USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

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FISCAL YEAR 2024
QUARTER 2
(JANUARY–MARCH 2024) REPORT

USAID
FROM THE AMERICAN PEOPLE

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PROJECT OVERVIEW

Program Name:		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
Reporting Period:		Fiscal Year 2024 Quarter 2 (January-March 2024)
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MTaPS Partners:	***Core Partners:***	Boston University, FHI360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, AUDA-NEPAD
	Global Expert Partners:	Brandeis University, Celsian Consulting, Deloitte USA, Duke-National University of Singapore, El Instituto de Evaluacion Technologica en Salud, IC Consultants, MedSource, IQVIA, University of Washington
	Capacity Resource Partners:	African Health Economics and Policy Association, Ecumenical Pharmaceutical Network, U3 SystemsWork, University of Ibadan, African Collaborating Centre for Pharmacovigilance and Surveillance, Kilimanjaro School of Pharmacy, Muhimbili University, Pharmaceutical Systems Africa
	Collaborators:	International Pharmaceutical Federation, Howard University, University of Notre Dame, WHO, World Bank

USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
Management Sciences for Health
4301 North Fairfax Drive, Suite 400
Arlington, VA 22203 USA
Telephone: 703.524.6575
Fax: 703.524.7898
Email: mtaps@msh.org

ACRONYMS AND ABBREVIATIONS

3HP	once-weekly dose of isoniazid and rifapentine for 12 weeks
3PL	third-party logistics provider
4PL	fourth-party logistics provider
ACIPC	Advisory Committee for IPC
ACTB	Alliance for Combating TB in Bangladesh
ADE	adverse drug event
ADR	adverse drug reaction
ADRAC	adverse drug reaction advisory committee
aDSM	active TB drug safety monitoring and management
AE	adverse event
AEFI	adverse events following immunization
AFROHUN	Africa One Health University Network
AMC	antimicrobial consumption
AMDF	Africa Medical Devices Forum
AMR	antimicrobial resistance
AMRH	African Medicines Regulatory Harmonization Initiative
AMR-TCC	AMR Technical Thematic Committee
AMS	antimicrobial stewardship
AMU	antimicrobial use
ANARME, IP	*Autoridade Nacional Reguladora de Medicamentos, Instituto Público* [National Medicines Regulatory Authority, Public Institute] (Mozambique)
ANEH	National Hospital Evaluation Agency (Mali)
ARC	antimicrobial resistance containment
ARV	antiretroviral
ARVs	antiretroviral medicines
ASEAN	Association of Southeast Asian Nations
ASM	active safety monitoring
ASO	AMS optimal access and use
ASRAMES	*Association Régionale d'Approvisionnement en Médicaments Essentiels*
AUDA-NEPAD	African Union Development Agency's New Partnership for Africa's Development
AWaRe	Access, Watch, and Reserve
BCZ/S	*Bureau central de la zone/de santé* (DRC)
BSC	balanced scorecard
CAPA	corrective and preventive action
CASIC	County Antimicrobial Stewardship Interagency Committee

CASS	communication and awareness intervention for school students
CCS	community care site (DRC); *Centro de Colaboração em Saúde* (Mozambique)
CDC	US Centers for Disease Control and Prevention, Communicable Disease Control (Bangladesh)
CDR	regional distribution center (DRC)
CGD	Center for Global Development
CHD	Center for Health Development (Philippines)
CHTF	child health task force
CIPCAC	County Infection Prevention and Control Advisory Committee
CMD	chief medical director
CME	continuous medical education
CMSD	Central Medical Store Depot (Bangladesh)
CNAMM	National Marketing Authorization Commission (Mali)
CODESA	health area development committee
COE	center of excellence
COR	contracting officer representative
COI	conflict of interest
COVID-19	coronavirus disease 2019
COVD	COVID-19 vaccine delivery
CPD	continuing professional development
CQI	continuous quality improvement
CSL	Commodity Security and Logistics
CSO	civil society organization
CYP	couple-years of protection
DAV	Drug Administration Department of Vietnam
DDA	Department of Drug Administration (Nepal)
DEPS	DRC Ebola post-mortem surveillance
DFDS	Department of Food and Drug Services (Nigeria)
DGDA	Directorate General of Drug Administration (Bangladesh)
DGFP	Directorate General of Family Planning (Bangladesh)
DGHS	Directorate General of Health Services (Bangladesh)
DGSHP	General Directorate of Health and Public Hygiene (Mali)
DGSV	General Directorate of Veterinary Services (Burkina Faso)
DH	district hospital
DHIS 2	district health information system version 2
DMHP	Directorate of Hospital and Proximity Medicine (Côte d'Ivoire)

DNAM	*Direcção Nacional de Assistência médica* [National Directorate of Medical Assistance] (Mozambique)
DNF	National Directorate of Pharmacy (Mozambique)
DOH	Department of Health (Philippines)
DOHS	Department of Health Services (Nepal)
DPCB	Disease Prevention and Control Bureau (Philippines)
DPM	Directorate of Pharmacy and Medicine (Mali and DRC)
DPML	Directorate of Pharmacy, Medicines, and Laboratories (Cameroon)
DPS	*Division Provinciale de la Santé* [Provincial Health Division] (DRC)
DQA	data quality assurance
DQSHH	Directorate for Quality, Security, and Hospital Hygiene (Senegal)
DRC	Democratic Republic of the Congo
DR-TB	drug-resistant tuberculosis
DTC	drug and therapeutics committee
DTG	dolutegravir
EAC	East African Community
eAMS	electronic asset management system
eLMIS	electronic logistics management information system
EML	essential medicines list
e-SPAR	Electronic State Parties Self-Assessment Annual Reporting Tool
EVD	Ebola virus disease
EVML	essential veterinary medicines list
EWG	expert working group
FA	framework agreement
FAIG	framework agreement implementation guidelines
FAO	Food and Agriculture Organization
FDA	US Food and Drug Administration, Philippines Food and Drug Administration, Rwanda Food and Drugs Authority
FG	focus group
FGD	focus group discussion
FP	family planning
FS	field support
FY	fiscal year
GAP	global action plan
GBT	Global Benchmarking Tool
GCMN-RAM	National MSC Group on AMR (Mali)
GFF	Global Financing Facility

GHeL	Global Health e-Learning Platform
GHPP	good hospital pharmacy practices
GHSA	Global Health Security Agenda
GHSC-PSM	Global Health Supply Chain Program–Procurement and Supply Management
GOB	Government of Bangladesh
GOJ	Government of Jordan
GPB	government procurement bylaw
GPD	government procurement department
GPP	good pharmacy practices
GRP	good regulatory practice
GSDP	good storage and distribution practices
GPVP	good pharmacovigilance practice
GWG	gender working group
HA	health area/account
HAD	health affairs directorate
HAI	health care-associated/acquired infection
HCAC	Health Care Accreditation Council
HCAD	Health Communication and Awareness Directorate
HCAI	health care-associated/acquired infection
HCF	health care facility
HCP	health care provider/practitioner/professional
HCW	health care worker
HCWM	health care waste management
HEOC	health emergency operation center
HEU	health economic unit
HF	health facility
HH	hand hygiene
HHSAF	Hand Hygiene Self-Assessment Framework
HQ	headquarters
HSR 2022	Seventh Global Symposium on Health Systems Research
HTA	health technology assessment
HWDP	health workforce development plan
HZ	health zone
ICC	infection prevention and control committee
iCCM	integrated community case management
ICU	intensive care unit

