutical framework.

I trust this report will serve as a valuable resource for all stakeholders, fostering informed decision-making and inspiring continued efforts towards our shared goal of a healthier and more prosperous Uganda.

Dr. Olaro Charles
Director General of Health Services.
Ministry of Health

KEY DATA POINTS



1,512 enrolled on the self-paced supply chain leadership and governance course

2,898 Local government and hospital leaders trained in Supply Chain Management.

12/22 54% Regional Refferal Hospitals attained Centre of Excellence Status

12 strategic documents developed / revised.

▲ 64% Health Facility EHMS Availability

266 Facillities reached for medicine spotchecks and reconciliations.

▼ 70% Warehouse EHMS Availability

1,348 Health workers oriented in Pharmaceutical services

64.8% 3.24/5 Health facility average stock management score

15.9% Increase in NMS for EHMS from UGX 464 to UGX 538 billion

19.6% GOU health budget allocated to health products (Ugx 640.86B/3, 265.9B)

467M Ugx Additional fund allocated to supply chain activities by District Local Governments (from 298M to 765M)

422 Traditional & complementary medicine products notified by NDA – cumulative:

21% Increase in Adverse Drug Reactions reported to NDA.

49▲ Local pharmaceutical manufacturing firms and lines licensed by NDA:

12% 131/1077 Health products and technologies sampled from post-market surveillance that fail quality tests

22% Health facilities had 95% availability

ACKNOWLEDGEMENTS

The development of the Annual Pharmaceutical Services Performance Report for the Financial Year (FY) 2023/24 was led by the Ministry of Health›s Department of Pharmaceuticals and Natural Medicines (DPNM). We express our sincere gratitude to the Ministry of Health leadership for their invaluable strategic guidance throughout the implementation and creation of this report.

I also extend our appreciation to the Ministries, Departments, and Agencies, including the National Medical Stores, Joint Medical Store, and the National Drug Authority, for their collaborative efforts in the execution of interventions and in the development of this report.

A special acknowledgment is due to the United Nations Population Fund (UNFPA) for their generous financial support, which made the development of this report possible.

I am also grateful to the following organizations for their unwavering commitment and financial contributions in supporting the implementation of various interventions across the eleven priority areas: Clinton Health Access Initiative (CHAI), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), USAID Strengthening Supply Chain Systems (SSCS) implemented by Management Sciences for Health (MSH), United Nations High Commissioner for Refugees (UNHCR), Global Fund to Fight AIDS, Tuberculosis, and Malaria, President›s Emergency Plan for AIDS Relief (PEPFAR), Fleming Fund, Baylor Uganda, Infectious Disease Institute, Jhpiego, RTI International, ACORD Uganda, USAID Strategic Information Technical Support (SITES), MJAP-Makerere University, Reproductive Health Uganda, Marie Stopes and PEPFAR funded projects at the sub-national level.

My sincere appreciation also goes to the following individuals for their dedicated contributions in reviewing the report: Martha Grace Ajulong, Harriet Akello, Daniel Aguma, Rodney Tabaruka, Shamim Nakade, Daniel Mawerere, Fred Tabu, Ambrose Jakira, Henry Oundo, Ian Nyamitoro, Joel Miti, Joseph Emiku, Pamela Achii, Linacy Nampa, Micheal Isabiryei, Peter Agababingi, Sandra Magona, Sarah Taratwebirwe, Nathan Jonah Elilu, Sunday Izidoro, Denis Okidi Ladwar, Joshua Musasizi, Timothy Kasule, Lawrence Were and Kirunda Anthony.

Lastly, I would like to express my gratitude to all stakeholders at both the national and sub-national levels, in their respective roles, for their significant contributions to ensuring the delivery of pharmaceutical services across both the public and private sectors.

We look forward to the continued commitment of all involved as we strive to achieve the objectives outlined in the National Pharmaceutical Services Plan.

Sincerely,

DR. MARTHA AJULONG
AG. COMMISSIONER DEPARTMENT OF
PHARMACEUTICALS AND NATURAL MEDICINES.
MINISTRY OF HEALTH

ABBREVIATIONS

ACT	Artemisinin-based Combination Therapy
ADR	Adverse Drug Reaction
AEFI	Adverse Effects Following Immunization
AHPC	Allied Health Professional's Council
AMC	Average Monthly Consumption
AMS	Antimicrobial Stewardship
AMU	Antimicrobial Use
ATC	Anatomical Therapeutic Chemical
ART	Antiretroviral therapy
ARV	Antiretroviral
API	Application Program Interfaces
CAO	Chief Administrative Officer
CBO	Community Based Organisations
CDC	Centers for Disease Control and Prevention
CHAI	Clinton Health Access Initiative
CHWs	Community Health Workers
CSG	Commodity Security Group
CSSP	Client Self Services Portal
CSO	Civil Society Organizations
COE	Center of Excellence
DDD	Defined Daily Dose
DHI	Division of Health Information
DHIS2	District Health Information System Version 2
DHO	District Health Office
DLFP	District Laboratory Focal Person
DPNM	Department of Pharmaceuticals and Natural Medicines
DPSSP	Digital Pharmaceutical Self-Assessment
eLMIS	Electronic Logistics Management Information System
EMHS	Essential Medicines and Health Supplies
EMHSLU	Essential Medicines and Health Supplies List of Uganda
EMR	Electronic Medical Records
ERP	Enterprise Resource Planning
GF	Global Fund
GHSA	Global Health Security Agenda
GHSC	USAID Global Health Supply Chain Program
GOU	Government of Uganda
GS1	Global Standards
HMIS	Health Management Information System
HSC	Health Supply Chain
ICT	Information, Communication, and Technology
IMTF	Inter-ministerial Task Force
IOS	Integrated Ordering System
IPD	Inpatients Department
IT	Information Technology
KII	Key Informant Interview
LAB	Laboratory
LLIN	Long-Lasting Insecticidal Nets

LOC	Level of Care
JMS	Joint Medical Store
LMIS	Logistics Management Information System
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MAUL	Medical Access Uganda Limited
MCM	Medical Countermeasures Plan
MPM	Medicines Procurement and Management
MB	Medical Bureau
MDA	Ministries, Departments, and Agencies
MTR	Mid-Term Review
MoFPED	Ministry of Finance, Planning and Economic Development
MoLG	Ministry of Local Government
MoH	Ministry of Health
MTC	Medicines and Therapeutics Committee
NDA	National Drug Authority
NHDW	National Health Data Warehouse
NHPR	National Health Product Registry
NMS	National Medical Stores
NPSSP	National Pharmaceutical Sector Strategic Plan
OFSSR	Online Facility Stock Status Report
OPD	Outpatients Department
OPM	Office of the Prime Minister
OTIF	Ontime in Full
PEPFAR	President's Emergency Plan for AIDS Relief
PCMT	Product Catalogue Management Tool
PIP	Pharmaceutical Information Portal
PNFP	Private Not for Profit
PPS	Point Prevalence Survey
PSU	Pharmaceutical Society of Uganda
SCM	Supply Chain Management
SDP	Service Delivery Points
SPARS	Supervision Performance Assessment and Recognitions Strategy
STG	Standard Treatment Guidelines
RH	Reproductive Health
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health
TB	Tuberculosis
TCM	Traditional and Complementary medicines
TWG	Technical Working Group
UCG	Uganda Clinical Guideline
UCMB	Uganda Catholic Medical Bureau
UPMB	Uganda Protestant Medical Bureau
UMMB	Uganda Muslim Medical Bureau
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
UOMB	Uganda Orthodox Medical Bureau
WOSSR	Warehouse Online Stock Status Report
USAID	United States Agency for International Development
SSCS	USAID Strengthening Supply Chain Systems Activity
WHO	World Health Organization

01

INTRODUCTION

The Annual Pharmaceutical Services Performance Report 2023/24 reviews the progress made towards achieving the targets set in the National Pharmaceutical Services Strategic Plan (NPSSP) 2020/21 - 2024/25.

Progress is assessed by examining the trends in the 32 selected indicators over time and comparing them to set targets. The report covers eleven (11) priority areas of the NPSSP which are aligned with the objectives in the National Medicines Policy 2015.

i. Governance, Leadership, and Stewardship.

ii. Health commodity supply Chain management system.

iii. Pharmaceutical human resource planning and development.

iv. Regulatory framework and compliance.

v. Appropriate Medical Product Use.

vi. Traditional and Complementary Medicines.

vii. Local manufacture of health commodities.

viii. Pharmaceutical services financing and pricing.

ix. Pharmaceutical management information systems.

x. Multi-sectoral collaboration and engagement.

xi. Research, Development, and innovation.

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METHODOLOGY

2.1. Data collection

The data collection process was in accordance with the standard and approved procedures, methods, and tools outlined in the Monitoring and Evaluation Plan for the NPSSP. The Data sources included the national Health Management Information System (HMIS) tools through the District Health Information Software version 2 (DHIS2); the national Supervision, Performance Assessment and Recognition Strategy (SPARS) reports; Key Informant Interview (KII) reports; records from National Medical Stores (NMS), Joint Medical Store (JMS), National Drug Authority (NDA), Pharmaceutical Society Uganda (PSU), Allied Health Professionals Council (AHPC), and other sources as referenced. The data is collected on an annual basis, analyzed, and reported by the Department of Pharmaceuticals and Natural Medicines.

TABLE 1: ANNUAL PHARMACEUTICAL SERVICES PERFORMANCE REPORT DATA SOURCES

#	Priority Area	Data Source
i.	Governance, Leadership, and Stewardship	Pharmaceutical Information Portal (PIP), Medicines Procurement and Management (MPM) Technical Working Group (TWG), CSG, 10-year supply chain roadmap, Ministry of Health Governance and Management Structures: Implementation Guidelines (2022)
ii.	Health Commodity Supply Management System	NMS and JMS issues and stock on hand (SOH) reports, HMIS 105 reports, SPARS Reports, Warehouse online stock status report (OSSR), online facility stock status report (OFSSR), NMS CSSP, JMS integrated ordering system.
iii.	Pharmaceutical Human Resource Planning and Development	Newly registered and graduating students, human resources register, PSU register, Allied Health Professionals Council register, and Pharmacy council register.
iv.	Regulatory Framework and Compliance	NDA annual performance and activity reports, pharmacovigilance quarterly bulletins
v.	Appropriate Medical Product Use	SPARS Reports, baseline assessment of the functionality of Medicines and Therapeutic Committees (MTCs) in public health facilities, antimicrobial stewardship (AMS) facility mentorship report
vi.	Traditional and Complementary Medicines	Department reports, NPSSP mid-term review (MTR) report
vii.	Local manufacture of Health Commodities.	Department reports, NPSSP MTR report

viii.	Pharmaceutical Services Financing and Pricing.	Ministerial policy statement and budget framework paper, NMS vote 116 health facility resource allocations, Integrated quantification report for essential medicines and health supplies, FY 2023/24 – 2025/26
ix.	Pharmaceutical Management Information Systems.	Pharmaceutical Information Portal, department reports
x.	Multi-sectoral Collaboration and engagement.	Department reports, MPM TWG
xi.	Research, Development, and innovation.	Department reports, MPM TWG

The indicators selected were based on the priority strategies outlined in the NPSSP. To ensure standardized measurements, operational definitions were clearly defined for each indicator, with the data source, collection and calculation method, and data limitations described in the Monitoring and Evaluation (M&E) plan. Where indicators can be measured through more than one source of data, these are presented together for the purpose of comparison and validation.

2.2. Data Analysis

Data was entered into STATA and different Excel workbooks and cleaned to ensure errors were corrected. Descriptive statistics for each indicator were generated. The focus of the analysis was the current performance compared to the previous year's performance and set targets.

2.3. Reporting

This report is disseminated through the Ministry of Health (MoH) website and other public channels.


MINISTRY OF HEALTH
ESSENTIAL MEDICIN
AND HEALTH SUPPLIES
FOR UGANDA (EMHSLU)

03

RESULTS AND DISCUSSION

Data on Pharmaceutical Services Performance is presented below. The report is detailed with two major sections as follows:

- The first section entails narratives focusing on the broader interventions
- The second section consists of a summary table of indicator scores of the targets and achievements for FY 2023/24 for all the priority area indicators. Data from the previous years is shown to measure the annual progress made.

3.1. Governance, Leadership and Stewardship

Strategic Objective: Improve Leadership, governance, and stewardship for pharmaceutical service delivery.

3.1.1. Strategy and Guideline Development

The Ministry of Health (MoH) in collaboration with partners, developed, reviewed, updated, and disseminated health supply chain policy and strategic documents to guide the implementation of pharmaceutical services interventions and activities. The MoH DPNM continues to follow up to ensure approval through the MoH approved structures. The documents are outlined in Table 2 below.

TABLE 2: LIST OF PHARMACEUTICAL STRATEGIC DOCUMENTS DEVELOPED

S/no	Policy/ Strategy Document	Status	Link
1	Fact Sheet for FY 2024/2025 Integrated quantification report for essential medicines and health supplies	Development, approval and dissemination was done in FY 2023/24	https://library.health.go.ug/sites/default/files/resources/MoH%20Factsheet%20V4.pdf
2	Uganda Clinical Guidelines (UCG) 2023	Approved and disseminated	https://library.health.go.ug/uganda-clinical-guidelines-2023.
3	Essential Medicines Health Supplies List for Uganda (EMHSLU) 2023	Approved and disseminated	https://library.health.go.ug/medical-products-technologies/pharmaceuticals-and-drugs/uganda-essential-medicines-and-health
4	Integrated quantification report for essential medicines and health supplies (EMHS) FY 23/24–FY 25/26, 2023	Approved and disseminated	https://library.health.go.ug/medical-products-technologies/pharmaceuticals-and-drugs/integrated-quantification-report-essential
5	Last Mile Assurance Guidelines	Draft – Medicines Procurement and Management TWG	Still under-development
6	Uganda National Health Products Traceability Strategy 2024/25-2028/29.	Draft -Senior Management Approval	Still under-development

7	Implementation Guide: National Medical Countermeasures Plan for Public Health Emergencies 2024/25-2028/29.	Draft -Senior Management Approval	Still under-development
8	Health products and technologies manual for central level operations 2024/25- 2028/29.	Draft -Senior Management Approval	Still under-development
9	Reproductive Health Commodity Security Strategic Plan III 2023/24-2027/28.	Draft -Top Management Approval	Still under-development
10	Costed Uganda Alternative Distribution Strategy 2023/24-2027/28.	Draft -Top Management Approval	Still under-development
11	Antimicrobial stewardship (AMS) implementation manual	Draft -Senior Management Approval	Still under-development
12	Health care waste management implementation plan 2024/2025	Draft -Senior Management Approval	Still under-development

3.1.2. Capacity Strengthening

3.1.2.1. Leadership Capacity Building

Physical and online meetings

In collaboration with the Ministry of Local Government (MoLG) and partners, a total of 507 district and hospital leaders were trained in health supply leadership and governance. The overall goal of the training was to strengthen health supply chain leadership and governance coordination mechanisms through existing structures and decision-making organs to improve Health Supply Chain (HSC) performance in local governments and health facilities. The training meetings were guided by the six (6) HSC leadership, management, and governance modules through a structured training and mentorship approach, namely, (1) overview of HSC management, (2) principles of governance, (3) action-oriented leadership, (4) strategic planning, budgeting, and financing of HSC, (5) HSC policy development and implementation, (6) overview of drivers of change. In addition to the training modules, key HSC thematic areas summarized in Figure 1 below were discussed at the Local government's leaders training.

At the districts, participants included Chief Administrative Officers, District Chairpersons, Resident district commissioners, District Health Officers, Assistant DHO – Maternal and Child Health, District Planners, District Biostatisticians, District HMIS Focal Persons, District Medicines Supervisors, District IT officers, District Cold Chain Technicians, District Internal Auditors, District Speakers, Secretaries for social / health services. On the other hand, the training meetings at the hospitals were attended by the Director / Medical Superintendents, Administrators, Stores Officers, Pharmacists, ICT Officers, EPI focal and Records officers.

e-Learning platform

For sustainability, the MoH together with partners developed the online, self-paced supply chain leadership and governance course accessible via ***https://elearning.health.go.ug/***. As of December 2024, 1,521 participants had enrolled for the course. Though non had completed due to various factors including lack of incentives, user experience challenges, limited digital literacy, lack of follow-up or motivation.

FIGURE 1: A FRAMEWORK FOR HSC LEADERSHIP, MANAGEMENT, AND GOVERNANCE TRAININGS

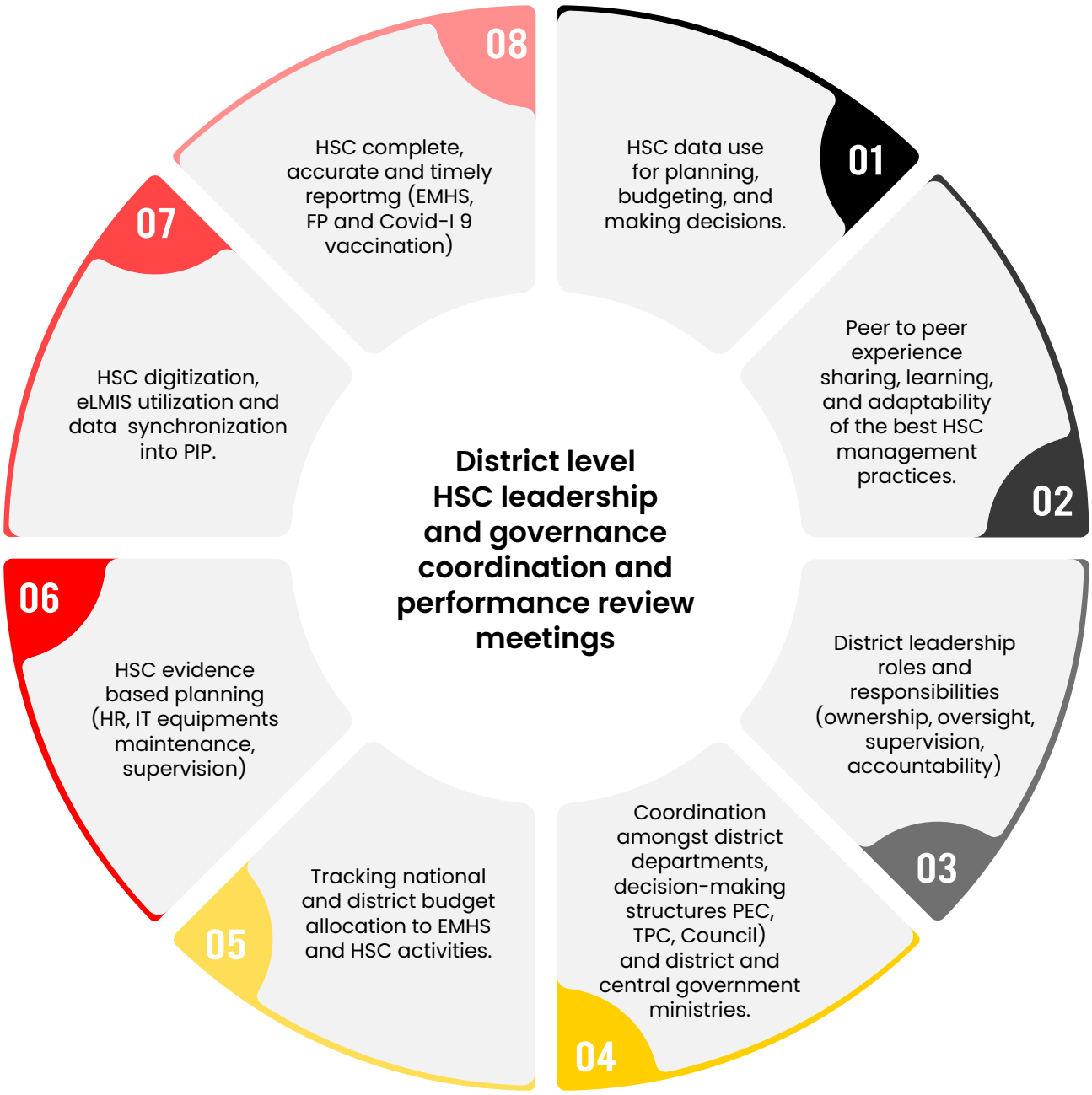
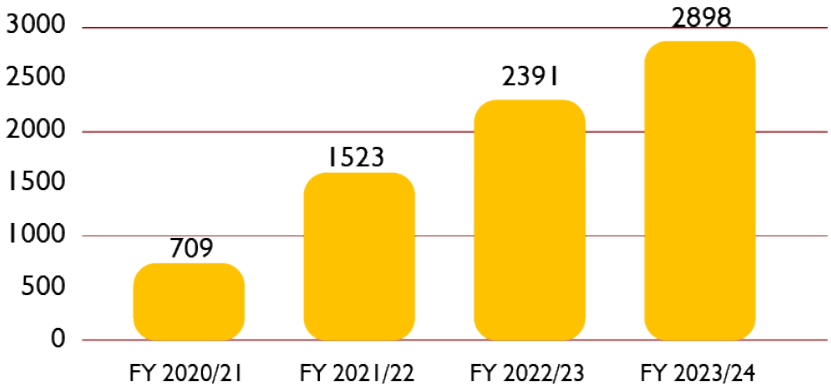


FIGURE 2: NUMBER OF LOCAL GOVERNMENTS AND HOSPITAL LEADERS TRAINED IN HEALTH SUPPLY CHAIN LEADERSHIP, MANAGEMENT AND GOVERNANCE.



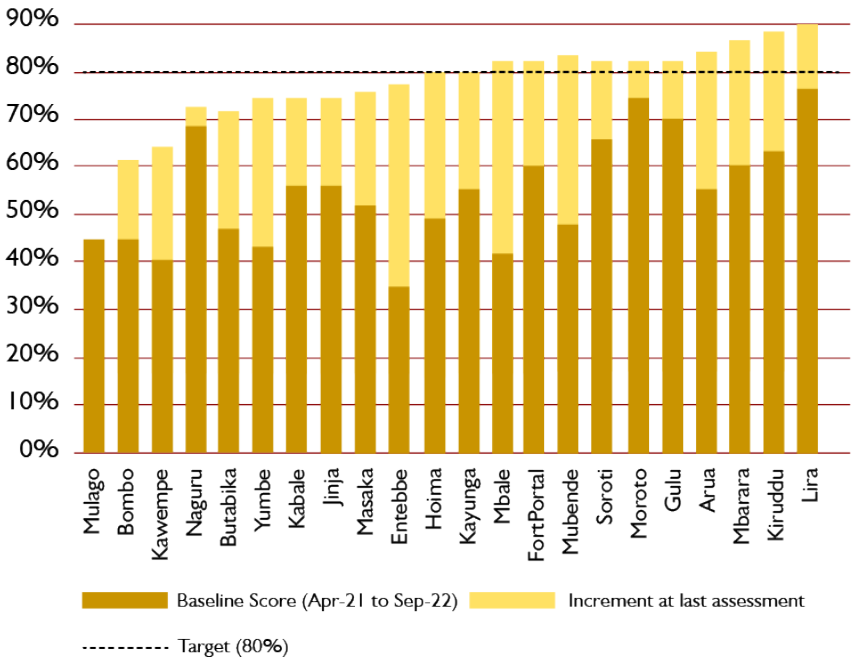
3.1.3. Hospital Center of Excellence Capacity Assessment and Performance

During the year, MoH DPNM conducted supply chain supervision across all 22 referral hospitals. These included Yumbe RRH, Arua RRH, Lira RRH, Gulu RRH (North), Moroto RRH, Soroti RRH, Mbale RRH, Jinja RRH (East), Kayunga RRH, China-Uganda Friendship Naguru RRH, Butabika NRH, Mulago NRH, Kawempe NRH, Kirudu NRH, Entebbe RRH, Bombo RRH, Masaka RRH, Mubende RRH (Central), Mbarara RRH, Kabale RRH, Fort Portal RRH, and Hoima RRH (West).

As of June 2024, 12 of the 22 referral hospitals had attained Center of Excellence (CoE) status, with Kayunga and Hoima RRHs being newly accredited during FY 2023/24. Overall, there has been an improvement in performance across the accreditation criteria for all referral hospitals, except for Mulago NRH, as illustrated in Figure 3 below. Additionally, through monthly regional supply chain TWGs, CoE-accredited hospitals received mentorship on implementing the supply chain management Hub & Spoke model. As a result, 10 referral hospitals have successfully established regional TWGs.

MoH continues to focus on strengthening low-performing areas in supply chain management, particularly Antimicrobial Stewardship, research plan development, EMR/eLMIS utilization, and supply chain budgeting and strategic planning.

FIGURE 3: CENTER OF EXCELLENCE STATUS OF 22 REFERRAL HOSPITALS



3.1.4. Last Mile Assurance

The Last Mile Assurance process involves a set of interventions designed to ensure visibility and accountability in managing and safeguarding Essential Medicines and Health Supplies (EMHS). These interventions span from the point of receipt to the last mile, referred to as the service delivery point (SDP). The SDP may be a static facility, a community health outreach post, or a household. MoH DPNM has implemented several strategies to promote last mile assurance.

3.1.4.1. Health Commodity Accountability

The MoHs Department of Pharmaceutical & Natural Medicine (DPNM) and various programs, including the National Malaria Control Division (NMCD), AIDS Control Program (ACP), and the Reproductive and Infant (R&I) Department and partners analyzed data from DHIS2 HMIS 105 report and the NMS Client Self Services Portal (CSSP) to establish the extent to which health facilities are accounting for health commodities. The analysis focused on 17 tracer health commodities across four commodity categories, basing on their high consumption and associated risks of non-accountability, as listed below.

- Antiretrovials (ARVs): Atazanavir /Ritonavir 300mg/100mg tablets, Lopinavir /Ritonavir 200mg/50mg Tablets, Tenofovir/Lamivudine 300mg/300mg Tablets and Tenofovir/Lamivudine/ Dolutegravir 300/300/50mg
- Laboratory: Determine HIV Test Kits Complete Kit, HIV 1/2 Stat-Pak (20 Tests), HIV 1/2, HIV/Syphilis Duo Complete Kit (25 Tests), HIV-1/2 3.0 SD Bioline Pack
- Reproductive Health Products: Etonogestrel 68mg Implant (Implanon), Levonorgestrel 0.75 mg Tablets, Medroxyprogesterone Acetate 150mg/ml Injection, Sayana Press 160mg/ml
- Malaria Products: Malaria Rapid Test Kits (25 Tests), Artesunate Injection, Artemether/ Lumefantrine

The analysis of commodity and patient data highlighted potentially unaccounted for commodities for FY 2022/2023. For malaria Commodities, morbidity and diagnosis data from DHIS2 was compared with malaria commodity supply data from NMS to health facilities for FY 2022/2023. For Family Planning, HIV, and Laboratory commodities; expected stock on hand (SOH) estimated as opening balance plus quantity received plus adjustments, less consumption data and losses, was compared with reported closing balance (COB) for each of the cycles one (July 2023) to five (March 2024). The potentially unaccounted for commodities/funds for each health facility were aggregated to estimate the total volume/value for each of the 136 districts. Data for the 10 cities was considered under each of the parent districts.

Although positions for HC4, hospital and district Pharmacists were created in the new human resource structure, many districts have been reluctant to recruit for these roles, citing inadequate funding. This has likely contributed to accountability challenges for health commodities, as one of the key responsibilities of a health facility or district Pharmacist is to ensure proper accountability and management of EMHS.

3.1.4.2. Health Products Reconciliation

The Ministry of Health (MoH) DPNM conducted a reconciliation exercise in 266 sampled health facilities across 110 districts in 13 regions. The facilities included 12 Regional Referral Hospitals, 49 General Hospitals, 85 Health Center IVs, 95 Health Center IIIs, 24 Health Center IIs, and one Special Clinic.

The reconciliation aimed to compare reports from NMS/JMS on delivered health commodities with records from the receiving health facilities. It also assessed the consistency between stock issued from health facility stores to user departments and what user departments reported as received and utilized. Accountability was tracked using stock cards, requisition and issue vouchers, as well as dispensing and laboratory registers.

Findings from the assessment indicated that 89% of commodities delivered matched the quantities received as per delivery notes. However, the highest discrepancies were observed in combined cycle deliveries. Untimely delivery of medicines, particularly in Cycles 3 and 4 of FY 2023/24, led to stock-outs in several facilities. To address this, NMS combined distribution cycles to align with the distribution plan.

Although health facilities are using accountability tools, challenges persist at dispensing units, where some facilities struggle to complete daily and monthly summaries of dispensed medicines and health supplies. Overall accountability at both store and user department levels averaged 50%, with Implanon having the highest accountability at 70%, while examination gloves had the lowest at 39%. Among the regions, Acholi demonstrated the highest level of accountability adherence, whereas Karamoja had the lowest at 32%.

Key reasons for accountability failures included: poor documentation-records not tallying (59%), poor documentation -issuing stock without recording on stock cards (33%), no feasible explanation for discrepancies (6%), and suspicious theft, negligence, or wastage (2%).

To improve facility performance, a multipronged approach is needed, including on-site training, mentorship, intensified supervision by District Health Teams, self-audits by health facility staff, and involvement of Local Government Leaders in reconciliation and accountability efforts. Additionally, the rollout of Electronic Logistics Management Information Systems (eLMIS) should be fast-tracked and prioritized to enhance accountability and tracking of health commodities.

3.1.4.3. Spot Check

An in-depth spot-check assessment was done for reproductive health commodities. This covered seven (7) health commodities namely Implanon NXT, Jadelle, Hormonal IUD, Sayana Press, Depo Provera, Combined Oral Contraceptive (COC) and Syringe 1ml. The value of sampled health commodities delivered was $7,017,919.08, which is equivalent to 90% of the total value of UNFPA programme supplies delivered to the MoH in 2023 ($7,760,039.92).

Fourteen on-site visits were conducted covering 14 sampled facilities across the central and northern regions of Uganda. The sampled facilities included: JMS, NMS, 4 public health facilities, 7 Private Not for Profit (PNFP) health facilities, and 1 Private for Profit (PFP) health facility. NMS and JMS warehouses were adequately equipped and maintained the storage of health supplies. However, the storage infrastructure at 7 out of 12 sampled Service Delivery Points (SDPs) was not in good condition due to budgetary constraints which inhibited regular maintenance and purchase of store equipment. Eleven (11) out of the 14 sampled facilities had maintained inventory records and the supplies received were recorded in stock cards. Syringes 1ml were observed to be overstocked at seven (7) health facilities because Depo Provera was issued without the syringes during interfacility transfers. Jadelle, Implanon NXT and Depo Provera were found to be overstocked across 3 out of 12 service delivery points (SDPs). On-site mentorship covering proper inventory management practices i.e. updating the stock card, recording of transfers/expiries/damages on the stock card among others was done. Follow-up visits will be made to assess performance improvement.

3.2. Health Commodity Supply Chain Management System

Strategic Objective 2: To strengthen the health commodity supply chain management system.

3.2.1. Health Commodity Ordering and reporting

Health facilities place routine orders for health commodities based on a defined annual ordering schedule, which is developed and disseminated by NMS and JMS to the public and PNFP/PFP health facilities respectively. MoH approved order and report templates and systems are used to place orders. In FY 2023/24, both NMS and JMS received health facility orders/reports through the client service platform of their Enterprise Resource Platforms (ERP).

3.2.1.1. Digitizing Commodity Ordering

Prior to FY2023/24, health facilities placed commodity orders to NMS and JMS through various methods, including Excel sheets, scanned copies, DHIS2 (WAOs), and others. This lack of standardization made order tracking and monitoring difficult. To address this challenge, the warehouse-integrated ordering system was introduced, extending the warehouse Enterprise Resource Platform (ERP) to include the client service portal. This portal allows health facilities to place orders directly with their designated warehouses, ensuring a more streamlined and efficient ordering process.

The new systems incorporate built-in order timeliness tracking, alerting users about upcoming deadlines. Late orders are automatically locked out unless an extension is formally authorized. Each health facility is required to order specific health commodity categories based on its accreditation and service level, following the «one facility, one warehouse» policy, as per the ordering schedule developed and shared by the warehouse. These categories include Essential Medicines and Health Supplies (EMHS, commonly referred to as the credit line), HIV Test Kits, Laboratory supplies, Tuberculosis (TB) medicines, Multi-Drug Resistant (MDR) TB medicines, and Reproductive Health commodities.

To ensure that all required orders from a health facility are placed within a particular order cycle, tracking is based on the different commodity categories. Order rate performance is measured by the timely submission of complete order sets. As such, ordering rate performance is defined as the number of facilities that submitted the expected complete order sets within each order cycle.

3.2.1.2. Public health facilities commodity ordering using NMS+ CSSP

National Medical Stores is mandated to procure, store and distribute EMHS to all public health facilities within the country, including Army, Police and Prisons health facilities. NMS serves over 3,400 public health facilities at various levels of care, with over 1,600 being Health Center IIIs and above, while the rest are Health Center IIs. NMS uses a mixed mode of ordering where Health Centre IIIs to Hospitals place orders for all health commodities (except for EMHS for HCIIIs which are district-based kits) every cycle, whereas Health Center IIs do not place routine orders but receive district-based kits every cycle.

Prior to FY 2022/23, NMS piloted use of NMS ERP to place HCIV and Hospital orders directly to the warehouse in 270 health facilities. Following the successful pilot, NMS extended electronic ordering using NMS+ Client Self Services Portal (NMS+ CSSP) to a total of 1,646 health facilities (inclusive of the pilot facilities) in FY 2023/24. The average ordering rate using NMS+ CSSP for both lower and higher-level public health facilities has been sustained at >95% in FY 2023/24 for program and non-program commodities across the six order cycles as shown in Figure 4 below.

FIGURE 4: IMPLEMENTATION STATUS OF NMS+ CSSP IN PUBLIC HOSPITALS, HCIVS, HC IIIS AND HC II ART SITES AS AT 30TH JUNE 2024

Zone	Regional IP	# of Lower Level HFs	# of High Level HFs	Level HFs Placed All Orders-Cycle	Level HFs Placed All Orders-Cycle	Level HFs Placed All Orders-Cycle	Level HFs Placed All Orders-Cycle	Level HFs Placed All Orders-Cycle	Level HFs Placed All Orders-Cycle	% of High Level HFs Placed All Orders-Cycle 1	% of High Level HFs Placed All Orders-Cycle 2	% of High Level HFs Placed All Orders-Cycle 3	% of High Level HFs Placed All Orders-Cycle 4	% of High Level HFs Placed All Orders-Cycle 5	% of High Level HFs Placed All Orders-Cycle 6
ZONE 1	MUWRP	44	7	86%	96%	98%	89%	93%	93%	86%	100%	100%	86%	100%	100%
	UHA E/LPHS E	192	27	96%	98%	100%	100%	100%	100%	96%	100%	100%	100%	96%	100%
	UHA E/LPHS Karamoja	30	5	97%	100%	100%	100%	100%	97%	100%	100%	100%	100%	100%	100%
	UHA EC/LPHS EC	106	24	93%	100%	100%	100%	98%	98%	96%	100%	100%	100%	100%	100%
	UHA Lango/LPHS Lango	8	1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	AIC Soroti	83	19	99%	100%	98%	99%	100%	90%	100%	100%	95%	95%	95%	89%
	Uganda Prisons Services	6	0	83%	67%	67%	67%	67%	67%						
ZONE 2	UHA SW/LPHS Ankole	140	26	98%	96%	96%	93%	96%	94%	100%	96%	100%	100%	100%	100%
	UHA SW/LPHS Kigezi	60	22	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	IDI Masaka-Wakiso	99	17	99%	97%	100%	100%	99%	97%	100%	100%	100%	94%	88%	100%
	Uganda Prisons Services	10	0	70%	80%	100%	90%	100%	80%						
ZONE 3	Baylor-Uganda (Bunyoro)	82	16	99%	99%	99%	100%	98%	98%	100%	100%	100%	100%	88%	94%
	Baylor-Uganda (Fort/Mubende)	158	33	97%	96%	97%	99%	99%	99%	100%	97%	97%	97%	97%	97%
	Uganda Prisons Services	7	0	86%	71%	71%	86%	86%	86%						
ZONE 4	IDI West Nile	121	17	93%	92%	96%	97%	98%	98%	100%	100%	100%	100%	100%	100%
	MUWRP	25	5	100%	90%	100%	96%	96%	100%	100%	80%	100%	80%	100%	80%
	UHA Acholi/LPHS Acholi	81	10	100%	100%	99%	100%	93%	100%	100%	100%	100%	90%	100%	100%
	UHA Lango/LPHS Lango	72	11	95%	98%	93%	97%	94%	97%	100%	100%	100%	100%	100%	100%
	Uganda Prisons Services	6	0	67%	67%	83%	83%	83%	83%						
ZONE 5	Reach Out Mbuya	0	16	69%	56%					69%	56%	63%	63%	69%	75%
	Baylor-Uganda (Fort/Mubende)	11	3	71%	100%	100%	100%	100%	100%	67%	100%	100%	100%	100%	100%
	IDI Masaka-Wakiso	32	10	93%	93%	97%	97%	100%	94%	90%	90%	100%	80%	100%	100%
	Uganda Prisons Services	3	1	75%	75%	33%	67%	33%	33%	100%	100%	100%	100%	100%	100%
		1,376	270	96%	96%	98%	97%	97%	97%	96%	96%	97%	95%	96%	97%

3.2.1.3. PNFP/PFP health facilities commodity ordering using JMS Integrated Ordering System

In line with the Ministry of Health (MoH) "one facility one warehouse" policy, private sector facilities order and receive EMHS from JMS. JMS serves about 1,050 private health facilities (PNFPs & PFPs) accredited to receive program commodities.