IDDS	infectious disease detection and surveillance
IEC	information, education, and communication
IFRC	International Federation of Red Cross
IGAD	Intergovernmental Authority on Development
IHR	International Health Regulations
IMS	information management system
IMS	Ebola incident management structure (Senegal)
InaHTAC	Indonesia HTA Committee
INH	isoniazid
INRB	*Institut National de Recherche Biomédicale*
IP	implementing partner
IPC	infection prevention and control
IPCAF	Infection Prevention and Control Assessment Framework
IPCAT2	Infection Prevention and Control Assessment Tool 2
IPNET	Infection Prevention Network
IRB	institutional review board
IRIMS	Integrated Regulatory Information Management System
ISO	International Organization for Standardization
IVD	in vitro diagnostic
JEE	Joint External Evaluation
JFDA	Jordan Food and Drug Administration
JLN	Joint Learning Network
KAP	knowledge, attitudes, and practices
KMITS	Knowledge Management and Information Technology Service (Philippines)
KNMF	Kenya National Medicines Formulary
LCP	Lung Center of the Philippines
LGU	local government unit
LHSS	Local Health System Sustainability project
LMICs	low- and middle-income countries
LMIS	logistics management information system
LTAP	local technical assistance provider/programs (Philippines)
M&E	monitoring and evaluation
MA	marketing authorization
MALAP	Maturity Level Action Plan
MALF	Ministry of Agriculture, Livestock, and Fisheries (Burkina Faso)
MCC	Multisectoral Coordinating/Coordination Committee

MCCH	maternal, child, and community health
MCDA	multicriteria decision analysis
MDA	ministries, departments, and agencies
MER	medicines evaluation and registration
MERL	monitoring, evaluation, research, and learning
MIC	middle-income country
MIHR	USAID MOMENTUM Integrated Health Resilience project
MIS	management information system
MKA	Momentum Knowledge Accelerator project
ML	maturity level
MMD	multimonth dispensing
MMS	medicines management supervisors
MNCH	maternal, newborn, and child health
MOES	Ministry of Education and Sports
MOH	Ministry of Health (sometimes MoH)
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly, and Children (Tanzania)
MOHFW	Ministry of Health and Family Welfare (Bangladesh)
MOHP	Ministry of Health and Population (Nepal)
MOPH	Ministry of Public Health
MPTF	Multi-Partner Trust Fund Office
MSC	multisectoral coordination
MSC-AMR	multisectoral coordination on AMR
MSH	Management Sciences for Health
MSR	medical and surgical requisites
MSSFPO	Momentum Safe Surgery in Family Planning and Obstetrics
MTaPS	Medicines, Technologies, and Pharmaceutical Services
MTC	medicines and therapeutics committee
NAMRAC	National Antimicrobial Resistance Advisory Committee
NAMRsC	national AMR subcommittee
NAP	national action plan
NAP-AMR	national action plan for AMR
NASIC	National Antimicrobial Stewardship Interagency Committee (Kenya)
NC-AMR	National Commission on AMR (DRC)
NCAT	National Committee for Antibiotic Treatment (Senegal)
NCD	noncommunicable disease

NCDC	Nigeria Center for Disease Control
NEML	national essential medicines list
NGO	nongovernmental organization
NMP	national medicines policy
NMRA	national medicines regulatory authority
NPC	National Pharmacy Council
NRA	national regulatory authority
NSP	national strategic plan
NTC	National Technical Committee (Bangladesh)
NTP	National Tuberculosis Control Program (Bangladesh)
OH	One Health
OHP	One Health Platform
OHS	Office of Health Systems
OHT	One Health Tool
OP	operational plan
OSH	occupational safety and health
PBF	performance-based financing
PCPD	Pharmacy and Clinical Pharmacy Directorate (Jordan)
PCR	polymerase chain reaction
PD	Pharmaceutical Division (Philippines)
PEA	political economy analysis
PERAC	pharmacovigilance expert review and advisory committee
PIES	provider integration and engagement system
PMDT	programmatic management of drug-resistant TB
PMS	post-market surveillance
POPCOM	Commission on Population and Development (Philippines)
PPB	Pharmacy and Poisons Board of Kenya
PPE	personal protective equipment
PPM	pooled procurement mechanism
PPS	point prevalence study/survey
PPSSP	*Programme de Promotion de Soins de Santé Primaires* (DRC)
PQM+	Promoting the Quality of Medicines Plus
PRH	population and reproductive health
PRIMS	Pharmaceutical Regulatory Information System
PS	procurement service
PSA	Pharmaceutical Systems Africa

PSCM	procurement and supply chain management
PSCMT	Procurement and Supply Chain Management Team (Philippines)
PSD	Procurement and Supply Directorate
PSS	pharmaceutical systems strengthening
PSU	pharmaceutical services unit
PSUR	periodic safety update report
Pusjak PDK	Policy Center of Health Financing and Decentralization (Indonesia)
PV	pharmacovigilance
PViMS	Pharmacovigilance Monitoring System
PY	program year
QMS	quality management system
RBC	Rwanda Biomedical Center
RDT	rapid diagnostic test
REC	regional economic community
RECO	community health worker (DRC)
REDISSE	Regional Disease Surveillance Systems Enhancement
RH	reproductive health
RHB	regional health bureau
RHMT	regional health management team
RMS	Royal Medical Services (Jordan)
RSS	regulatory systems strengthening
RUA	rational use of antimicrobials
RWE	real-world evidence
SADC	Southern African Development Community
SC	steering committee
SCM	supply chain management
SCMP	supply chain management portal
SCMS	Supply Chain Management Service (Philippines)
SDP	service delivery point
SDG	Sustainable Development Goal
SEARN	South-East Asia Regulatory Network
SHA	Systems for Health Accounts
SHD	School Health Directorate (Jordan)
SI	strategic information
SIAPS	Systems for Improved Access to Pharmaceuticals and Services Program
SMT	senior management team