To strengthen health commodity management, the National Pharmaceutical Services Strategic Plan 202/21 2024/25 highlights the integration of supply chain activities as a critical component. Prior to FY 2023/24, ordering processes at JMS required facilities to submit orders for ART, TB, Test Kits, laboratory and reproductive health commodities through DHIS2. Orders for other program commodities i.e., anti-malarials, medicines for opportunistic infections (OI)/Sexually Transmitted Infections (STIs), personal protective equipment (PPEs) etc. were submitted manually through paper-based processes since these commodities were not in DHIS2. Facilities would print order forms, fill them, sign on them, scan and send copies to JMS via mail or WhatsApp for processing.

In FY 2023/24, the Ministry of Health in collaboration with JMS and with funding support from UNFPA developed an integrated online ordering portal that allows private sector health facilities to order and report on all program commodity baskets. USAID/Strengthening Supply Chain Systems activity (SSCS) and other partners provided technical guidance on system performance, including training of the users, and monitoring uptake, applying lessons learned from digitization of ordering at NMS. The system was rolled out in April 2024, enhancing an integrated approach to ordering, order consolidation, fulfillment, tracking, and analytics. By July 2024, all accredited private sector health facilities (PNFPs and PFPs) had been fully transitioned to place all their program orders through the JMS Integrated Ordering system (JMS-IOS). All commodity orders for Cycle 4, 5 & 6 2024 for Antiretrovirals (ARVs), anti-malarials, Test Kits, Laboratory supplies, Reproductive Health commodities, Anti-Tuberculosis commodities, and others were submitted through the JMS-IOS.

As a result of this digitalization, average ordering rate for PNFP facilities increased from 69% in FY 2022/23 to 95% in FY 2023/24 (N=1004) for both program and non-program commodities. 92% of the PNFP facilities had placed complete order sets in the JMS-IOS in Cycle 3 (May/June 2024). These were achieved through system development, training of 1,152 participants from 140 districts/ cities, and system account creation.

FIGURE 5: IMPLEMENTATION STATUS OF JMS INTEGRATED ORDERING SYSTEM FOR PROGRAM ORDERS IN PNFP/PFP HEALTH FACILITIES AS AT 31ST DECEMBER 2024

			Cycle 1		Cycle 2		Cycle 3		Cycle 4		Cycle 5		Cycle 6	
Zone	Regional IP	Sites	At least 1 Order	All Orders	At least 1 Order	All Orders	At least 1 Order	All Orders	At least 1 Order	All Orders	At least 1 Order	All Orders	At least 1 Order	All Orders
Zone 1	Baylor-Ug (Bunyoro)	5							100%	100%	100%	100%	100%	100%
	Baylor-Ug (Fort/Mubende)	2							100%	100%	100%	100%	100%	100%
	IDI West Nile	24							88%	83%	100%	100%	100%	100%
	LSDA	30							100%	97%	100%	97%	100%	97%
	MUWRP	25							96%	96%	100%	100%	100%	100%
	UCMB	42							98%	90%	100%	100%	100%	100%
	UHA Acholi/LPHS Acholi	33							91%	85%	94%	91%	94%	91%
	UHA Lango/LPHS Lango	13							92%	69%	100%	77%	100%	100%
	UPMB	11							100%	100%	100%	100%	100%	100%
Zone 2	AIC-Soroti	29					93%	86%	93%	90%	100%	93%	100%	100%
	LSDA	84					99%	92%	99%	95%	100%	95%	100%	95%
	MUWRP	53					96%	91%	96%	96%	100%	100%	100%	100%
	UCMB	13					100%	100%	100%	100%	100%	100%	100%	100%
	UHA E/LPHS E	34					88%	79%	85%	85%	97%	97%	100%	100%
	UHA EC/LPHS EC	60					92%	87%	92%	90%	98%	98%	100%	100%
	UHA Karamoja/LPHS Karamoja	4					75%	75%	75%	75%	100%	75%	100%	100%
	UPMB	5					100%	100%	100%	100%	100%	100%	100%	100%
Zone 3	IDI Masaka-Wakiso	52					90%	85%	88%	87%	96%	96%	96%	96%
	LSDA	77					100%	94%	100%	91%	100%	93%	100%	97%
	UCMB	50					100%	96%	100%	90%	100%	100%	100%	100%
	UHA Ankole/LPHS Ankole	33					97%	94%	85%	82%	82%	82%	97%	97%
	UHA Kigezi/LPHS Kigezi	55					95%	91%	95%	87%	96%	91%	98%	98%
	UPMB	8					100%	100%	100%	75%	100%	100%	100%	100%
Zone 4	Baylor-Ug (Bunyoro)	26			88%	62%	88%	85%	85%	85%	88%	88%	85%	81%
	Baylor-Ug (Fort/Mubende)	45			80%	69%	87%	80%	87%	82%	89%	89%	91%	91%
	IDI Masaka-Wakiso	27			89%	85%	93%	85%	93%	85%	93%	89%	100%	100%
	Reach Out Mbuya	48			98%	90%	98%	88%	94%	92%	98%	94%	98%	98%
	UCMB	65			100%	75%	100%	88%	98%	94%	98%	97%	100%	100%
	UPMB	51			98%	76%	98%	86%	100%	84%	100%	98%	100%	96%
Total	NATIONAL	1004			92%	76%	94%	89%	95%	89%	97%	95%	99%	97%

3.2.1.4. Vaccine ordering

Vaccine orders were submitted by all 136 districts during October-December 2023. However, the strike by the district cold chain technicians hampered this performance, which fell from 88% in Jan 2024 to 10% in May 2024.

FIGURE 6: TIMELY VACCINES ORDERING IN FY 2023/24

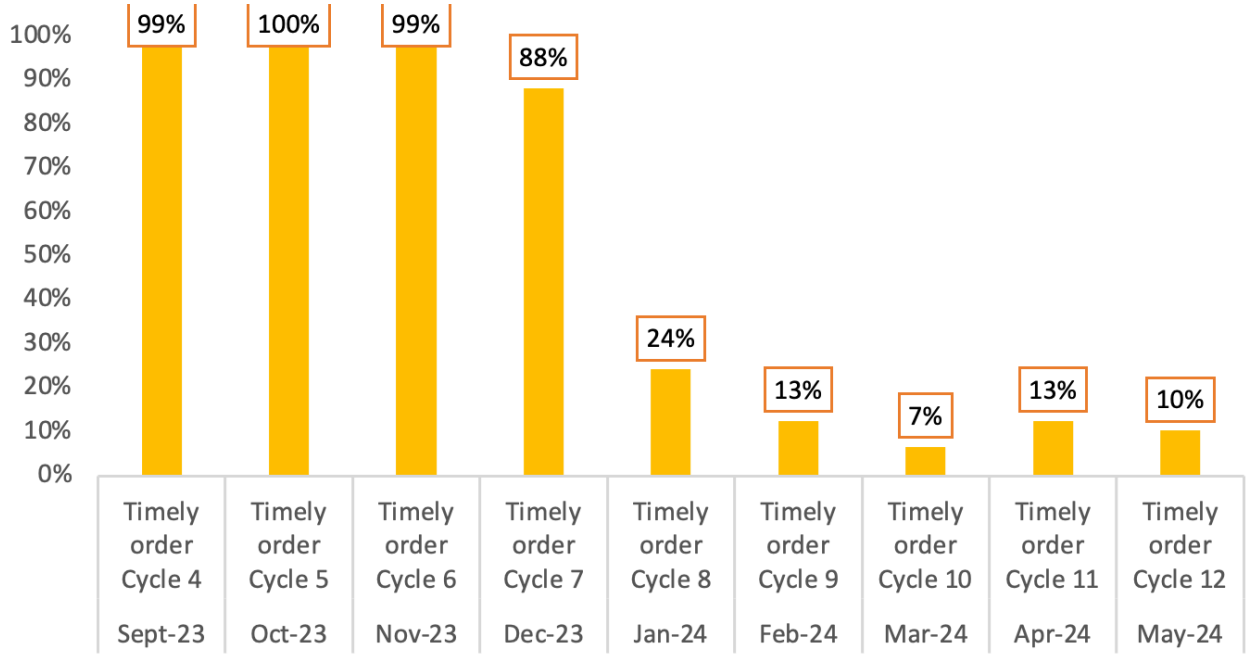


FIGURE 7: IMPLEMENTATION STATUS OF NMS+CSSP VACCINES ORDERING AS AT 1ST JUNE 2024

NMS+ CSSP Vaccines Ordering										As at 1-Jun-24		
		Order Month	Sept-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
Cycle 12 Deadline	NMS Route	Regional IP	No of DVS	Timely order Cycle 4	Timely order Cycle 5	Timely order Cycle 6	Timely order Cycle 7	Timely order Cycle 8	Timely order Cycle 9	Timely order Cycle 10	Timely order Cycle 11	Timely order Cycle 12
31-May-24	ROUTE 1	Baylor-Uganda (Bunyoro)-DVS	1	100%	100%	100%	100%	100%	0%	0%	0%	0%
		Baylor-Uganda (Fort/Mubende)-DVS	1	100%	100%	100%	100%	100%	100%	0%	0%	0%
		IDI Masaka-Wakiso-DVS	1	100%	100%	100%	0%	0%	0%	0%	0%	0%
		IDI West Nile-DVS	12	100%	100%	100%	83%	8%	0%	17%	8%	8%
		MUWRP-DVS	2	100%	100%	100%	100%	50%	100%	0%	100%	100%
		UHA Acholi/LPHS Acholi-DVS	8	100%	100%	100%	100%	25%	13%	13%	25%	25%
		UHA Lango/LPHS Lango-DVS	8	100%	100%	100%	100%	25%	25%	0%	13%	13%
31-May-24	ROUTE 2	Reach Out Mbuya-DVS	1	100%	100%	100%	100%	100%	100%	0%	100%	100%
		MUWRP-DVS	4	100%	100%	75%	50%	0%	0%	0%	0%	0%
		IDI Masaka-Wakiso-DVS	1	100%	100%	0%	100%	0%	0%	0%	0%	0%
		AIC-Soroti-DVS	10	100%	100%	100%	90%	30%	0%	0%	0%	0%
		UHA E/LPHS E-DVS	16	100%	100%	100%	100%	13%	13%	19%	13%	13%
		UHA E/LPHS Karamoja-DVS	9	100%	100%	100%	89%	33%	11%	11%	11%	0%
		UHA EC/LPHS EC-DVS	11	100%	100%	100%	82%	9%	0%	0%	0%	0%
		UHA Lango/LPHS Lango-DVS	1	100%	100%	100%	100%	100%	100%	100%	100%	100%
31-May-24	ROUTE 3	Baylor-Uganda (Bunyoro)-DVS	7	86%	100%	100%	86%	29%	14%	14%	14%	14%
		Baylor-Uganda (Fort/Mubende)-DVS	14	100%	100%	100%	86%	21%	7%	0%	14%	7%
		IDI Masaka-Wakiso-DVS	11	100%	100%	100%	64%	27%	18%	0%	18%	9%
		UHA SW/LPHS Ankole-DVS	12	92%	100%	100%	100%	33%	17%	0%	8%	8%
		UHA SW/LPHS Kigezi-DVS	6	100%	100%	100%	100%	33%	0%	0%	0%	0%
	Grand Total		136	99%	100%	99%	88%	24%	13%	7%	13%	10%

3.2.2. Order Fill Rate

Order fill rate refers to the extent to which health facility order lines are filled by the respective warehouse(s) in a given ordering period.

3.2.2.1. Public Sector (NMS performance)

The delivery of health commodities is based on published monthly or bimonthly schedules. Quantity of commodities delivered is informed by procurement plan, orders, and availability of commodities at the warehouse.

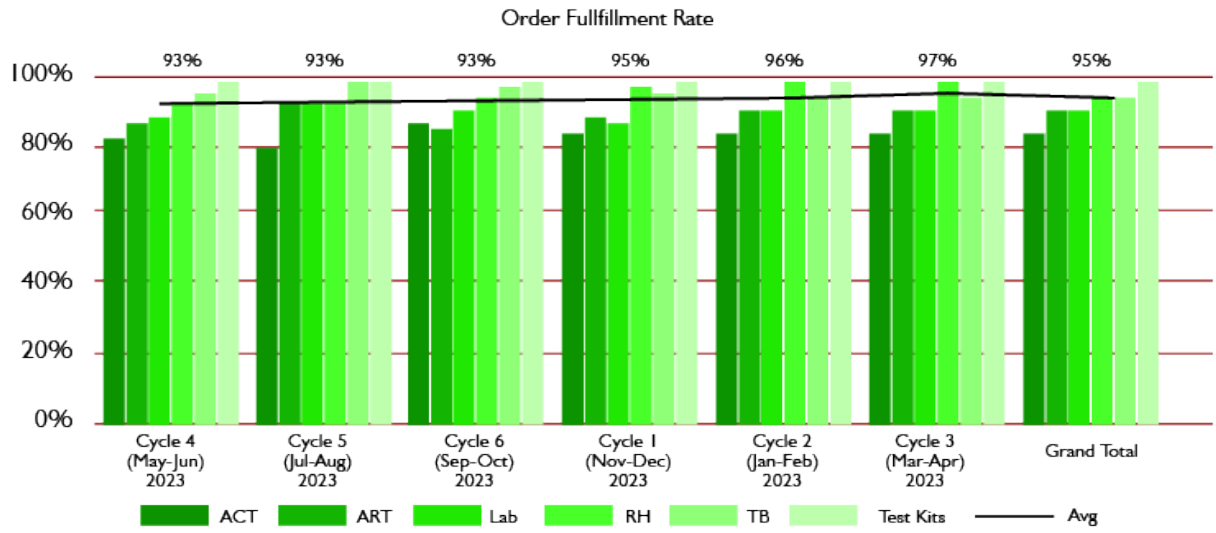
As of the end of FY 2023/24, all the 136 districts had received the combined cycle orders, with 96% (131/136) receiving at least 75% of the target order item lines. In Q4 of FY 2023/24, the average lead time for routine bimonthly orders in the public sector was 60 days compared to 30 days in the PNFP sector. The increase in lead time in the public sector was due to delays arising from the delay of release of operational funds from Ministry of Finance, Planning and Economic Development (MoFPED) to NMS. As a result, NMS combined cycle deliveries to ensure the availability of commodities in health facilities.

3.2.2.2. Private-Not-for Profit Sector (JMS performance)

Program commodities

The overall order-fill rates (Figure 8) for program commodities in the PNFP sector were sustained over the 90% mark with variations observed across the commodity categories. Antimalarials (ACTs) experienced below average performance due to the application of MoH-approved for fulfillment of artesunate orders. The cut-offs were determined based on the severe malaria cases submitted into DHIS2. This minimizes the risk of issuing high volumes of the product due to poor quality orders.

FIGURE 8: ORDER FULFILLMENT RATES FOR THE PRIVATE-NOT-FOR PROFIT

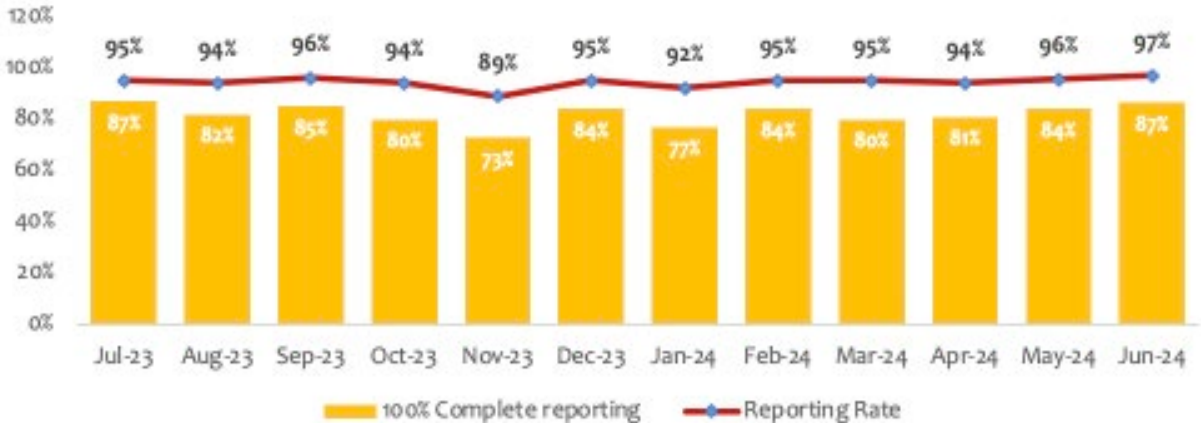


3.2.3. Health Supply Chain Reporting

3.2.3.1. HMIS 105 section 6 reporting

HMIS 105-6 (stock status) reporting continued to remain steady across facilities as of June 2024 due to the district leadership, intensive mobilization of district Biostatisticians, and continued implementing partner's support. However, due to DHIS2 downtime, reporting was affected in the months of November 2023 and January 2024.

FIGURE 9: MONTHLY MEDICINE STOCK STATUS REPORTING RATES AND COMPLETENESS OF REPORTING IN FY 2023/24



3.2.3.2. Other reporting forms (eCHIS)

3.2.4. Health Commodity Availability

3.2.4.1. Health facility availability

The average availability of a basket of 41 tracer commodities in the last quarter of FY 2023/24 was 64% for 4,211 functional reporting health facilities (public & PNFPs) that reported (refer to Table 3). This was below the annual target of 90% and an increase of 6 percentage points compared with the last quarter of FY 2022/23 which was 58%. The Lab basket had the highest average availability of 79% in the last quarter of FY 2023/24, followed by TB (74%), RMNCAH (67%), then EMHS and ARVs baskets at 58% & 43% respectively.