SOP	standard operating procedure
SOW	scope of work
SPARS	supervision, performance assessment, and recognition strategy
SSI	surgical site infection
STG	standard treatment guideline
SWOT	strengths, weaknesses, opportunities, and threats
TA	technical assistance/advice
TB	tuberculosis
TLD	dolutegravir-based tenofovir + lamivudine + dolutegravir
TOE	table of organization and equipment
TOR	terms of reference
TOT	training/trainer of trainers
TPT	TB preventive treatment
TS	technical secretariat
TTC	technical thematic committee
TWC	technical working committee
TWG	technical working group
UAT	user acceptance testing
UHC	universal health coverage
UIMS	Upazila Inventory Management System (Bangladesh)
UNFPA	United Nations Population Fund
USAID	US Agency for International Development
USD	US dollar
VAMOHS	Voluntary Access Mechanism for Originator Health Supplies
VSS	vaccine safety surveillance
WAAW	World AMR Awareness Week
WASH	water, sanitation, and hygiene
WB	World Bank
WHO	World Health Organization
WIMS	Warehouse Inventory Management System
WOAH	World Organization for Animal Health

1. INTRODUCTION

A. PURPOSE

Funded by USAID and implemented by a team led by MSH, the purpose of the six and a half year MTaPS program (2018–2025) is to provide assistant with PSS for sustained improvements in health system performance and to advance USAID's goals of preventing child and maternal deaths, controlling the HIV/AIDS epidemic, combating infectious disease threats, and expanding essential health coverage.

B. MTAPS' GOAL AND OBJECTIVES

The goal of the MTaPS program is to help LMICs strengthen their pharmaceutical systems to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines, vaccines, and other health technologies and pharmaceutical services. In this context, MTaPS uses the term "access" to refer specifically to affordability, acceptability (or satisfaction), geographical accessibility, availability, and equity (the extent to which pharmaceutical systems deal fairly with population subgroups differentiated along various parameters). The program's utilization of "use" refers to prescribing, dispensing (or sale or supply to the user), and consumption (or end use).

MTaPS' objectives are to:

1. Strengthen pharmaceutical-sector governance
2. Increase institutional and human resource capacity for pharmaceutical management and services, including regulation of medical products
3. Advance availability and use of pharmaceutical information for decision making and the global learning agenda
4. Optimize pharmaceutical-sector financing, including resource allocation and use
5. Improve pharmaceutical services, including product availability and patient-centered care, to achieve desired health outcomes

C. MTAPS' APPROACH TO STRENGTHENING PHARMACEUTICAL SYSTEMS

The program's approach to strengthening pharmaceutical systems is based on USAID's vision for PSS, which posits six functions of health systems that must be strengthened to achieve sustained and equitable access to essential, high-quality services: human resources, health finance, health governance, health information, medical products/vaccines/technologies, and service delivery. MTaPS has adapted this framework to the pharmaceutical sector as per figure 1, which illustrates a comprehensive set of dynamic relationships among a health system's functions with an overarching focus on the role medical products are expected to play in improving health system performance.

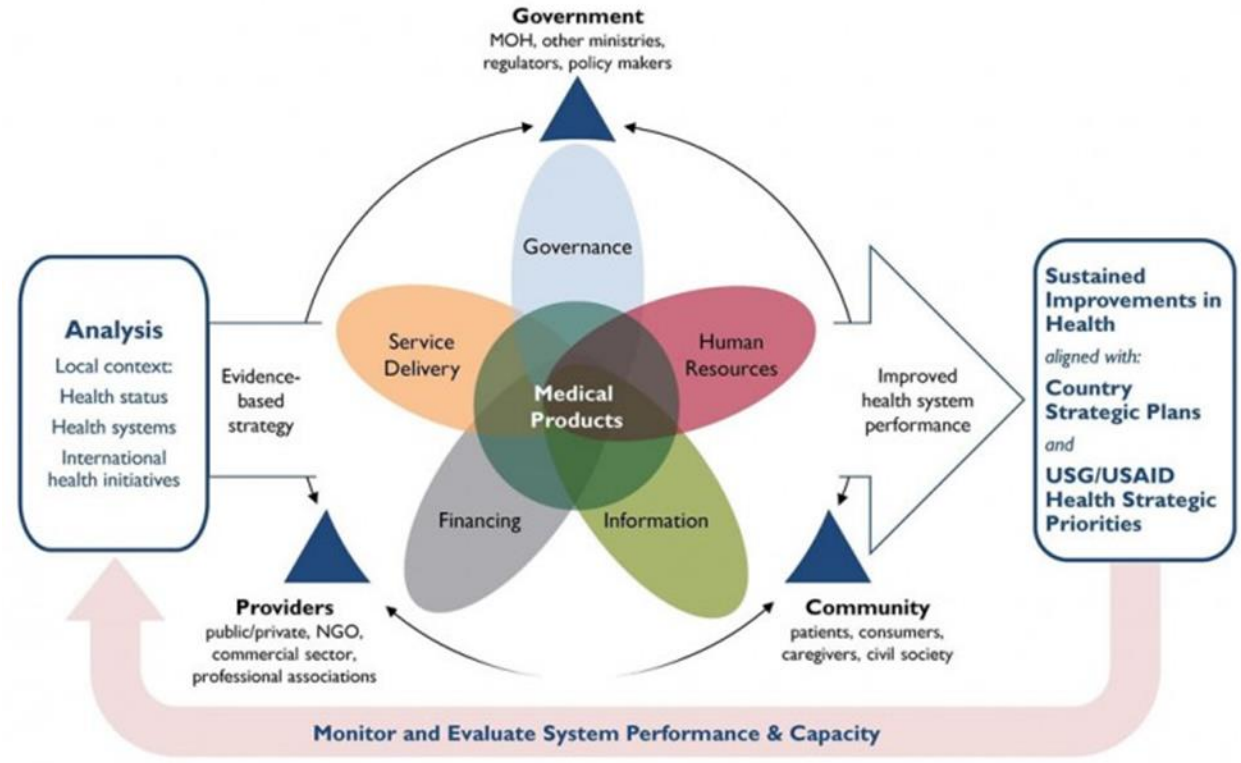


Figure 1. USAID pharmaceutical systems–strengthening approach

D. ABOUT THE REPORT

This report presents activity progress and achievements by portfolio for the second quarter of fiscal year 2024 (January–March 2024). It summarizes program performance and key challenges and is organized by program objectives, funding stream, country, and health element portfolios.

2. PROGRESS BY OBJECTIVES

A. OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

- ***Sub-Objective 1.1:*** Transparency and accountability of country pharmaceutical systems improved
- ***Sub-Objective 1.2:*** Evidence-based medicines policies, laws, regulations, guidelines, norms, and standards improved and enforced
- ***Sub-Objective 1.3:*** Stakeholder engagement and empowerment, including civil society and consumers, increased

OVERVIEW

Promoting transparency and accountability is a prerequisite for improving access to essential medicines and medical technologies, which is required for achieving UHC.[1] Poor governance in pharmaceutical systems can reduce access to pharmaceutical products, inflate medicine prices, and waste scarce health system resources.[2] Governance also plays a critical role in minimizing opportunities for corruption and mitigating other system inefficiencies. It shapes the ability of the health system to mature and respond to challenges. This section highlights select country progress to date and indicative activities undertaken during Q2, FY24.