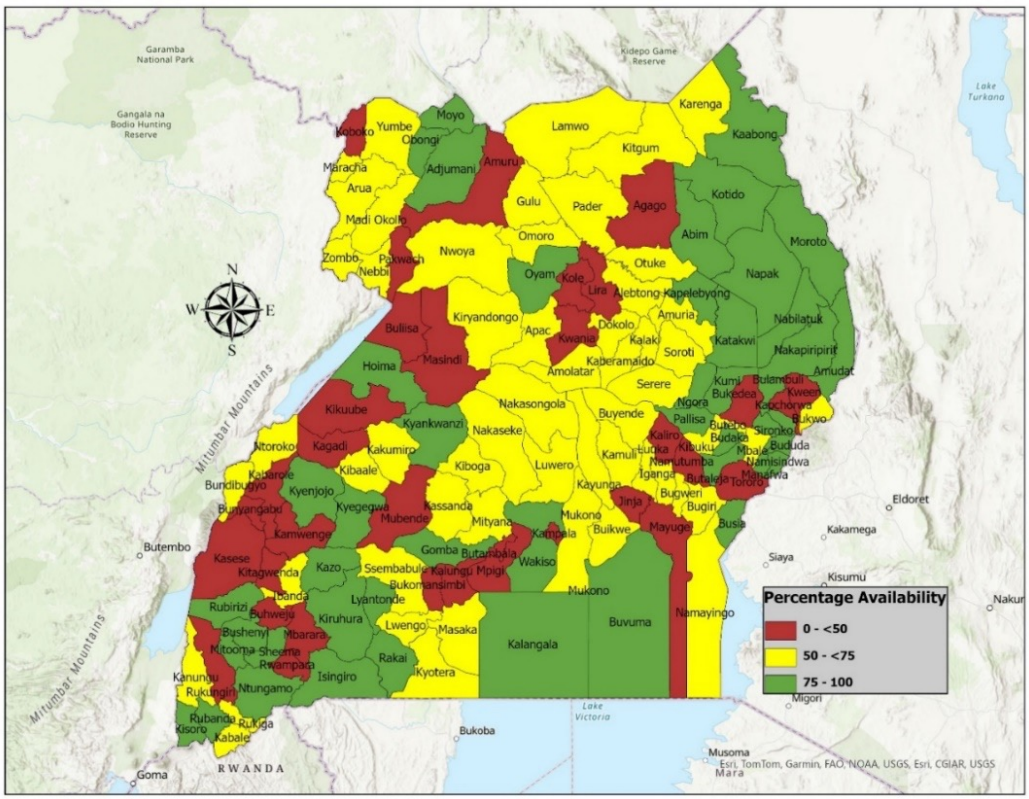
The proportion of health facilities having over 95% availability of a basket of commodities in the last quarter of FY 2023/24 increased from 15% to 22% in 2023/24 far below the annual target of 75%.

TABLE 3: 5-YEAR TREND OF HEALTH FACILITY AVAILABILITY OF 41 TRACER ITEMS

Indicator	Disaggregation	Q4 FY2019/20	Q4 FY2020/21	Q4 FY2021/22	Q4 FY2022/23	Target FY2023/24	Q4 FY2023/24
Average percentage availability of a basket of 41 commodities based on all reporting facilities in the previous quarter	EMHS	82%	81%	72%	47%	90%	58%
	ARVs	70%	79%	81%	45%	90%	43%
	TB	86%	85%	84%	69%	90%	74%
	LAB	80%	78%	72%	73%	90%	79%
	RMNCAH	79%	83%	80%	57%	90%	67%
	Overall	79%	81%	78%	58%	90%	64%
Percentage of facilities that had over 95% availability of a basket of commodities in the previous quarter	EMHS	49%	43%	31%	3%	75%	5%
	ARVs	33%	29%	36%	1%	75%	1%
	TB	67%	63%	57%	35%	75%	42%
	LAB	46%	39%	31%	33%	75%	48%
	RMNCAH	33%	39%	28%	2%	75%	12%
	Overall	46%	43%	37%	15%	75%	22%

Trends show that availability for all baskets of commodities progressively improved through the four (4) quarters. ART regimen optimization (change of first line regimens) affected reporting from health facilities, because optimized regimens were not incorporated into the routine data collection tools. The tracer ARVs that were being tracked cover only a small section of ART Clients and the others are obsolete, which essentially affected the availability of ARVs. The LAB and TB baskets had the highest availability.

FIGURE 10:MAP SHOWING HEALTH FACILITY AVERAGE AVAILABILITY OF A BASKET OF 41 COMMODITIES BY DISTRICT IN FY 2023/24



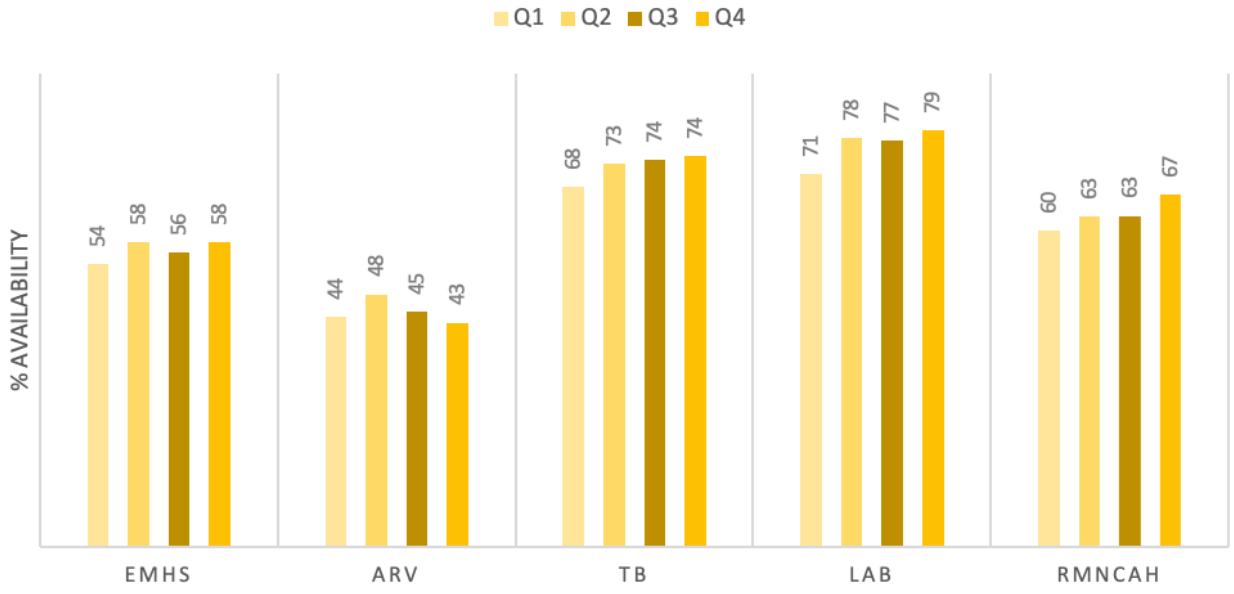
3.2.4.2. Central Level Warehouse Availability

The overall availability of supplies for a basket of 41 Commodities and health supplies at Central Level Warehouses (NMS and JMS) was 70%, which was below the target of 80% (refer to Table 4 and Figure 11). The low availability was largely attributed to distribution challenges.

TABLE 4: 5-YEAR TREND OF CENTRAL WAREHOUSE AVAILABILITY OF 41 TRACER ITEMS

Indicator	Disaggregation	Q4 FY2019/20	Q4 FY2020/21	Q4 FY2021/22	Q4 FY2022/23	Target FY2023/24	Q4 FY2023/24
Percentage availability of supplies for a basket of 41 Commodities and health supplies at Central Level Warehouses (NMS and JMS)	EMHS	47%	69%	57%	97%	80%	84%
	ARVs	57%	63%	61%	75%	80%	61%
	TB	67%	67%	67%	83%	80%	75%
	LAB	56%	52%	63%	78%	80%	77%
	RMNCAH	64%	55%	66%	79%	80%	55%
	Overall	58%	61%	63%	82%	80%	70%

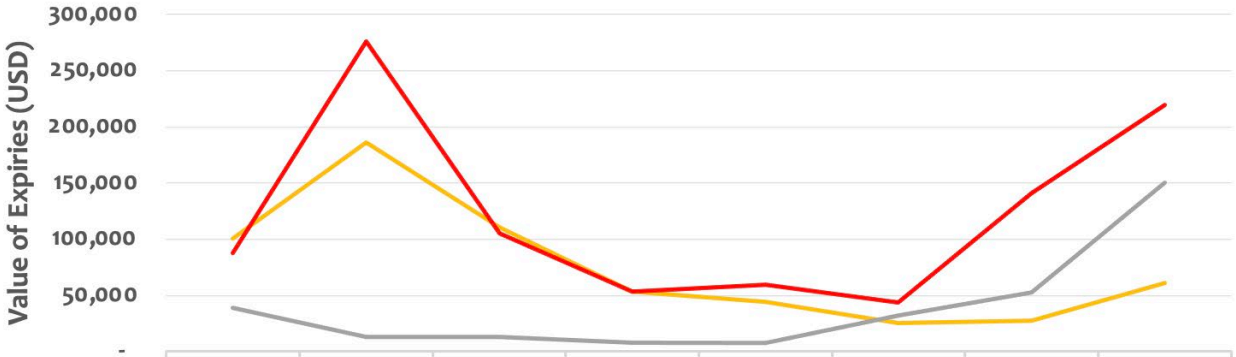
FIGURE 11: AVERAGE PERCENTAGE WAREHOUSE AVAILABILITY OF A BASKET OF 41 COMMODITIES PER QUARTER IN FY 2023/24



3.2.5. Health Commodity Wastage

The MoH continued to support quantification, supply planning, central and facility expiry tracking, and reporting using the online warehouse stock status report and health facilities monthly HMIS 105-6. These interventions are aimed at addressing product expiry and wastage. The MoH tracked the value of expiries reported by health facilities. The graph was split into two (Figure 12 and Figure 13), basing on the value of expiries.

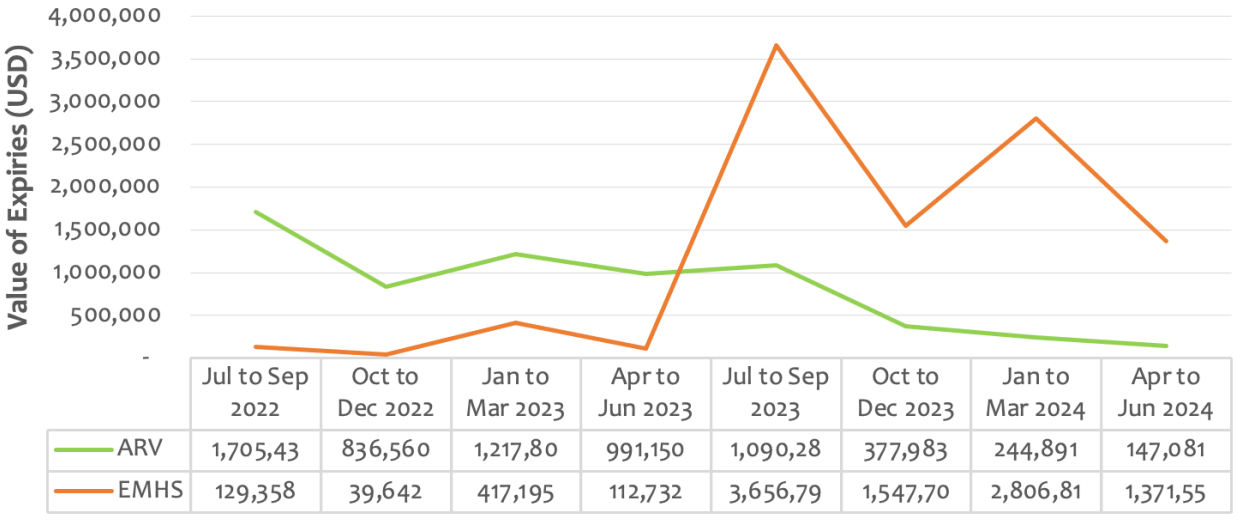
FIGURE 12: COMMODITY BASKETS WITH LOWER RANGES OF VALUE BELOW USD 300,000



	Jul to Sep 2022	Oct to Dec 2022	Jan to Mar 2023	Apr to Jun 2023	Jul to Sep 2023	Oct to Dec 2023	Jan to Mar 2024	Apr to Jun 2024
RMNCAH	100,904	185,768	110,746	53,505	44,177	25,515	27,553	61,316
LAB	88,006	275,757	105,521	53,505	59,589	44,115	140,849	219,828
TB	39,353	12,813	13,284	7,929	8,023	31,741	52,711	150,637

RMNCAH LAB TB

FIGURE 13: COMMODITY BASKETS WITH HIGHER RANGES OF VALUE ABOVE USD 300,000



	Jul to Sep 2022	Oct to Dec 2022	Jan to Mar 2023	Apr to Jun 2023	Jul to Sep 2023	Oct to Dec 2023	Jan to Mar 2024	Apr to Jun 2024
ARV	1,705,43	836,560	1,217,80	991,150	1,090,28	377,983	244,891	147,081
EMHS	129,358	39,642	417,195	112,732	3,656,79	1,547,70	2,806,81	1,371,55

ARV EMHS

During the last quarter of the year, April to June 2024, commodity expiry decreased by 40% and 51% for ARVs and EMHS respectively, however it was still high compared to other commodity baskets namely TB, RMNCAH, and Laboratory. This is attributed to the transition from obsolete to optimal regimens. Notably, the value of expired items increased by more than double for TB, RMNCAH, and Laboratory baskets.

In response to the expiries, MoH is strengthening the capacity of 22 National/Regional Referral Hospitals as CoEs, to develop and implement pharmaceutical waste management and disposal plans. Ninety-five percent (21/22) of the referral hospitals attained at least an 80% score in pharmaceutical waste management. Of the 21 hospitals with a score of 80% or higher, 19 (90%)

have had at least four assessments and two (10%) have had three assessments. Mulago NRH is the only facility that has not reached the 80% score in pharmaceutical waste management, mainly because there were accumulated expired commodities that were not yet disposed of at the time of the third assessment. Follow-ups are ongoing to have them address this concern. USAID/SSCS activity continues to work with the facilities to improve their waste management plans.

3.2.6. Stock Management Performance

Good stock management practices are the cornerstone of efficient and effective healthcare delivery at health facilities. Ensuring the availability of essential medicines and supplies, while minimizing waste and losses is crucial for meeting patient needs and optimizing resource utilization.

Stock management indicators are tracked under the Essential Medicines Supervision Performance Assessment and Recognition Strategy (SPARS). The parameters tracked include appropriate stock card use (availability, filling, completion, agreement of physical count and stock card balance, and average monthly consumption (AMC) correctness; as well as appropriate stock book use. The average stock management score for FY 2023/24 was 3.24/5 (64.8%), which is below the target of 80%.

Additionally, there are other methods/approaches used to supplement SPARS including Pre-Joint Review supervisions, support supervisions and mentorships etc., though the data for these could not easily be attained.

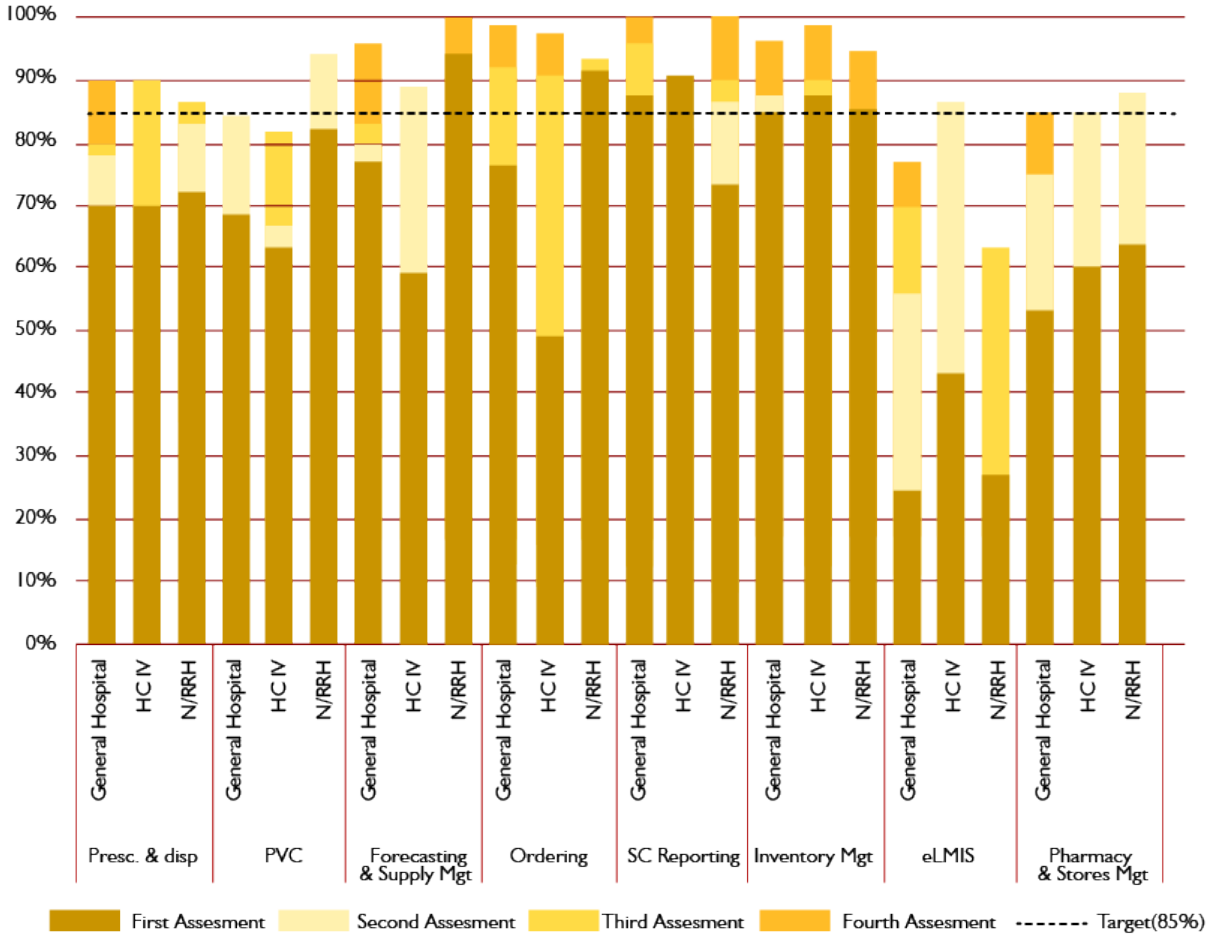
3.2.7. Digital Supply Chain Performance Self-Assessment

The Digital Supply Chain Performance Self-Assessment (DSPSS) portal accessible via https://dspss.health.go.ug/, is a platform for health facility supply chain managers/staff to assess the health facility supply chain performance, without need for presence of external supervisors.