CUMULATIVE PERFORMANCE TO DATE

SUB-OBJECTIVE 1.1: TRANSPARENCY AND ACCOUNTABILITY OF COUNTRY PHARMACEUTICAL SYSTEMS IMPROVED

For this quarter, we highlight the work MTaPS has conducted over the life of the project regarding governance aspects required to institutionalize MSC within the context of the GHSA.

Tanzania

Institutionalizing MSC requires coordinated action in several areas of systems governance over a concerted period. To this end, MTaPS supported the coordination of AMR activities under the AMR MCC, working under the OH approach. The MCC held meetings to oversee and give guidance on implementing the NAP-AMR 2017–2022 and the current NAP-AMR 2023–2028 across the human health, animal health, plant, livestock, and fisheries sectors. These plans provide overarching government planning and coordination for MSC. MTaPS supported the setup and operation of TWGs, which helped improve the implementation of IPC, AMS, and M&E in Tanzania. MTaPS supported the development and operationalization of the Multisectoral AMR Communication Strategy: Moving from Awareness to Action 2020–2025, which helped improve OH communications, practices, and implementation among the MOH; Ministry of Agriculture; Ministry of Livestock and Fisheries; President's Office Regional Administration and Local Government; and the five TWGs that feed into the MCC (AMR awareness,

[1] Wirtz VJ, Hogerzeil HV, et al. Essential medicines for universal health coverage. The Lancet. 2017. 389(10067):403–476.
[2] World Health Organization. 2013. Good Governance in the Pharmaceutical Sector. Geneva.

AMR surveillance, IPC, AMS, and M&E). Tanzania now has a stable defined governance structure to continue to pursue MSC priorities in the context of the GHSA.

SUB-OBJECTIVE 1.2: EVIDENCE-BASED MEDICINES POLICIES, LAWS, REGULATIONS, GUIDELINES, NORMS, AND STANDARDS IMPROVED AND ENFORCED

Evidence-based legal and standards documentation underpins the integrity of all activities in the pharmaceutical system, and national governments must be able to implement these standards to ensure the availability of quality medicines. In this quarter we highlight the Philippines and its focus on supply chain management, Bangladesh with its focus on strengthening the NRA for pharmaceuticals, and Tanzania with its regulatory focus on registration and importing of ARVs.

Philippines

MTaPS supported the DOH in developing three-year (2018–2022) and five-year (2024–2028) supply chain strategies, facilitated the inclusion of articles into UHC regulation to ensure policy support for supply chain reforms, developed a supply chain road map for UHC law implementation, and designed an inventory strategy for all levels.

Bangladesh

MTaPS assisted the DGDA in developing an inspection strategy to ensure GPP in PY1 and PY2 and an electronic inspection and licensing system for pharmacies in PY3. In PY4, MTaPS supported the CAPA plan development to address WHO GBT assessment gaps, establish an effective QMS, and employ the convergence of regional technical standards for medicines registration and application of good review practices. In PY5, MTaPS assisted with training and dissemination of the DGDA five-year strategic plan (2022–2026).

Tanzania

MTaPS facilitated a comprehensive process improvement mapping for the registration and importation of ARVs in the public sector. This initiative aimed to identify and address barriers and bottlenecks in the ARV supply chain by involving both the TMDA and medicines importers. The interventions created awareness of bottlenecks, improved regulatory guidelines for ARVs, streamlined import clearance procedures, and minimized wastage of essential HIV/AIDS and other disease management products.

SUB-OBJECTIVE 1.3: STAKEHOLDER ENGAGEMENT AND EMPOWERMENT, INCLUDING CIVIL SOCIETY AND CONSUMERS, INCREASED

Jordan

Private-sector pharmaceutical suppliers are critical to the availability of quality medicines at affordable prices. In Jordan, MTaPS has worked with a range of stakeholders, including the private sector, to complete the drafting of a pharmaceutical purchasing FA and SOPs, which were submitted to the National Committee for Procurement Policies for review and approval. In addition, the final draft of the procurement negotiation SOPs, with an annex specifically focused on negotiations within the FA settings, has been completed. Once fully approved, this FA will reduce purchasing costs and increase the efficiency of medicines purchasing in Jordan.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

In this section, select activities from a variety of countries are highlighted to demonstrate the range and scope of governance-related interventions across MTaPS in this quarter.

SUB-OBJECTIVE 1.1: TRANSPARENCY AND ACCOUNTABILITY OF COUNTRY PHARMACEUTICAL SYSTEMS IMPROVED

Tanzania

The draft M&E framework for NAP-AMR 2023–2028, developed with MTaPS' technical support, was presented to the MCC and discussed, and the MCC provided preliminary approval. The MCC recommended fast-tracking the framework's finalization, launch, and implementation to collect data for the first year of NAP-AMR 2023–2028 implementation. This will form the basis for the ongoing monitoring of national AMR interventions beyond the life of MTaPS.

Philippines

MTaPS supported the DOH in developing the governance structure and TOR for establishing an effective stewardship and oversight mechanism for PSCM. MTaPS endorsed the establishment of the National PSCM Stewardship and Oversight Council, along with the eLMIS Governance Committee and the National Demand Planning and Allocation Committee, to the DOH. Once officially established, these governance bodies will be crucial for coordinating and overseeing PSCM activities effectively.

SUB-OBJECTIVE 1.2: EVIDENCE-BASED MEDICINES POLICIES, LAWS, REGULATIONS, GUIDELINES, NORMS, AND STANDARDS IMPROVED AND ENFORCED

Bangladesh

The draft GRP guideline was updated to include feedback from a stakeholder consultation workshop held this quarter. This guideline will improve the governance and operational structures of the regulatory system and move the DGDA toward achieving ML3 as per the WHO GBT.

Senegal

MTaPS provided technical support for the AMR multisectoral technical working group March 5–7, 2024, to finalize the new AMR NAP 2024–2028. The objectives and highlights of this strategic document for AMR containment in Senegal were presented and validated during an OH multisectoral technical committee meeting March 20, 2024. The OH Steering Committee validated the AMR NAP 2024–2028 on March 29, 2024. This demonstrates active use of AMR governance in Senegal.

SUB-OBJECTIVE 1.3: STAKEHOLDER ENGAGEMENT AND EMPOWERMENT, INCLUDING CIVIL SOCIETY AND CONSUMERS, INCREASED

Burkina Faso

MTaPS supported the OH Platform Technical Secretariat and the AMR-TC to organize the first semi-annual meeting of the AMR-TC February 11, 2024. The attendees included representatives from ECTAD/FAO; CDC/Atlanta; DQSS; DIPUR; DGSV; DLBM; NMRA; the ministries of environment and agriculture; and the professional orders of midwives, nurses, and pharmacists. Aligned with the closure of MTaPS, the meeting was held to discuss the sustainability of these meetings and the scope of MTaPS' activities. During the meeting, the OH Platform Executive Secretariat shared the contributions of the

Global Fund through the Pandemic Fund—a mechanism of financing to be implemented by WHO, UNICEF, and the FAO. A sustainability plan was developed to provide an outline of activities, indicating timeline, the government entity in charge of implementation, and a potential NGO partner, to help ensure that the OH Platform gains made with MTaPS' support continue.

DRC

During this quarter, MTaPS supported L'Association des Gestionnaires de la Chaîne d'Approvisionnement et Logisticiens (AGCAL), to obtain its personnalité juridique (legal personality), granting it full legal existence to operate in DRC. MTaPS organized a working session March 12 and 26, 2024, with the AGCAL team that focused on the evaluation of AGCAL's semi-annual action plan; an overview of PY6 activities as approved in the work plan; and the development of the timetable for the implementation of activities. The assessment showed that some activities were not completed. These activities were not conducted as the MTaPS work plan remained under development and was not approved until February 2024. MTaPS and AGCAL agreed on priority activities, including providing AGCAL with a national office; filling all vacancies on the Executive Management and Board of Directors; and providing AGCAL with normative documents (strategic plan, operational plan, administrative and financial SOPs). The strengthening of AGCAL as a local professional association is a good example of how MTaPS works with strategic local entities to strengthen their ability to contribute to pharmaceutical systems change over the longer term.

Philippines

MTaPS and ReachHealth joined forces to pilot the PIES in Batangas and Laguna, integrating 12 primary care provider network sites via the MyCure system. Team OPS was engaged for MyCure, with documentation transitioned to ReachHealth since MTaPS Philippines concludes in April 2024. A close-out meeting endorsed the transition plan with Batangas City alone using MyCure; full cycle implementation awaits. ReachHealth continues working with Team OPS for the MyCure proof of concept. MTaPS and ReachHealth crafted a Local Health Board Resolution template for further eLMIS buy-in. This Philippines example demonstrates MTaPS' approach to leveraging local actors to further work conducted under MTaPS to continue pharmaceutical strengthening gains.

BEST PRACTICES/LESSONS LEARNED

Regular stakeholder consultation is crucial to create a space for feedback from medical product manufacturers and distributors to facilitate smooth implementation and clear understanding of requirements. Previously, the Bangladesh DGDA did not have a system to adequately consult with stakeholders on new guidance; however, there is now a clear and transparent system for stakeholder engagement that was created with MTaPS' support. Draft regulations and guidelines on regulatory functions are discussed with key stakeholders for feedback before consideration for approval. Once approved, guidelines are published widely online to inform the public. Regular seminars are held to update pharmaceutical manufacturers, distributors, importers, and pharmacy owners on new regulatory developments.

B. OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES INCREASED, INCLUDING REGULATION OF MEDICAL PRODUCTS

- ***Sub-Objective 2.1:*** Innovative and proven approaches for human resource capacity building institutionalized
- ***Sub-Objective 2.2:*** Capacity of government to manage pharmaceutical systems strengthened
- ***Sub-Objective 2.3:*** Capacity of private-sector organizations to support pharmaceutical operations improved
- ***Sub-Objective 2.4:*** Medicine regulatory capacity strengthened, including through regional regulatory harmonization

OVERVIEW

Individual and institutional capacity strengthening is a critical aspect of sustainability within MTaPS. Sustainable pharmaceutical systems require more than just training. MTaPS focuses on capacity strengthening to ensure that the range of program activities are fully institutionalized, and country owned, for example by integrating e-Learning materials into the learning system of ministries for ongoing use, supporting TWGs' functioning without ongoing support from MTaPS, and developing digital solutions that are seamlessly embedded into the workflows of pharmaceutical systems. MTaPS aims to enable mature pharmaceutical systems—including regulatory systems—in countries, leaving the responsibility for these systems in the hands of local counterparts.

CUMULATIVE PERFORMANCE TO DATE

Strengthening pharmaceutical systems requires incremental improvements over time. For example, to strengthen pharmaceutical regulatory systems, MTaPS performed assessments and reviewed previous assessments to determine the ML of the regulatory system in countries and cocreated and implemented development plans to address the gaps identified. MTaPS worked with NRAs in Bangladesh, Mozambique, Nepal, and the Philippines to implement a QMS for efficient delivery of regulatory services and streamlined registration systems by applying GRP and electronic IMSs.

MTaPS worked with several regional organizations, including ASEAN and SEARN, to support convergence and harmonization of medical product regulation in PV, regulatory inspections, and regulatory information management systems. MTaPS offered technical assistance to validate an M&E tool to measure the performance of 11 designated regional centers of regulatory excellence and provide baseline information on the status of the institutions and organizations providing capacity development in medicine regulation in Asia. Support was provided to foster convergence of medicine regulation in ASEAN, SEARN, and IGAD.

These incremental and targeted approaches have demonstrated progress toward MTaPS' goal to achieve stable and effective regulatory systems to ensure the safety and quality of medical products on the market.

The next section presents country examples of how systematic application of capacity strengthening approaches has been applied since the beginning of the program to improve pharmaceutical system components.

SUB-OBJECTIVE 2.1: INNOVATIVE AND PROVEN APPROACHES FOR HUMAN RESOURCE CAPACITY BUILDING INSTITUTIONALIZED

Côte d'Ivoire

MTaPS supported the development of e-Learning modules for training on IPC and AMS and integrated them into the government learning management system. In addition, MTaPS assisted the AMR TWG in establishing a regional pool of AMR trainers, including 18 master trainers and 36 regional AMR trainers. With high scores on the IPCAF and DTC evaluations, MTaPS was able to support the AMR TWG to establish three COEs for IPC and AMS activities.

Senegal

MTaPS supported the DQSHH to review and update Senegal's national IPC supervision checklist. The revised checklist now includes the WHO's multimodal strategy as well as the WASH component in health care settings. The DQSHH used the updated checklist to measure the IPC capacity level of HFs. This supervision checklist includes guidance to help supervisors standardize its use in the 14 health regions in Senegal. Additionally, MTaPS supported the DQSHH to conduct the first assessment of the national IPC program using the WHO IPCAT2 and to conduct the baseline assessment of the IPC program in 13 hospitals and one health center using the WHO IPCAF tool.

SUB-OBJECTIVE 2.2: CAPACITY OF GOVERNMENT TO MANAGE PHARMACEUTICAL SYSTEMS STRENGTHENED

Cameroon

MTaPS engaged a consultant in FY23 to work with the MOH and regional and headquarters teams to employ a coaching and mentoring approach to transfer competence to local counterparts. MTaPS supported the DPML to train individuals on evaluating marketing authorization applications for pharmaceutical products, thus strengthening the capacity of registration personnel to perform quality assessments and make informed regulatory decisions on marketing authorization of medical products. MTaPS also supported the DPML to organize four workshops to develop registration guidelines and variations guidelines for marketing authorization of pharmaceutical products. These activities contributed to enhancing the regulatory framework for registration of medicines, including antimalarials, to ensure market entry of safe and quality-assured products.