Figure 14 below shows the health facility DSPSS scores as of June 2024. All targeted referral hospitals (22), general hospitals (56), and HC IVs (184) were initiated to the DSPSS. The facilities attaining a self-assessment score of at least 85% reached 82% (18/22) for referral hospitals, 91% (51/56) for general hospitals, and 45% (83/184) for HC IVs. Health workers scored more than 50% at baseline or first assessment in seven modules, with the lowest performance recorded for eLMIS use. The MoH and partners continuously conducted assessments and mentorships that contributed to improved performance in the various parameters.

Through the MoH e-learning platform (https://elearning.health.go.ug/) health workers enroll to the e-learning supply chain management course to improve their knowledge in the domains where they score low on the assessments.

FIGURE 14: SCORES OF HEALTH FACILITIES IN PHARMACEUTICAL FUNCTIONS



3.3. Pharmaceutical Human Resource Planning and Development

The MoH is committed to attaining and maintaining an adequate pharmaceutical services workforce that is equitably distributed, appropriately skilled, motivated, and productive. Over the years, there has been an increase in the number of training institutions and schools which has led to an increase in the number of pharmacy professionals. Currently, three (3) universities are offering pharmacy education at bachelor's and post-graduate levels. There are several institutions training pharmacy technicians (dispensers) and pharmacy assistants at diploma and certificate levels respectively.

3.3.1. Human Resource Structure

A review of the human resource structure for public health facilities, that included the introduction of new pharmacist positions at referral, district, general hospital, and HC IV levels was approved. The table 5 ad 6 below shows the new positions for pharmacy cadres approved for each level.

TABLE 5: PHARMACY STAFFING BY LEVEL OF CARE AS PER APPROVED HUMAN RESOURCE STRUCTURE AS COMPARED TO CURRENT STRUCTURE

LOC	Ass. Comm. Pharmacist		Principal Pharmacist		Senior Pharmacist		Pharmacist		Principal Dispenser (Pharmacy Technician)		Senior Dispenser (Pharmacy Technician)		Dispenser (Pharmacy Technician)	
	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old
HCII														
HCIII													1	0
HCIV							1	0			1	0	2	1
GH					1	0	1	1			1	1	2	2
District LG					1	0	0	0						
RRH			1	0	2	2	2	1			2	2	5	4
NRHs			1	1	2	2	4	4	1	1	3	3	11	11
Mulago NRH	1	0	2	1	4	4	10	10	1		3		12	

TABLE 6: PHARMACY STAFFING LEVELS FOR SPECIALIZED INSTITUTIONS

	Uganda Cancer Institute		Uganda Heart Institute	
	Main	Regional Centers	Main	Regional Centers
Senior Consultant (Oncology Pharmacist)	1			
Consultant (Oncology Pharmacist)	2			
Consultant (Radio pharmacy)	2			
MO Special Grade (Oncology Pharmacist)	4			
Manager Pharmacy			1	
Principal Pharmacist	4		1	
Senior Pharmacist	3	1	3	1
Senior Radio pharmacist	2			
Pharmacist	6	2	12	2
Radio pharmacist	6			
Pharmacy Technician	8	4	6	3
Total	38	7	23	6

3.3.2. Pharmaceutical Sector Workforce

Various indicators are used to track progress in building the pharmaceutical sector workforce. Data for the indicators is obtained from the Pharmaceutical Society of Uganda (PSU) and Allied Health Professional's Council (AHPC) records, Pharmacy school registers, and MoH Human Resources for Health Information System.

3.3.2.1. Human Resource Capacity for the Pharmaceutical Sector

The pharmacist densities include pharmacy cadres namely pharmacists, dispensers, and Pharmaceutical Assistants to population ratio (/100,000 population). It measures the number of pharmacists, pharmaceutical technicians, pharmaceutical assistants, and related occupations practicing in the public and private sectors in Uganda per 100,000 people/population. It's established by dividing the total number of practicing pharmaceutical practitioners (pharmacists, pharmaceutical assistants, pharmaceutical technicians) by the total population in Uganda multiplied by 100,000.

TABLE 7: DENSITIES FOR THE PHARMACEUTICAL CADRES REGISTERED WITH THEIR PROFESSIONAL BODIES

#	Cadre	Totals	Pharmaceutical densities
1	Pharmacists	1,900	4.1
2	Pharmacy Technician/Dispenser	1932	4.2
3	Pharmacy Assistants	329	0.72
	Total	4,161	9.0

By the end of FY 2023/24, the approved positions for the Department of Pharmaceuticals and Natural Medicines (DPNM) remained seven (7) with only 57% (4/7) filled. In addition, the public sector facilities had only filled 50% of pharmacist positions and 44% of pharmacy technician and dispenser positions. This highlighted a severe shortage of pharmaceutical staff hence the urgent need to prioritize recruitment for the pharmacy cadres across all levels given the critical role and corresponding benefits ranging from increased health commodity accountability, antimicrobial stewardship, and efficient planning and utilization of health supply chain resources among others.

3.3.2.2. Training of Human Resources for the Pharmaceutical Services

To temporarily address the severe shortage of qualified pharmaceutical staff in both the public and PNFP health sectors, other healthcare cadres have been assigned specific roles to manage essential medicines and health supplies at various levels of care. The MoH adopted various modes to build the capacity of these assigned staff, namely onsite mentorship and training, online learning, class-room trainings, and webinars. Table 8 below summarizes the number of individuals trained/ mentored during the review period.

TABLE 8: CUMULATIVE NUMBER OF HEALTH WORKERS MENTORED IN PHARMACEUTICAL ROLES

#	Mode of Capacity Enhancement	Total
1	Onsite facility mentorships	500
2	Completed the E-Learning HSC Courses	141
3	Training using the Leadership Management and Governance Course	507
4	Workshops/Classroom training	200
	Total	1,348

E-Learning

The MoH adopted the e-Learning model that provides learners with the flexibility to learn at their own pace and convenience. The MoH e-Learning platform contains various courses including those on Supply Chain Management. 141 professionals (Target_240) completed the Supply Chain Management course in 2023/24, as shown in Figure 15 below.

FIGURE 15: NUMBER OF LEARNERS THAT HAVE COMPLETED THE SUPPLY CHAIN MANAGEMENT COURSE

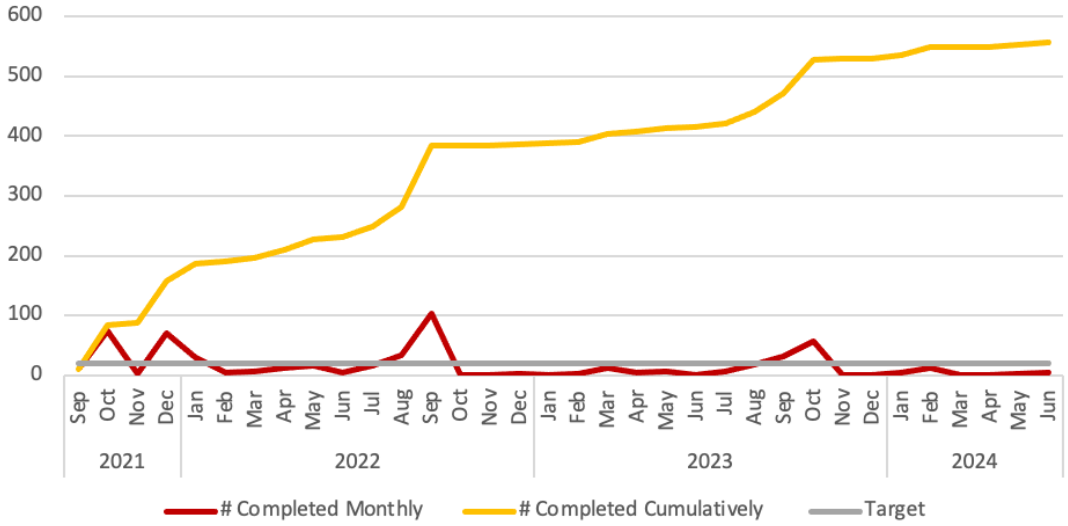
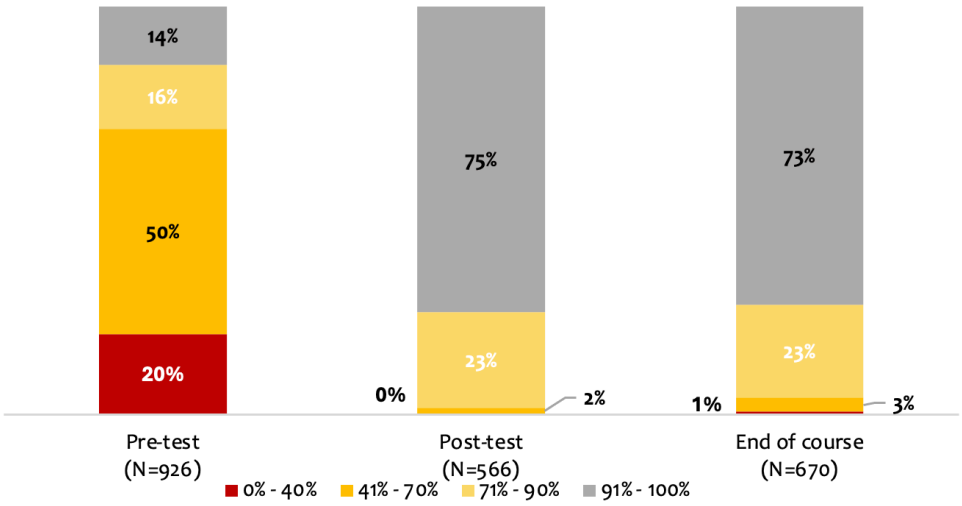


Figure 16 illustrates the scores of health workers in the Supply Chain Management course. The results show a significant improvement in performance between the pre-test and post-test assessments. Whereas only 30% of health workers attained at least 71% in the pre-test, this increased to 98% in the post-test, demonstrating substantial learning gains.

FIGURE 16: HEALTH CARE WORKERS SCORES ACROSS ASSESSMENTS



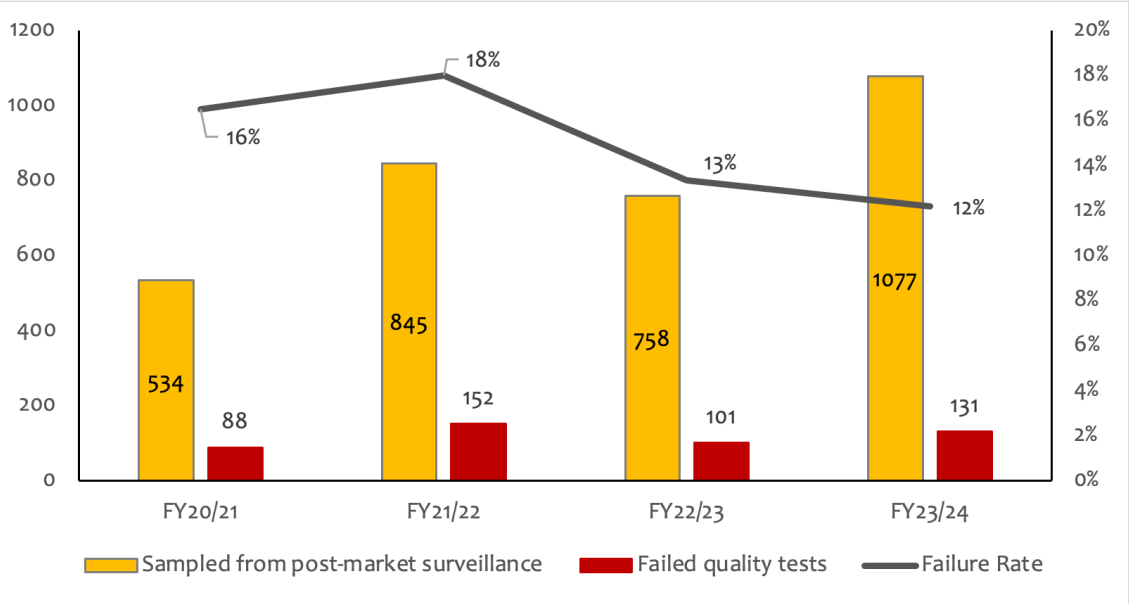
3.4. Regulatory Framework and Compliance

Since 1993, the National Drug Authority (NDA) has been responsible for assessing the quality, safety, and efficacy of medicines; inspecting and licensing all pharmaceutical outlets in Uganda; and conducting sensitization on pharmacovigilance.

3.4.1. Health Product Quality Testing

The National Drug Authority (NDA) samples health products and technologies for testing as part of post-market surveillance. They assess the level of quality by the health products and technologies in the market. This parameter is established by dividing the number of health products and technologies that have failed post-market quality test by the total number of health products and technologies sampled multiplied by 100.

FIGURE 17: PROPORTION OF HEALTH PRODUCTS AND TECHNOLOGIES SAMPLED FROM POST-MARKET SURVEILLANCE THAT FAIL QUALITY TESTS



There has been a general decline in the failure rate since FY 20/21, dropping from 16% to 12% in FY 23/24. However, the current failure rate remains too high and significantly exceeds the target of 1%. This poses a substantial risk to the healthcare sector, the population, and the overall quality of healthcare provision, highlighting the need for enhanced surveillance and vigilance.

3.4.2. Strategic Document Development and Review

A total of five (5) strategic documents were developed, 15 were reviewed, and five (5) were operationalized in the FY 2023/24, as outlined in Table 10 below.

TABLE 10: POLICIES, AND GUIDELINES REVIEWED/DEVELOPED AND OPERATIONALIZED

Document	Developed	Reviewed	Operationalized
Policies	1. Research Policy 2. Fraud Control Policy 3. Risk Management Policy		
Guidelines	1. Guidelines on Variation of Registered Biotherapeutic Products	1. Guidelines for regulation of local herbal medicine products in Uganda 2. Guidelines for Variation of Registered Medicinal Products 3. Guidelines for Introducing a new formulation pharmaceutical product on the Uganda market	1. Guidelines on Registration of imported Herbal Medicine Products for Human or Veterinary Use in Uganda 2. Guidelines on Veterinary Pharmacovigilance in Uganda (Detecting & Reporting Veterinary Adverse Drug Events)

		3. Guidelines for Online Supply of Drugs 4. Guidelines on Good Manufacturing Practices for Blood Establishments 5. Guidelines for the conduct of clinical trials in children, pregnant and lactating women in Uganda 6. Guidelines on Regulation of Medical Devices for Human Use in Uganda 7. Guidelines on Submission of Documentation for Marketing Authorization of a medical device that is Prequalified by World Health Organization or Approved by a Stringent Regulatory Authority 8. Pharmacovigilance guidelines for Licensed Persons 9. Guidelines on Good Pharmacovigilance Practices in Uganda 10. Guidelines on Good Manufacturing Practices for Blood Establishments	3. Guidelines on clinical research on herbal medicine products 4. Guidelines on registration of Surgical Instruments and appliances
Regulation	The National Drug Policy and Authority (Laboratory Testing) Regulation was drafted in consultation with FPC; however, consultations are ongoing.	1. The National Drug Policy and Authority (Licensing), 2. Pharmacovigilance, 3. Conduct of Clinical Trials, 4. Certificate of Suitability Amendment Regulations 2021 have been amended.	The revised National Drug Policy and Authority Amendment of Drug Schedules (Amendment) Order 2020 was approved by the Minister of Health.

3.4.3. Stakeholder Engagement

The NDA conducted sensitization meetings on licensing regulations per district. A total of 443 sensitization meetings on licensing regulations were conducted across all districts in Uganda for FY23/24.

TABLE 11: NUMBER OF SENSITIZATION MEETINGS ON LICENSING REGULATIONS BY REGION

Regions	# Sensitizations
Central	39
Kampala Extra	4
S. Eastern	62
S. Western	40
Western	106
West Nile	9
Northern	113
Eastern	70
Total	443

3.5. Appropriate Medical Product Use

3.5.1. Prescribing Quality

Improving medicine use through proper prescribing and dispensing practices ensures the best use of limited resources and optimal patient care. Prescribing quality is measured by four sub-indicators i.e. number of medicines prescribed per encounter, prescription by generic name, encounters with one or more antibiotics, injections and diagnosis recorded, and adherence to standard treatment guidelines. FY 2023/24 performance is highlighted in Table 12 below.

TABLE 12: PRESCRIBING QUALITY PERFORMANCE IN FY 2023/24

Indicator	Performance
Number of antibiotics prescribed per encounter	1.5
Prescription by generic name	61.3%
Adherence to standard treatment guidelines	50%

3.5.2. Medicines Therapeutic Committees

For the period of July 2022-June 2023, 57.1% (4/7) national referrals (NRs) (inclusive of the 2 national institutes), 52.5% (9/17) regional referral hospitals and 12.2% (6/49) General Hospitals (GHs), had functional MTCs. In FY2023/24, 100% of general hospitals had functional MTCs. MoH DPNM also piloted the functionalization of MTCs in five private health facilities i.e., Nakasero, Lubaga, Kitovu, Lacor, and Kampala Hospital.

3.5.3. Antimicrobial Stewardship

To increase awareness, DPNM instituted a National Telemonitoring program for antimicrobial stewardship. From July 2023 to June 2024, a total of 1,386 health-care professionals were mentored. In addition, two technical committees at the National level focused on antimicrobial stewardship (AMS) and antimicrobial use (AMU) were revitalized. To monitor antimicrobial use, we adopted World Health Organization (WHO) tools namely the Point Prevalence Survey (PPS), and Prescription and Medicine Use Audit as well as submitted data to the GLASS-AMC to monitor consumption. As of June 2024, 100% of Regional Hospitals and General public hospitals were implementing the national guidelines for antimicrobial consumption and use surveillance in Human Health.