SUB-OBJECTIVE 2.3: CAPACITY OF PRIVATE-SECTOR ORGANIZATIONS TO SUPPORT PHARMACEUTICAL OPERATIONS IMPROVED

DRC

Despite the large percentage of medicines under the management of private organizations, there is a lack of well-established local and professional supply chain organizations to support the public supply chain system for health commodities in DRC. MTaPS has been systematically supporting *L'Association des Gestionnaires de la Chaîne d'Approvisionnement et Logisticiens* (AGCAL) to strengthen its capacity and increase its engagement and role in the management of the national pharmaceutical supply chain system. MTaPS has facilitated the establishment of AGCAL at the national and provincial (Nord-Kivu and Ituri)

levels, supported the appointment of key AGCAL officials, and assisted in the development of leadership competencies for these officials.

SUB-OBJECTIVE 2.4: MEDICINES REGULATORY CAPACITY STRENGTHENED, INCLUDING THROUGH REGIONAL REGULATORY HARMONIZATION

Nepal

MTaPS made significant progress in several areas to improve the DDA's regulatory capability, including assisting in the organizational restructuring of the DDA; strengthening regulatory systems to increase MLs, which included implementation of OpenRIMS for medicine registration and PViMS; capacity strengthening and competency development of regulatory workforce personnel; and establishing QMS standards and practices. MTaPS provided TA to the DDA in the implementation of the MALAP, which has enabled the authority to adequately address WHO GBT indicators linked to ML, with 64% of ML1, ML2, and ML3 indicators either implemented or awaiting approval. MTaPS also supported the development of a new MIS known as the Drug Administration Management System 2 (DAMS-2), which would improve efficiency and the transparency of regulatory procedures/processes and increase data visibility. With MTaPS' support, the DDA has addressed all 55 recommendations for ML 1 and 2 indicators in the CAPA plan. The DDA's regulatory system has significantly improved to ensure control of the pharmaceutical market and ensure access to safe, effective, and quality-assured medical products.

Asia Bureau

MTaPS used a mapping exercise to identify 18 key entities that strengthen pharmaceutical regulatory systems (initiatives, networks, and stakeholders), including ASEAN and the WHO Collaborative Procedure for Accelerated Registration, for potential opportunities for collaboration. Competency mapping for NRAs in Nepal, Bangladesh, and the Philippines was conducted, aligning with the WHO global competency framework. Capacity strengthening plans were developed for these NRAs with the aim of achieving ML3. MTaPS also facilitated technical capacity strengthening trainings on several topics, including good manufacturing practice, vaccine dossier evaluation, and good review practices for medical product registration. MTaPS' support has significantly contributed to increasing the Asian workforce for medicines regulation.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

Selected examples of country-based capacity strengthening achievements are highlighted below.

SUB-OBJECTIVE 2.1: INNOVATIVE AND PROVEN APPROACHES FOR HUMAN RESOURCE CAPACITY BUILDING INSTITUTIONALIZED

Côte d'Ivoire

MTaPS supported the MTC4 in collaboration with the Directorate of the Pharmaceutical Activity (DAP) to organize a one-day meeting February 20, 2024, to review and validate the online IPC modules. The one-day meeting was attended by eight people (three female). The DAP "ecaps" platform was presented by the DAP's IT team as the platform to house the e-Learning modules. Participants reviewed the modules and the evaluation questions and integrated their observations into modules for revision. Following the IPC module review and validation meeting, MTaPS supported the MTC4 and MTC5 in collaboration with the DAP to organize the training workshop for 21 e-Learning course tutors (five female) for online training of health care providers on AMS and IPC. The trainers are from the IPC

and AMS regional trainer pool and will be instrumental in driving further use and application of the modules.

Tanzania

In collaboration with the MOH, MTaPS Tanzania conducted onsite IPC mentorship at eight MTaPS-supported facilities February 4–16, 2024. The aim was to follow up on implementation of various IPC interventions at the HFs and mentor health care workers on areas that needed improvement, including hand hygiene, equipment sterilization, appropriate infrastructure, checking availability of materials and equipment for IPC, and standards for reduction of overcrowding in wards. An IPC data quality assessment was completed. The facilities were mentored on properly filling SSI surveillance forms to help identify SSI cases and enhance their reporting into DHIS2. During this visit, an assessment using the IPCAF was conducted, and results indicated improvements in IPCAF scores for all eight supported hospitals compared to previous assessments.

SUB-OBJECTIVE 2.2: CAPACITY OF GOVERNMENT TO MANAGE PHARMACEUTICAL SYSTEMS STRENGTHENED

Philippines

MTaPS supported the DOH in developing an addendum to enhance the existing Warehouse Operations Manual (WOM) by incorporating recent system design considerations. MTaPS shared the WOM addendum document with the DOH after finalizing it through consultations with supply officers and health program managers. The addendum complements the existing WOM by including parameters related to the recent inventory control system (ICS) design. These ICS parameters will provide guidance for warehouse operations, inventory management, and allocation decisions across all levels of the supply chain. In addition to the ICS parameters, MTaPS incorporated guidelines and considerations for sites with insufficient storage capacity into the WOM addendum. This comprehensive document aims to improve the efficiency and effectiveness of warehouse operations, ensuring proper inventory management and allocation to meet the needs of health programs.

MTaPS facilitated a consultative workshop and capacity development initiative focused on the updated WOM for DOH central offices and CHDs February 6–8, 2024, with 52 participants (16 male, 36 female). During the workshop, the WOM addendum provisions, including roles and responsibilities of DOH central and regional bureaus, were discussed and clarified to ensure a comprehensive understanding among participants. Key outcomes of the activity included agreement on processes and timeline for the stock assessment, which were incorporated into the WOM addendum document for endorsement by the DOH. Following the workshop, MTaPS handed over the updated WOM addendum document to the DOH for implementation and dissemination to CHDs, LGUs, and SDPs.

SUB-OBJECTIVE 2.3: CAPACITY OF PRIVATE-SECTOR ORGANIZATIONS TO SUPPORT PHARMACEUTICAL OPERATIONS IMPROVED

Philippines

MTaPS facilitated an information exchange session on February 2, 2024, for potential LTAPs supporting eLMIS implementation, with three representatives from Mybusybee Inc. (a private-sector organization that offers digital solutions). Another orientation on March 2, 2024, focused on LTAPs involving other PSCM technical areas, including warehouse operations, to bolster adherence to supply chain standards

by these private-sector organizations as they seek to assist the Government of the Philippines. Attended by 18 participants from the DOH and the private sector, the session aimed to present PSCM learning materials and develop action plans so that private-sector organizations involved in the LTAPs program can better understand how to engage with the government for future PSCM technical support.