3.5.3.1. Point Prevalence Survey

The MoH with support from partners conducted a national assessment of PPS in all public hospitals and five (5) private hospitals namely Nakasero, Lubaga, Kitovu, Lacor, and Kampala Hospital. The focus was on all patients prescribed antibiotics in the past 24 hours relative to all patients admitted in the facility ward between 8 am and 12 pm on the day of the survey.

A total of 4,690 patients (male-1,893, female-2,797) were reviewed. Of those reviewed, 98% (4,599) were prescribed antibiotics and 50.9% had an injectable antibiotic. The average number of antibiotics prescribed per patient encounter was 1.85, adherence to standard treatment guidelines was 55% and the percentage of antibiotics prescribed by generic name was 59.6%. Functionalizing and strengthening the MTCs, will contribute to the improvement of the above indicators.

3.5.3.2. Prescription and Medicine Use Audit

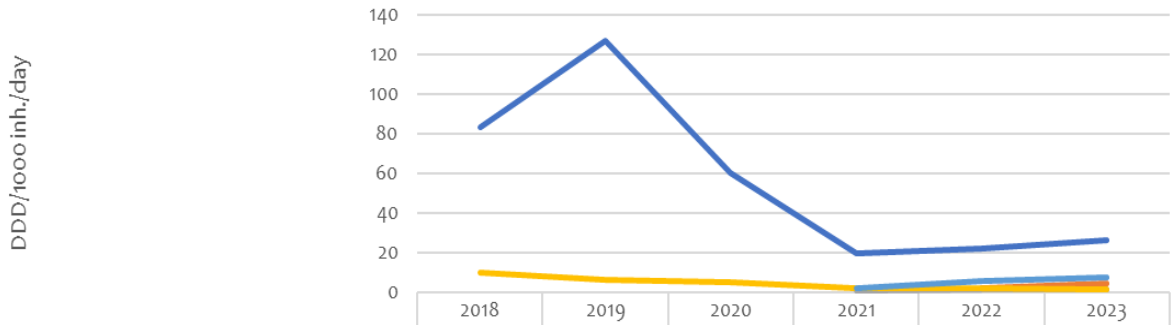
The MoH with support from partners conducted a prescription and medicine use audit in all public hospitals and five (5) private hospitals namely Nakasero, Lubaga, Kitovu, Lacor, and Kampala Hospital. A review of patients prescribed antibiotics in the past three months using the outpatient department (OPD) records was done.

A total of 7,085 patients were reviewed. Of those reviewed, 6,395 (90.26%) male-2,284, female-4,111 were prescribed antibiotics, and 5.62% had an injectable antibiotic. The average number of antibiotics prescribed per patient encounter was 1.5, adherence to standard treatment guidelines was 50.01% and the percentage of antibiotics prescribed by generic name was 61.29%. Functionalizing and strengthening the MTCs, will contribute to the improvement of the above indicators.

3.5.3.3. GLASS Antimicrobial Consumption Data

The MoH submitted the antimicrobial consumption and antimicrobial resistance surveillance data for 2024 to the WHO Global Antimicrobial Surveillance System. Data submitted included distribution data from the National Medical Stores (NMS) and Joint Medical Store (JMS). Through the GLASS-AMC, the Ministry of Health monitors annual antimicrobial consumption. The antimicrobials are classified according to the Anatomical Therapeutic Chemical (ATC) classification system and the volume of consumed antimicrobials are expressed as Defined Daily Dose (DDD). The antimicrobials associated with ATC/DDD listed in the ATC/DDD 2023 index were included in the analysis. The antimicrobial classes monitored using import records include antibacterials, antivirals for systemic use, antimycotics and antifungals for systemic use, drugs for the treatment of tuberculosis, and Antimalarials as in Figure 18 below.

FIGURE 18: CONSUMPTION BY ANTIMICROBIAL CLASSES EXPRESSED AS DDD PER 1,000 INHABITANTS PER DAY



	2018	2019	2020	2021	2022	2023
Antibacterials	83.39	126.91	59.92	19.62	21.65	26.46
Antivirals for systemic use					1.87	4.08
Antimycotics and antifungals for systemic use				1.26	1.48	1.43
Drugs for the treatment of tuberculosis	9.59	6.41	5.04	1.64	1.74	1.06
Antimalarials				1.8	5.74	7.31

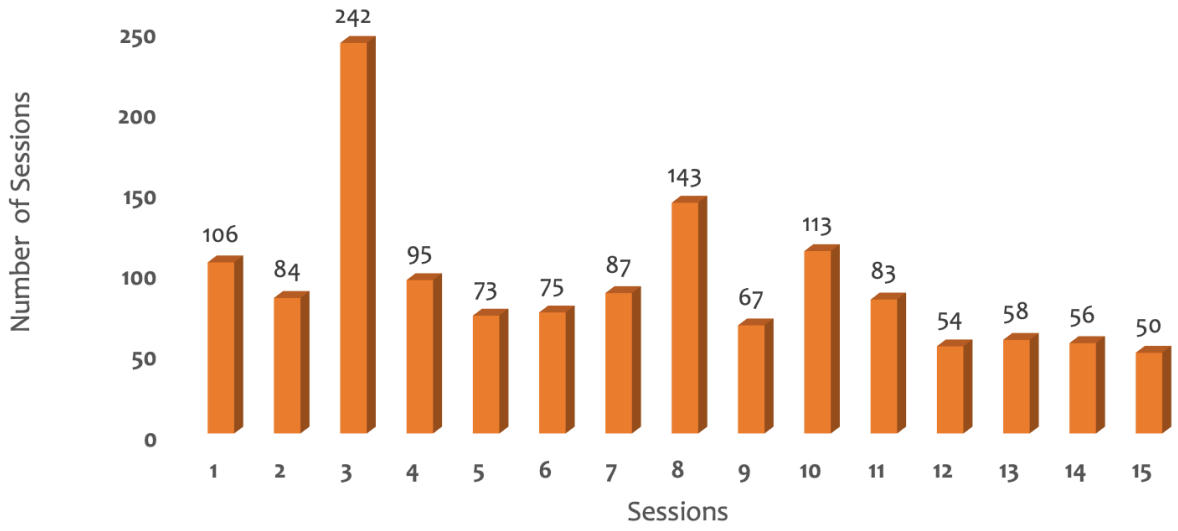
The spike in 2021 was due to different data sources utilized for monitoring. Up until 2021, order data was considered instead of receipt data with the assumption that all that was ordered was received.

3.5.3.4. Tele-mentoring for Antimicrobial Stewardship

The Tele-mentoring program for AMS was launched in October 2023 to support the implementation of antimicrobial stewardship through functionalizing the AMS structures, and high-impact interventions for quality improvement. To date, 15 sessions (detailed in Figure 19) and 14 system and clinical cases were discussed based on topics identified and reviewed from a baseline that was conducted in 6 facilities. A total of 1,386 participants composed of various cadres including Specialists, Medical Doctors, Pharmacists, Laboratory Technicians and Technologists, Counselors, Clinical Officers, ART In charge, and Nurses were mentored.

As a result, 60% (n=33) of the participants have initiated new practices at their workplaces, and 85% (n=20) have observed improvement in patient management or patient outcomes as a result of implementation. This is attributed to good leadership and governance as well as collaboration between three (3) departments namely DPNM, Laboratory, and Clinical Services. Barriers observed include the lack of internet connectivity to attend sessions and lack of resources to implement interventions.

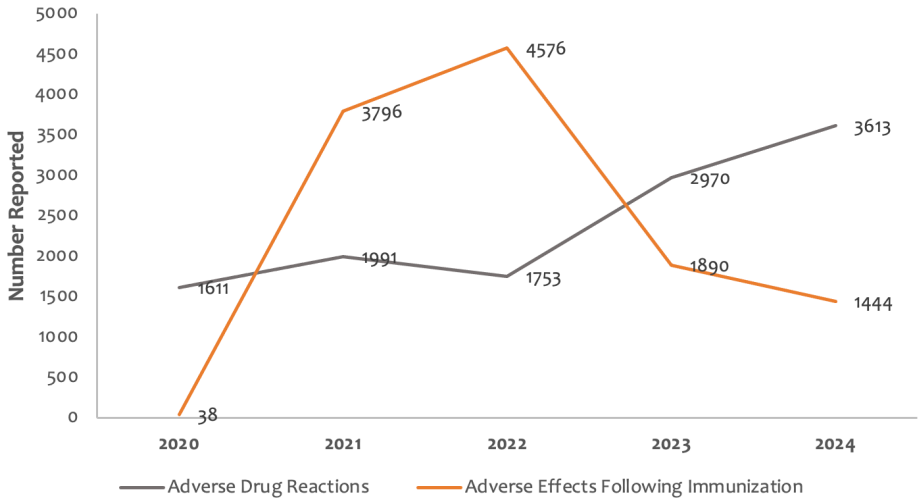
FIGURE 19: NUMBER OF TELEMENTORING AMS SESSIONS AND PARTICIPATION



3.5.4. Pharmacovigilance

There has been a 21% increase in Adverse Drug Reaction (ADR) reports received in the FY 2023/24 reporting period compared to those received in FY 2022/23. Whereas the percentage increase in reports is less than the 69% increase from the previous reporting year, ADR reporting continues a steady upward trend as pharmacovigilance efforts are extended to various health programs in the country. The majority of the reports were submitted from the HIV & TB clinics and the reproductive health programme, where targeted sensitization campaigns have been conducted to encourage health workers to report even what is considered “normal” or “expected” side effects

FIGURE 20: REPORTING TREND OF ADVERSE DRUG REACTIONS AND ADVERSE EVENTS FOLLOWING IMMUNIZATION

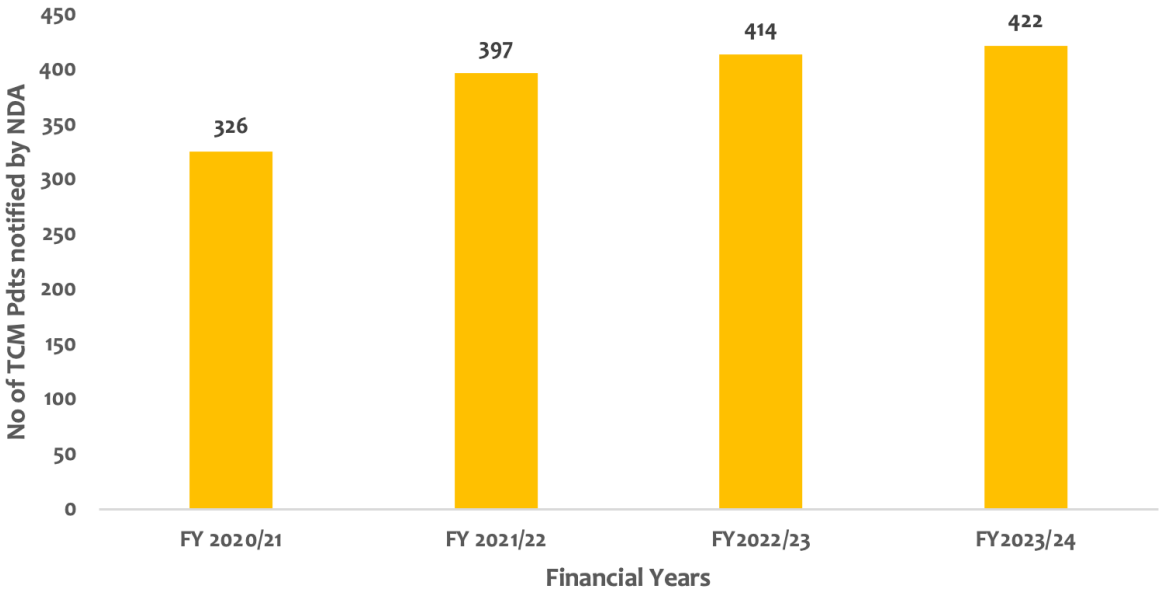


Adverse Effects Following Immunization (AEFI) reports have steadily declined since the completion of the COVID-19 vaccination mass campaigns.

3.6. Traditional and Complementary Medicines

There was a slight increase in the number of traditional and complementary medicines (TCM) notified by NDA from 326 products in FY 2020/21 to 422 in FY 2023/24.

FIGURE 21: NUMBER OF TRADITIONAL AND COMPLEMENTARY MEDICINE PRODUCTS NOTIFIED BY NDA



The NDA Herbal Unit has undertaken several initiatives to strengthen the regulation of herbal medicines by enhancing local capacity building, engaging with relevant national bodies, and fostering collaboration in herbal regulation. These efforts have been complemented by regional training sessions, stakeholder sensitization, and enforcement activities.

3.6.1. Regional Trainings and Stakeholder Engagement

The unit has conducted sensitization sessions for herbalists and bodies at various locations, including: JK Mugonza Herberlist in Kyotera ;CBS PEWOSA Bulange ;Buwama Herbalists Association

and Prometra ;CBS PEWOSA Masaka ;Uganda Nedagala Nobuwangwa Bwafe ; Guluddene Traditional Healers and Herbalists Association ;Natural Products Research & Innovation Centre (NAPRIC), Busitema University, College of Health Sciences ;DIT trainees under the Natural Chemotherapeutic Research Institute (NCRI) ;DIT trainees under Kenso Professional Services

Below is the district per regions trained in herbal medicines

TABLE 13: DISTRICTS TRAINED IN HERBAL MEDICINES PER REGION

Region	District
Western	Fort portal city
Kampala Extra	Bukomansimbi and Nakasongola
South Eastern	Kayunga and Buvuma island
Eastern	Jinja city
Northern	Gulu and Oyam

In addition, operations have been conducted to curb illegal advertising of herbal products and the unauthorized sale of herbal medicines on public transport, with enforcement efforts carried out at all regional levels.

3.6.2. International Collaboration

To align with international standards, the NDA Herbal Unit participated in the 15th Meeting of the International Regulatory Cooperation on Herbal Medicines (IRCH), held virtually from April 17-19, 2024. This engagement provided valuable insights into global best practices in herbal medicine regulation.

3.6.3. Capacity Building for Domestic Herbal Medicine Manufacturers

In the 2023/24 financial year, the Herbal Unit conducted:

- **Two (2) technical training sessions** aimed at building the capacity of domestic herbal medicine manufacturers. These sessions focused on meeting regulatory requirements, addressing challenges identified during post-marketing surveillance, and improving manufacturing capabilities.
- **Four (4) benchmarking training visits** to model herbal manufacturing facilities, where selected herbal manufacturers received on-site training to enhance their production standards and these included;

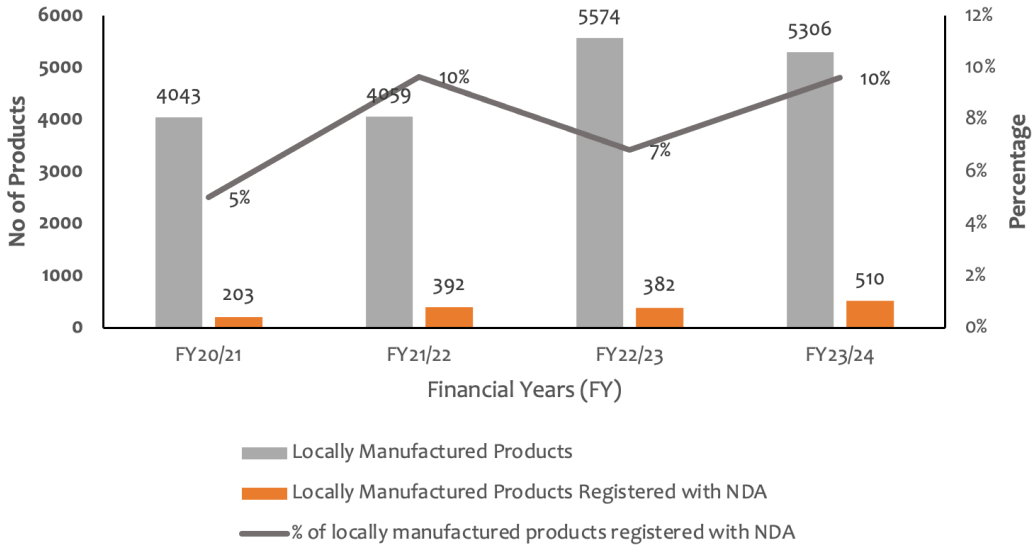
    1. Jenna herbals.
    2. Doctor's Choice Ltd, Jinja.
    3. Kazire herbals ltd, Mbarara.
    4. Yeco Organics

These activities reflect NDA's ongoing commitment to strengthening the regulatory framework for herbal medicines, ensuring compliance, and improving the quality and safety of herbal products in Uganda.

3.7. Local manufacture of Health Commodities

To enhance the local manufacture, the percentage of locally manufactured products registered with NDA is monitored. It's established by dividing the number of locally manufactured products by total number of products registered by NDA multiplied by 100. The numbers are derived from the

FIGURE 22: RATE OF REGISTRATION OF LOCALLY MANUFACTURED PRODUCTS IN UGANDA

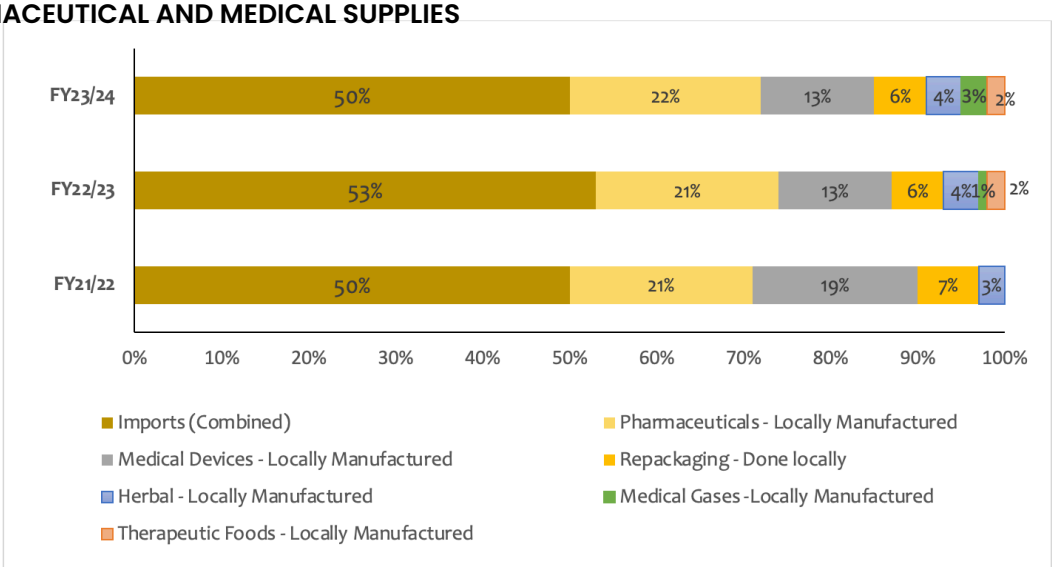


Despite various incentives provided to manufacturers, such as training, exemption from fees for importing raw materials, reducing fees for registration and variations, the percentage of locally manufactured products registered with the NDA has remained low over the years. The highest figure reached was just 10%, which is significantly below the target of 100%. Local manufacturers continue to pose challenges, particularly the high cost of production, which is hindering the growth of local manufacturing. There is a pressing need for more dialogue between the government and local manufacturers to find more effective and supportive solutions.