SUB-OBJECTIVE 2.4: MEDICINES REGULATORY CAPACITY STRENGTHENED, INCLUDING THROUGH REGIONAL REGULATORY HARMONIZATION

Tanzania

MTaPS conducted training for 25 (9 female) assessors on the review, preparation, and publication of Summary of Product Characteristics (SmPC) and the Public Assessment Report (PAR) using training materials and tools developed by MTaPS. The SmPC is a reference document for healthcare professionals, while the PAR summarizes the evaluation and assessment for MA approval or renewal of a medicinal product. MTaPS and the TMDA collaborated to develop standard operating procedures (SOPs) for reviewing the SmPC and PAR. MTaPS also developed an assessment template, checklist, and training modules on SmPCs and PARs. Over March 4-8, 2024, 25 assessors were trained on reviewing, preparing, and publishing SmPCs and PARs. This initiative aims to increase transparency in the medicine registration process, increase awareness of the Authority's procedures, and provide assurance to healthcare professionals, patients, and the public. The training materials and tools will be used by TMDA to train future medicine assessors, contributing to sustainable building of the Authority and the country's regulatory workforce.

Asia Bureau

MTaPS and the USAID PQM+ program conducted a Regional Regulatory System Strengthening, Harmonization, and Reliance Workshop for ASEAN member states to advocate for the adoption of minimum common standards for regulatory information management systems. The workshop was attended by the ASEAN Secretariat and 17 participants (15 female, 2 male) from eight ASEAN member states; Myanmar and Singapore did not attend. A regional action plan was developed as an output of the workshop for future consideration and implementation to adopt the minimum common standards for regulatory information management systems.

Collaboration with AMRH on Operationalization of AMA

MTaPS provided technical support to develop key guidance documents in collaboration with the AMRH for consideration in and contribution to the operationalization of the AMA. A continental reliance framework and draft strategy for digitalization of regulatory information management systems were developed. The documents are under review by the various technical committees and key stakeholders before presentation to the AMRH Steering Committee for approval and implementation. Using a common approach to conducting regulatory services and digitalization of regulatory information management systems will contribute to promoting convergence and harmonization of medical products regulation.

BEST PRACTICES/LESSONS LEARNED

- Effective discussions with users of electronic regulatory IMSs to agree on customized solutions is important to achieve the desired goal. In Rwanda, MTaPS facilitated close engagement with the

Rwanda FDA and the consultant engaged to deploy IRIMS to identify areas for improvement and achieve satisfactory results for operation of the system.

C. OBJECTIVE 3: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION FOR DECISION MAKING INCREASED AND GLOBAL LEARNING AGENDA ADVANCED

- ***Sub-Objective 3.1:*** Pharmaceutical management information systems that are interoperable and link patients and products effectively implemented
- ***Sub-Objective 3.2:*** Information on pharmaceutical systems available and used
- ***Sub-Objective 3.3:*** Pharmaceutical systems–strengthening research and global learning agenda advanced

OVERVIEW

MTaPS adopts a comprehensive strategic approach aimed at assisting governing bodies in leveraging evidence-based recommendations and proven methodologies to fortify the pharmaceutical system. By offering TA to ministries, MTaPS endeavors to cultivate institutionalized and sustainable capacity, recognizing its pivotal role in realizing UHC and sustainable development objectives and fostering self-reliance.

CUMULATIVE PERFORMANCE TO DATE

SUB-OBJECTIVE 3.1: INTEROPERABILITY OF PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEMS THAT LINK PATIENTS AND PRODUCTS

Bangladesh

During PY2, MTaPS effectively broadened the coverage of the **eAMS** to encompass all 61 DHs nationwide. Through collaboration with the NTP, a phased transition plan was devised to integrate storage systems for TB medicines. Consequently, 478 of 484 peripheral stores managed by IPs and located outside Upazila Health Complexes were incorporated into Upazila Health Complexes according to the plan. MTaPS continued its support to the NTP by assisting in the recording and reporting of high-quality TB data. All 868 TB sites submit information electronically to the NTP using e-TB Manager. In PY3, enhancements were made to **e-TB Manager** to facilitate electronic reporting of **aDSM** and ensure interoperability with the Janao app, enabling the capture of TB data from the private sector. By PY5, the system integrated a dashboard featuring selected indicators to streamline reporting analysis and foster prompt decision making. In collaboration with the NTP, MTaPS introduced the **eLMIS** for TB commodities across all 64 districts and 485 sub-districts (upazilas) nationwide.

Nepal

The DDA has seen an expansion in its role and duties across various areas, including medicines registration regulation, oversight of clinical trials, PV, registration of health technology products, and inspection of pharmacies and wholesalers. To formalize and digitize these functions, MTaPS has provided technical support in developing a new MIS known as the Drug Administration Management System 2 (**DAMS-2**). This collaborative endeavor among MTaPS, the DDA, and a local vendor involves migrating data and customizing **DAMS-2**, which includes integrating online payment features. The goal of this initiative is to modernize and streamline various processes within the DDA to enhance efficiency and effectiveness in managing its expanding scope of responsibilities.

Philippines

MTaPS has assisted the DOH in introducing and implementing a comprehensive **eLMIS** to improve visibility and efficiency in the supply chain, including for COVID-19 vaccines. By the end of February 2024, 224 warehouses, spanning the central (7), regional (28), LGU (64), and SDP (125) levels, were equipped with operational eLMIS. Continuously collaborating with various agencies such as the Philippine Business for Social Progress, the Global Fund's principal recipient, and WHO, MTaPS has mobilized approximately **USD 1.9 million** from non-USAID sources to support the **eLMIS** implementation.

Rwanda

To increase efficiency of the Rwanda FDA's regulatory functions, MTaPS provided technical support in implementation of a regulatory management information system—**IRIMS**—which was customized to the Authority's requirements and implemented with training of internal and external users. MTaPS worked with the Rwanda FDA to facilitate final hosting of IRIMS in the country's National Data Center. IRIMS has since gone live, enhancing efficiency and accountability in regulatory service provision and access to information for decision making at the Authority.

SUB-OBJECTIVE 3.2: INFORMATION ON PHARMACEUTICAL SYSTEMS AVAILABLE AND USED

Bangladesh

MTaPS supported the evaluation of 162 AE reports and at least 6 regulatory decisions for selected medicines, including all injectable antibiotics. These were then enhanced for electronic reporting of **aDSM**. In PY5, the system was enhanced with a dashboard to provide graphic and quantitative summaries of selected indicators for reporting and decision making.