3.7.1. Domestic Market Share

Domestic market share focuses on the volume of locally manufactured pharmaceutical and medical supplies in comparison to the total pharmaceutical and medical supplies volume. It measures the pharmaceutical and medical supplies market share controlled by local manufacturers. The Ugandan pharmaceutical market remains heavily reliant on imports, which account for half of the pharmaceuticals used in the country. While there was a surge in small-scale manufacturing firms producing sanitizers and masks during the Covid-19 pandemic which led to a rise in the proportion of medical devices, this has since declined. The contribution by the locally manufactured pharmaceuticals has not registered any significant change for the past three years (Figure 23). The local manufacture of therapeutic food and medical gases that started in FY22/23 has supported the local industry to reclaim the 50% market share in FY 2023/24.

FIGURE 23: SHARE OF THE DOMESTIC MARKET SERVICED BY LOCAL MANUFACTURED PHARMACEUTICAL AND MEDICAL SUPPLIES

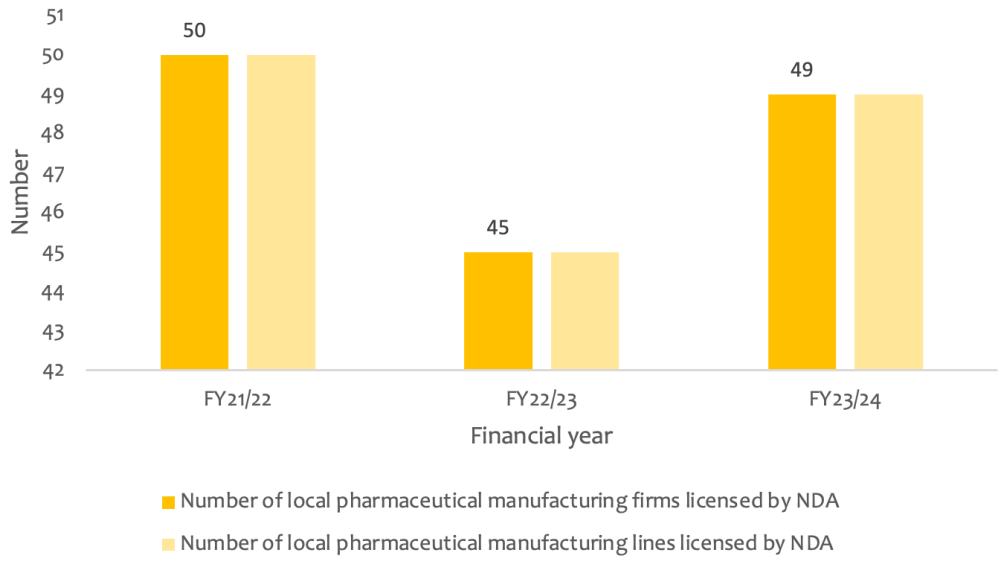


3.7.2. Pharmaceutical Manufacturing Licensing

3.7.2.1. Local Pharmaceutical Manufacturing Firms Licensed

There was a surge in small-scale manufacturing firms producing sanitizers and masks during the Covid-19 pandemic, but this has since declined due to reduced market for the two items hence the need for diversification in products manufactured. There was a net increase of 4 licensed firms which communicates optimism in the growth of the local pharmaceutical manufacturing industry.

FIGURE 24: NUMBER OF LOCAL PHARMACEUTICAL MANUFACTURING FIRMS AND LINES LICENSED BY NDA



3.7.2.2. Local Pharmaceutical Manufacturing Lines Licensed

As one of the pre-requisites for licensure, a firm should have at least one manufacturing line fully inspected and approved by the NDA, multiple manufacturing lines are an indicator of the level of specialization of the products manufactured (i.e. antineoplastics require dedicated lines), and the manufacturing capacity for the firms. For Uganda, all the licensed firms have one licensed manufacturing line which points to potentially limited capacity and diversity within the individual manufacturing firms as shown in Figure 24 above.

3.8. Pharmaceutical Services Financing and Pricing

3.8.1. Health Commodity Financing

The total pharmaceutical expenditure as a percentage of total health expenditure measures Government of Uganda (GOU) contribution to finance essential health commodities for the provision of a basic health care package including laboratory supplies, ARVs, ACTs, vaccines, TB medicines, reproductive health commodities, and other EMHS. This indicator measures the proportion of the health sector budget allocated to pharmaceutical service delivery, with a target of 25%.

In the FY 2023/24, 19.6% (UGX 640.86 billion of UGX 3,265.9 billion) of the GOU health sector budget was allocated to health commodities, falling short of the target. This highlights the urgent need for increased funding, given the critical role of EMHS in ensuring quality healthcare delivery.

3.8.1.1. Public Sector Commodity Financing

There was a 15.9% increase in the budget for EMHS at NMS from UGX 464 billion in FY 2022/23 to UGX 538 billion in FY 2023/24 as highlighted in Table 14. This is inclusive of the credit line and program commodities. The biggest beneficiaries from the increment included HCIIs, HCIIIs, ARVs, and Reproductive health supplies.

TABLE 14: PUBLIC HEALTH FACILITY CREDIT LINE AND PROGRAM COMMODITIES BUDGET ALLOCATIONS

Level of Care	Budget Holder	No. of HFs	FY2022/23 (UGX)	FY2023/24 (UGX)	%age change
HC II	Credit line	1,772	11,163,236,942	15,163,236,942	35.8%
HC III	Credit line	1,350	35,684,761,813	47,684,761,813	33.6%
HC IV	Credit line	204	21,432,000,000	22,432,000,000	4.7%
GH	Credit line	52	22,531,010,130	22,531,010,130	0.0%
RRH	Credit line	18	22,184,228,057	22,184,228,057	0.0%
NRH	Credit line	5	24,366,797,224	24,366,797,224	0.0%
Uganda Heart Institute	Credit line	1	2,181,400,000	2,181,400,000	0.0%
Uganda Blood Transfusion Services	Credit line	1	39,888,909,000	39,888,909,000	0.0%
NCDs Commodities	Credit line		2,032,123,776	2,032,123,776	0.0%
Sub total			181,464,466,942	198,464,466,942	9.4%
Nutrition Commodities	Program		5,000,000,000	5,000,000,000	0.0%
Malaria Commodities	Program		5,108,625,000	5,108,625,000	0.0%
Reproductive Health Supplies	Program		22,000,000,000	27,000,000,000	22.7%
Lab Commodities	Program		61,000,000,000	63,000,000,000	3.3%
ARV Medicines	Program		150,891,375,000	200,891,375,000	33.1%
TB management commodities	Program		7,000,000,000	7,000,000,000	0.0%
Vaccines and Associate Supplies (Plus Hep B Meds)	Program		29,000,000,000	29,000,000,000	0.0%
Public Health Emergencies	Program		2,500,000,000.00	2,500,000,000	0.0%
Sub total			282,500,000,000	339,500,000,000	20.2%
Grand Total			463,964,466,942	537,964,466,942	15.9%

3.8.1.2. Private Sector Commodity Financing

Through the non-wage Primary Health Care (PHC) grant to the PNFP sector, GOU contributes to the EMHS budget for the eligible PNFP health facilities. This initiative started in FY19/20 and it has been pivotal in increasing the availability and access to EMHS in the PNFP sector hence improving the quality of healthcare delivery.

A total of UGX 13,617,055,953 (Thirteen billion, six hundred seventeen million, fifty-five thousand, nine hundred fifty-three shillings) was released from MoH for 552 beneficiary PNFP health facilities for FY 2023/2024 as detailed in Table 15 and Table 16 below. This contribution has stagnated over the years, despite the increment in beneficiary health facilities from 542 in FY 19/20 to 552 in FY 2023/24 and overall EMHS requirements. The available funding only covered 37% of the PNFP sector's commodity needs, leaving a huge gap of 63%.

TABLE 14: ALLOCATION FOR EMHS AT JMS BY LEVEL OF CARE

Details	No HFs	Total allocation (UGX)	%age allocation	Average allocation per level of care
Health Center II	271	1,718,454,298	13%	6,341,160
Health Center III	212	2,186,138,649	16%	10,311,975
Health Center IV	22	555,129,772	4%	25,233,171
Hospital	47	9,157,333,234	67%	194,836,877
Total	552	13,617,055,953	100%	

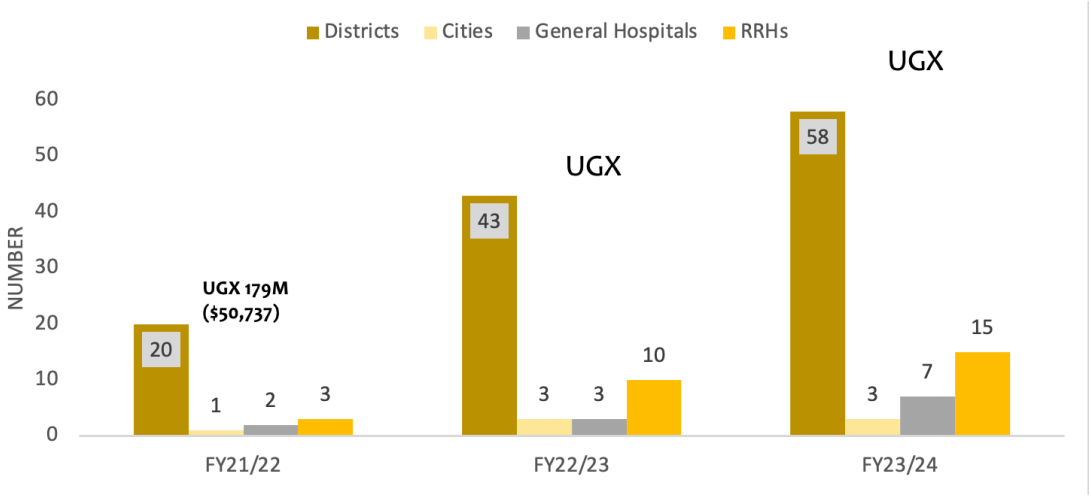
TABLE 15: ANNUAL ALLOCATION FOR EMHS AT JMS BY AFFILIATION

Details	No of HFs	Total allocation (UGX)	%age allocation	Average allocation per level of care
PARTNERSHIP	9	71,933,242	0.5%	7,992,582.42
CBO	3	47,945,155	0.4%	15,981,718.24
PNFP	13	383,286,047	2.8%	29,483,542.10
UPMB	225	3,798,047,819	27.9%	16,880,212.53
UCMB	264	8,604,284,397	63.2%	32,591,986.35
UMMB	35	699,676,760	5.1%	19,990,764.58
UOMB	3	11,882,532	0.1%	3,960,844.10
Total Expenditure	552	13,617,055,953	100%	24,668,579.62

3.8.2. Budgeting for Health Supply Chain Activities

Funding allocated to Health Supply Chain (HSC) activities by District Local Governments (districts and cities) has shown a progressive increase, as illustrated in Figure 25 below. The allocation has grown significantly from UGX 298 million in FY 2022/23 to UGX 765 million in FY 2023/24, reflecting a steady move towards sustainability and local ownership of HSC interventions. However, this increment translates to an allocation of UGX 5.2 million ($1,416) per district/City per FY which is still suboptimal and requires further enhancements.

FIGURE 25: DISTRICTS, CITIES, AND HOSPITALS PLANNING AND BUDGETING FOR HEALTH SUPPLY CHAIN



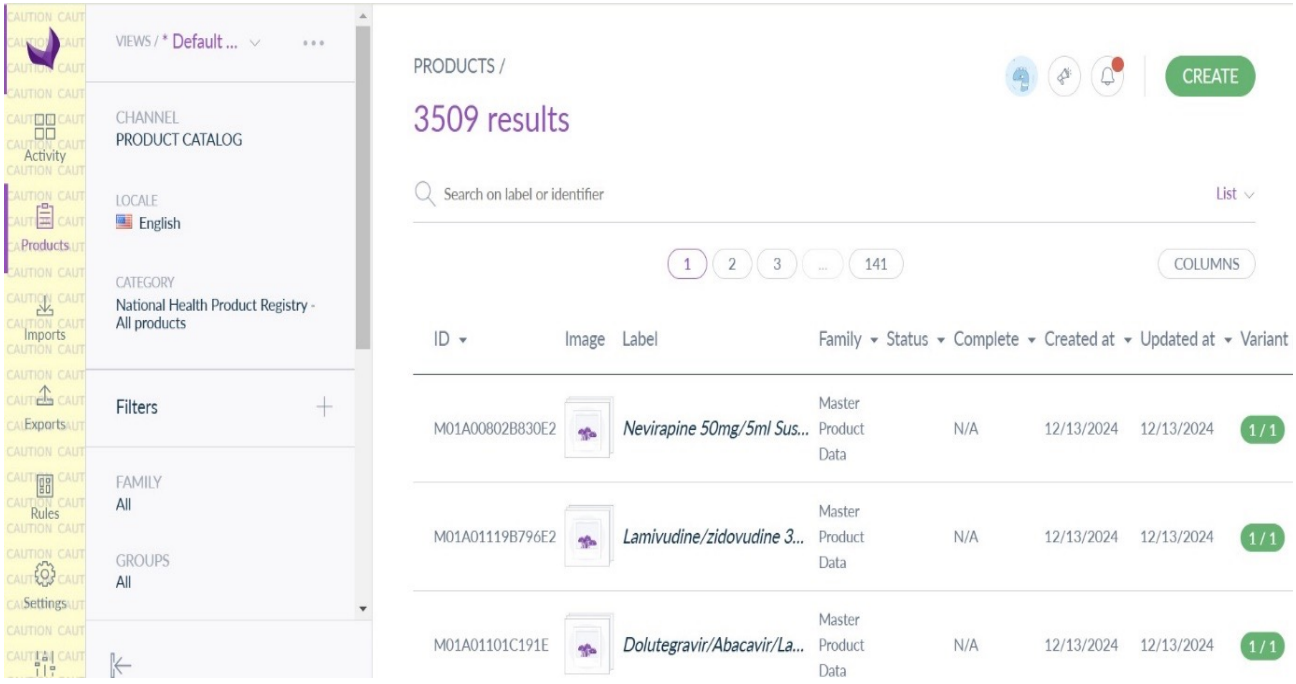
The GOU in collaboration with development partners, continues to support additional system-strengthening activities. These include supply chain digitization, integrated quantification, enhanced supply chain visibility (track and trace), capacity building, and healthcare waste management. The MoH in collaboration with the MoLG and partners engaged with the district and hospital leaders to increase allocation of funding for supply chain activities. As illustrated in Figure 25 above, an increase was observed from 298 million UGX in FY 2022/23 to 765 million UGX in FY 2023/24. Focus areas planned for include health supply chain infrastructure development (medicine stores), procurement/maintenance of ICT infrastructure/equipment, recruitment of Personnel, supervision and management meetings focused on health supply chain Issues.

3.9. Pharmaceutical Management Information Systems

3.9.1. National Product Registry

MoH DPNM, together with DHI, ICT and partners developed standardized nomenclature and product coding for 7,975 products as follows: 28% (2218/7975) laboratory supplies, 45% (3570/7975) medical sundries & supplies, and 27% (2187/7975) drugs and pharmaceuticals. The standardized nomenclature and product codes which are the unique product identifiers have been uploaded into the National Health Product Registry (NHPR). The NHPR has been developed using the open-source product catalogue management tool (PCMT), this tool includes provisions for Global Standards (GS1) codes, facilitating track and trace capabilities in line with global standards. Additionally, back-end application program interfaces (API) have been developed to enable interoperability between various systems and the national health product registry.

FIGURE 26: A SCREENSHOT OF THE NATIONAL HEALTH PRODUCT REGISTRY

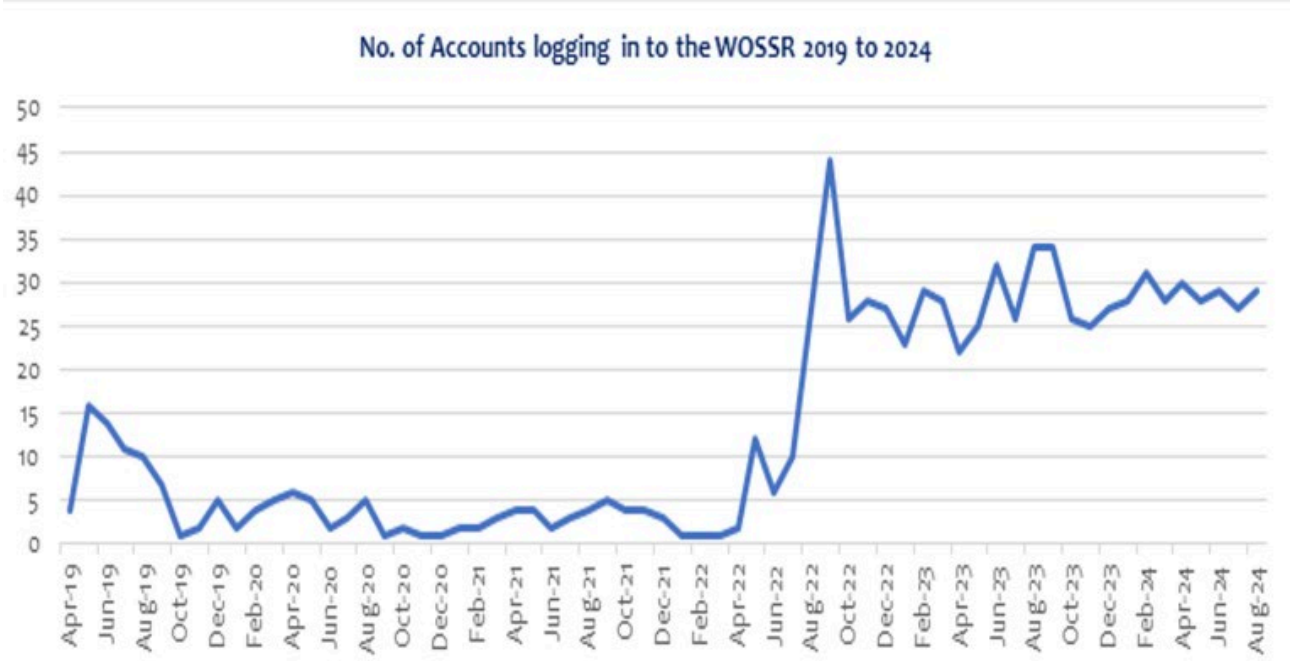


3.9.2. Dashboard Enhancement

3.9.2.1. Warehouse Online Stock Status Report Dashboard

The warehouse online stock status report dashboard (WOSSR) underwent a 3rd phase of enhancements which introduced critical functionalities such as user customizable reports, website walkthrough guides, in-website quick messaging chart, direct pipeline data entry and editing, Ontime in full (OTIF) report. Cumulatively, the accounts that logged in into WOSSR increased from 147 in December 2021 to 746 in August 2024.

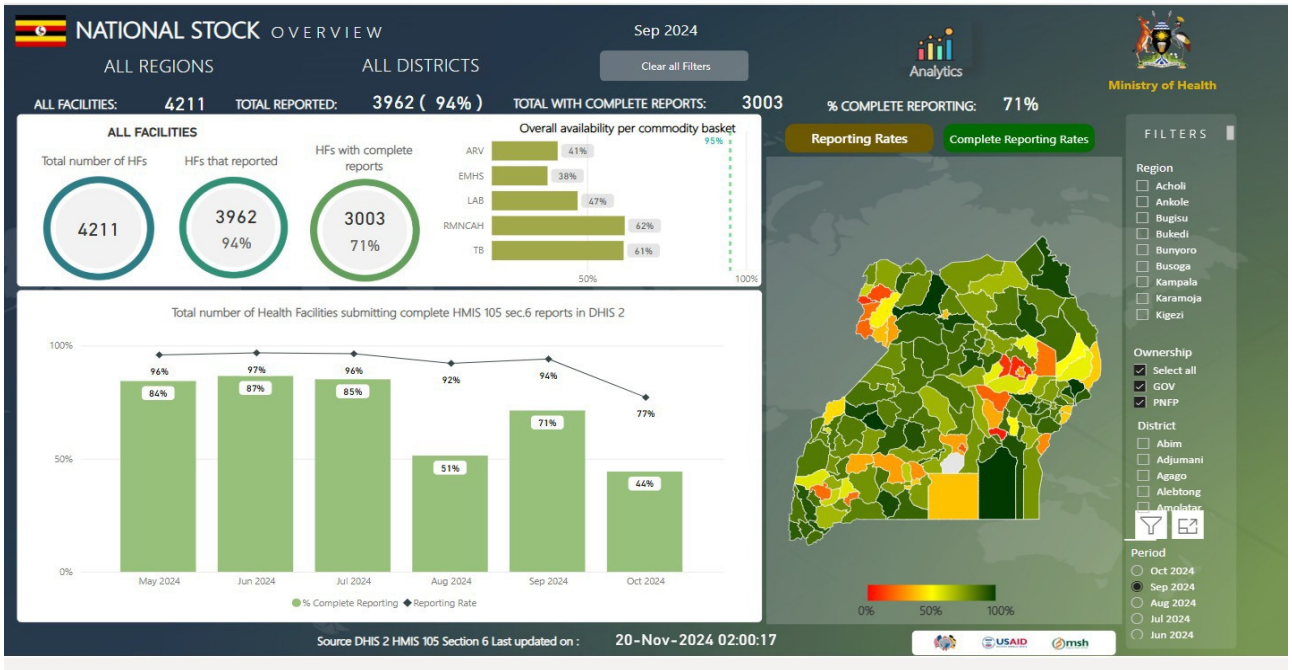
FIGURE 27: NUMBER OF ACCOUNTS LOGGING INTO WOSSR



3.9.2.2. Online Health Facility Stock Status Report Dashboard

The Online Health Facility Stock Status Report (OFSSR) is directly integrated with the DHIS2 system, automatically fetching updated monthly stock data on the 41 tracer items reported in the HMIS 105 section 6 by over 4,000 public and private-not-for-profit health facilities. The dashboard was rolled out to the users starting March 2023. As of June 31, 2024, the cumulative access to the dashboard was 6,948 hits, a shift from 14 hits in March 2023 when the dashboard was deployed.

FIGURE 28: SCREENSHOT OF OFSSR

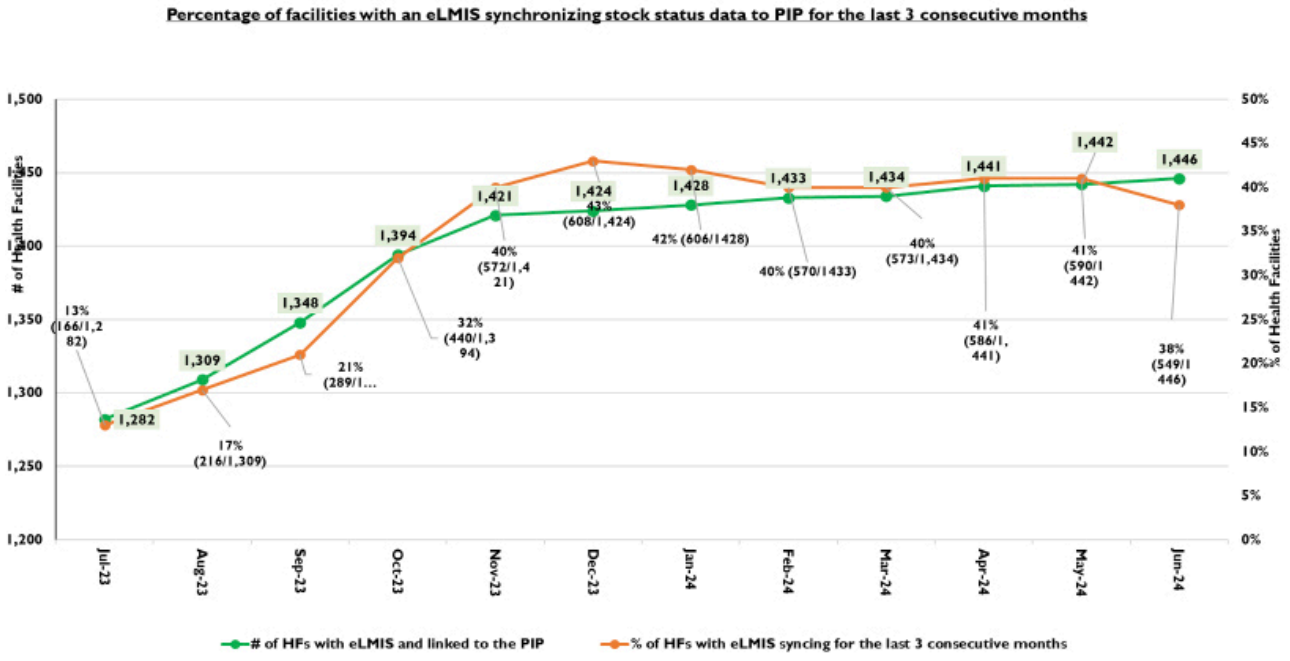


3.9.3. Electronic Medical Records Systems

In line with the National Health Information and Digital Health Strategic Plan 2020/21–2024/25, the Division of Health Information in collaboration with other departments, programs and the partners started rolling out Electronic Medical Records (EMR) - eAFYA and Clinic Master Electronic Medical Records (EMRs) in high-volume hospitals and HCIVs. The EMR implementation includes a module that tracks commodities at the stores and pharmacy section. As of June 30, 2024, roll-out had been done in 69 hospitals. In collaboration with partners including USAID/Strengthening Supply Chain Systems Activity, Global Fund, United Nations Population Fund (UNFPA), and United Nations High Commissioner for Refugees (UNHCR) procured, distributed, and installed 1,653 computers with electronic Logistics Management Information System (eLMIS) for tracking of health commodities at 1446 lower-level health facilities (Health Center IVs, HC IIIs, and HC IIs) to digitalize commodity management in stores and dispensaries.

A total of 260 eLMIS support supervision visits were conducted at health facilities. By the end of June 2024, the number of facilities using eLMIS had increased from 1,282 in July 2023 to 1,446. Additionally, the proportion of facilities consistently synchronizing stock status data in the National Health Data Warehouse (NHDW) for three consecutive months rose from 13% in July 2023 to 38% in June 2024. This improvement was driven by intensified follow-up efforts from both national and sub-national stakeholders. However, the performance remained slightly below the national target of 40%.

FIGURE 29: PERCENTAGE OF FACILITIES WITH AN ELMIS SYNCHRONIZING STOCK STATUS DATA INTO PIP CONSECUTIVELY



3.10. Multisectoral collaboration and engagement for Pharmaceutical Services

3.10.1. Inter-ministerial Task Force

The MoH DPNM served as the secretariat for the Inter-Ministerial Task Force (IMTF) on the health commodities supply chain. Its responsibilities included agenda setting, participant mobilization, minute-taking, and follow-up on meeting action points. The IMTF meetings are hosted and chaired by the Office of the Prime Minister (OPM) and co-chaired by the Ministry of Finance, Planning, and

Economic Development (MoFPED). Coordinated by the OPM, the IMTF comprises relevant ministries, departments, and agencies (MDAs), Health Development Partners, and Civil Society Organizations (CSOs).

During the reporting period, four (4) meetings were held. The meetings primarily focused on implementation of Uganda's 10-year roadmap for the health supply chain. Specifically, meetings discussed and made resolutions about the adoption of more MDAs relevant in the implementation of the 10-year HSC Roadmap such as the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), National Drug Authority, and National Planning Authority. Other topics discussed included MDAs performance reporting of the planned HSC activities and scaling up and utilization of integrated electronic medical records in national and regional referral hospitals. All the above resolutions have been implemented.

3.10.2. Technical Working Group

MoH-DPNM coordinated technical working group meetings, achieving full implementation of all 12 monthly Commodity Security Group (CSG) meetings and 83% (10 out of 12) of the Medicines Procurement and Management (MPM TWG) meetings during the reporting period. These engagements led to key resolutions, including the review and implementation of strategic documents such as the 2023 UCG and EMHSLU, among others.

The MoH DPNM also functionalized a total of 8 regional supply chain TWG meetings in Ankole, Bunyoro, Busoga, Bugisu, Karamoja, Kigezi, Teso, and Tooro. A total of 16 meetings were held with discussions focused on issues affecting the availability of commodities including the NMS's nonadherence to the delivery schedule and strategies to catch up to minimize treatment interruptions.

3.11. Research, Development, and Innovation

In 2022, through an innovation hub challenge, the MoH in collaboration with Partners identified an integrated solar-powered infrastructure platform that uses alternative sources of power with powerful networking technology to enable on-site health facility health commodity track and trace as well as end-to-end visibility in health facilities with power and internet challenges.

This innovation was rolled out and implemented in 10 sites (9 health facilities, 1-DHOs) in Yumbe District from January 2023. Between July 2023 and June 2024, the supply chain data synchronization rate from the nine health facilities was 82% above the national average of 42%. Using the S+ console dashboard, 100% average System uptime was observed for all 9 facilities between June 2023 to July 2024. This meant they had reliable solar power, network connectivity, and handheld terminal access throughout the implementation period. The district store S+ system had a 77% average system uptime from July 2023 to June 2024 due to technical glitches. The results are currently being presented to the various technical working groups to obtain approval to apply the innovation to the wider scope of health facilities.

APPENDIX

Indicator Matrix Summary Table

	Indicators	Target	Baseline (FY20/21)	FY22/23	FY23/24	Notes
Strategic Objective 1	**Improve Leadership, governance and stewardship for pharmaceutical service delivery**					
Indicator 1	Existence and year of last update of a published national medicines policy (last update <10-yr)	Yes			Yes	
Indicator 2	% of leadership positions in the DP&NM filled	100% (7/7)			57% (4/7)	
Indicator 3	Pharmaceutical legislation and regulations current, fit for purpose and implemented	No target				
Strategic Objective 2	**To strengthen the health commodity supply management system**					
Indicator 4	Order fill rates from warehouses (NMS, JMS) to facilities (deliveries)	90%			95% for JMS	
Indicator 5	Percentage availability for a basket of 41 medicines and supplies in the last three months at the central warehouses	80%	61%	82%	64%	
Indicator 6	Order Cycle Time metric (OCT) - Average warehouses (NMS, JMS) lead-time (days) from ordering to delivery to the facility	45 days				NMS-60 days, JMS -15 days

Indicator 7	Rate of usage of integrated electronic logistics management information system in PIP (ERP) at all levels	85%			96.4%	
Indicator 8	Percent performance in stock management for public and PNFP facilities	80%			71.8%	DPSSP
Strategic Objective 3	**To strengthen the human resource capacity for pharmaceutical sector at all levels (National, subnational, district, private sector) Pharmacist densities**					
Indicator 9	Pharmacy cadres (Pharmacist, Dispensers and Pharmaceutical Assistants) to population ratio (/100,000 population)	1. Pharmacist: 90/100,000			9.0/100,000	1900 - Pharmacist from the Pharmacy Board, 1932 pharmacy technicians and 329 pharmacy assistants from the Allied Health Professionals council.
Indicator 10	Number of regulations for the pharmaceutical human resources identified, drafted and implemented	No Target			Yes	The revised human resources structure is integrated and caters for key human resources critical for pharmaceutical services
Strategic Objective 4	**To strengthen the pharmaceutical sector regulations and compliance**					
Indicator 11	Proportion of health products and technologies sampled from post-market surveillance that fail quality tests	<1%	16% (88/534)	13% (101/758)	12% (131/1077)	NDA data
Strategic Objective 5	**Strengthen appropriate use of medical products**					
Indicator 12	% prescribing score for public and private (including PNFP) facilities	80%	79%		84.5%	

Indicator 13	% dispensing score for public and private (including PNFP) facilities	80%	79%		84.5%	
Indicator 14	Proportion of regional referral hospitals with functional Medicine and Therapeutic Committees (MTCs)	100% (18/18)		50% (9/18)	83% (15/18)	Baseline Assessment of the functionality of MTCs in Public Health Facilities https://www.health.go.ug/wp-content/uploads/2024/10/Baseline-assessment-of-the-functionality-of-MTCs-in-Public-Health-Facilities-in-Uganda-19-Oct-2022-1.pdf
Indicator 15	Proportion of MTCs at regional referral hospitals implementing antimicrobial stewardship and infection prevention and control activities in the health facilities	100%			100%	AMS facility mentorship report
Strategic Objective 6	**To streamline the regulation and application of Traditional and Complementary Medicines**					
Indicator 16	Proportion of the approved TCM products that have been mainstreamed into the conventional regimens	85%			6%	NPSSP MTR Report
Indicator 17	Number of TCM products notified by NDA	No target	326	414	422	NDA data
Strategic Objective 7	**Promote local pharmaceutical manufacturing**					
Indicator 18	% of locally manufactured products registered with NDA	85%			20%	NPSSP MTR Report

Indicator 19	Share of domestic market serviced by locally manufactured pharmaceutical and medical supplies, disaggregated by product category.	85%		47%	50%	NDA data call
Indicator 20	Number of local pharmaceutical manufacturing firms licensed by NDA	No Target		45	49	NDA Data call
Indicator 21	Number of local pharmaceutical manufacturing lines licensed by NDA	No Target		45	49	NDA Data call
Strategic Objective 8	**To strengthen sustainable financing and pricing mechanisms for the pharmaceutical sector**					
Indicator 22	Percent of average international price paid by NMS and JMS for procured basket of EMHS	<100%				Not implemented
Indicator 23	Total pharmaceutical expenditure as % of total health expenditure	25%			19.6%	Integrated Quantification Report for Essential Medicines and Health Supplies, FY 2023/24 – 2025/26 Link - http://library.health.go.ug/medical-products-technologies/pharmaceuticals-and-drugs/integrated-quantification-report-essential
Indicator 24	System for monitoring prices of EMHS in local market established					Not yet established
Indicator 25	Proportion of health commodity budget realized per annum	100%			100%	

Strategic Objective 9	**To strengthen the pharmaceutical information management systems**					
Indicator 26	Proportion of all health facilities linked to the ERP	85%			96.4%	
Indicator 27	Proportion of health facilities who are linked to and using the ERP (reporting using ERP).	40%		13%	38%	
Strategic Objective 10	**Strengthen multi-sectoral collaboration and engagement for pharmaceutical sector (multi-sectoral, national, regional, international)**					
Indicator 28	# of pharmaceutical sector stakeholder engagements resolutions implemented (all) - (domesticated for international)					
Strategic Objective 11	**To promote basic and applied research that enhances the effective implementation of the National Medicine Policy at all levels**					
Indicator 29	Amount of funds dedicated for research	No target				NA
Indicator 30	Number of research proposals approved and funded	No target				NA
Indicator 31	Number of research results and innovations applied locally	No target				NA
Indicator 32	Number of end of research reports	No target				NA

PICTORIAL DIGEST

PICTURE 1: PARTICIPANTS OF THE INTER-MINISTERIAL TASKFORCE RETREAT IN MUNYONYO IN DECEMBER 2023

PICTURE 2: LAUNCH OF THE NEW JMS INTEGRATED ORDERING SYSTEM

PICTURE 3: PARTICIPANTS AT THE LAUNCH OF THE UGANDA CLINICAL GUIDELINES 2023, THE ESSENTIAL MEDICINES AND HEALTH SUPPLIES LIST 2023, AND INTEGRATED QUANTIFICATION 2023/24 IN JUNE 2024

PICTURE 4: LAUNCH OF THE 2023 UCG & EMHSLU BY DR. DANIEL KYABAYINZE DIRECTOR PUBLIC HEALTH REPRESENTING THE MINISTER OF HEALTH

PICTURE 5: BI-MONTHLY MEETING BETWEEN MOH, NMS, AND PARTNERS TO REVIEW PERFORMANCE AT NMS KAJJANSI

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