Mozambique

Using **PViMS**, 149 AEs were reported by 105 patients. The most frequently recorded AEs included headache, insomnia, nausea, and skin rash. The study, conducted by ANARME, IP, achieved its objectives, which involved characterizing the AE profile among patients using TLD and estimating the incidence of AEs, including adverse pregnancy outcomes. MTaPS played a crucial role in supporting ANARME, IP by assisting in data cleaning to enhance the quality of the information gathered during patient follow-up visits. Unique patient records were then entered into PViMS. Additionally, MTaPS provided support for capacity strengthening, particularly on causality assessment, and offered practical training on the use of PViMS. Nine individuals (five female, four male) were trained. In PY4, PViMS underwent an update with the inclusion of TPT data collection forms, further enhancing its capabilities and relevance.

Philippines

Since the initiation of the **PViMS** rollout in PY3, MTaPS has achieved full coverage, reaching all 199 targeted TB facilities. To date, 597 AEs have been reported through PViMS, and causality assessments have been conducted to inform decision making processes. Furthermore, MTaPS has supported the DOH in analyzing stock information for critical tracer commodities related to TB, FP, and HIV since PY3. This analysis aids in making well-informed decisions to ensure the uninterrupted availability of essential program commodities. MTaPS has also enhanced the functionality of PViMS to monitor patient safety, ensuring seamless interoperability with **VigiFlow**.

Rwanda

MTaPS strengthened PV in Rwanda by developing a costed multiyear national plan and training 19 participants from the National Pharmacovigilance Advisory Committee and the Rwanda FDA. The electronic **PViMS** was adapted to facilitate reporting of AEs, including AEFI for Ebola and COVID-19 vaccines. From June 2021 to September 2023, 1,708 AEFI (776 serious) were reported, ensuring quick analysis by the Rwanda FDA and timely regulatory feedback. MTaPS also supported PViMS' interoperability with WHO's **VigiFlow** using a specialized E2B format.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

SUB-OBJECTIVE 3.1: INTEROPERABILITY OF PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEMS THAT LINK PATIENTS AND PRODUCTS

Bangladesh

MTaPS provided support to the DGHS and CMSD to implement a comprehensive eLMIS in four districts (Gopalganj, Feni, Moulvibazar, and Nilphamari). This assistance aimed to identify inconsistencies in commodity receiving processes, recordkeeping, and distribution. The process involved tailoring the eLMIS to meet the specific needs of HFs, conducting UAT, and enabling evidence-based decision making for procurement planning and supply replenishment.

Additionally, MTaPS assisted the DGFP in implementing its eLMIS in Maternal and Child Welfare Centers across two pilot districts. This support included assessing logistics management, customizing the system, and conducting UAT with staff to enhance inventory management and provide real-time logistics data for informed decision making.

Furthermore, MTaPS aided the DGHS in rolling out the eAMS in a tertiary-level hospital and TB laboratories. This support involved training staff, developing action plans, and implementing the system to enhance equipment tracking and health care provision. MTaPS also supported the implementation of the eAMS in Regional TB Reference Laboratories (RTRLs) and the National TB Reference Laboratory, resulting in the entry of assets and resolution of maintenance issues. Plans for further rollout in other tertiary-level hospitals are in progress. To date, 253 assets from 3 RTRLs have been entered into the eAMS, with entries for the fourth RTRL scheduled for next quarter. Since the inception of the eAMS, DHs have raised 342 maintenance tickets, with 128 resolved.

Nepal

During this quarter, significant progress has been made with the **DAMS-2** (**OpenRIMS**) project. The DDA, supported by MTaPS, has devised a phased approach for the pharmacy and wholesale module implementation. The initial phase prioritizes public notification and data migration from existing systems to DAMS-2. Subsequent phases will focus on implementing renewal, registration, and modification processes for both pharmacy and wholesale modules, along with product and manufacturer registration modules. To ensure sustained development and support for the system, USAID has assigned FHI 360 (EPIC PSM) the responsibility of overseeing the handover process and continuing the software development life cycle for at least nine months. This ensures the project's stability and long-term success. Server installation at the National Information Technology Center and networking tasks at the DDA have been successfully completed.

Philippines

MTaPS has been actively assisting the DOH in the rollout of the **eLMIS** in selected LGUs and SDPs, with 10 new sites recently added. A TOT session for provincial health personnel was conducted February 27–March 1, 2024, for 68 participants (20 male, 48 female) from 17 regions. The goal was to establish master trainers for ongoing eLMIS training sessions in rural health units (RHUs) nationwide. A rollout plan for phase 4 aims to deploy the eLMIS to all RHUs by December 2024, with the SCMS, CHD, and Provincial Department of Health identifying RHUs ready for implementation. The eLMIS is operational across 224 sites, facilitating stock assessment and PSCM decisions, with a high-level eLMIS dashboard deployed for the DOH.

Rwanda

In Q2, MTaPS maintained its support to Rwanda by assisting in the operationalization of **IRIMS**. This involved providing training to the Rwanda FDA IT team on IRIMS' architecture, database management, system hosting, and end-user support. The aim was to enhance their capacity to ensure the sustainability and maintenance of the system. Additionally, MTaPS entered into a subcontract with the developer, SoftClans, to facilitate system enhancements aligned with the Rwanda FDA's requirements. This included continuing the integration of IRIMS with other systems such as the National Product Catalogue and the Rwanda FDA's laboratory information management system.

Cameroon

MTaPS assisted the MOPH in implementing **OpenRIMS** for the electronic submission and evaluation of pharmaceutical product registration applications. In collaboration with the DPML, MTaPS facilitated the recruitment of a national consultant tasked with supporting the digitization of health care product registration. Following selection, the consultant underwent orientation provided by MTaPS' headquarters technical subject matter experts regarding the configuration of the OpenRIMS software platform. The consultant is actively engaged in fulfilling his deliverables.

SUB-OBJECTIVE 3.2: INFORMATION ON PHARMACEUTICAL SYSTEMS AVAILABLE AND USED

Bangladesh

MTaPS supported the NTP in maintaining the functionality of the TB **eLMIS** and **e-TB Manager**. All 485 Upazila Health Complexes submitted their indents for January–March 2024 on time, with approval from all 64 district health authorities using the eLMIS. System upgrades were implemented to meet NTP requirements, including the incorporation of TPT case data and new regimens for DR-TB cases. Capacity-strengthening documents were finalized and shared with the NTP and USAID, enabling streamlined training initiatives.

MTaPS collaborated with GOB stakeholders to develop transition plans for various MTaPS-developed IT systems. These plans were shared with USAID for review, with responses provided for three plans. Once the quality review process is completed, the plans will be handed over to the government with ongoing activities, including stakeholder training, for sustainable system transition.

Rwanda

During PY6, Q2, MTaPS focused on finalizing activities from PY5 by updating **PViMS**. MTaPS tailored the AE reporting forms to align with requirements from the Rwanda FDA and WHO, enhancing user-friendliness and data entry efficiency. Furthermore, **PViMS** was transitioned to MySQL as part of its

approval as a Digital Public Good, transforming it into a fully free and open-source software solution. Its name was changed to **OpenRIMS-PV**.

In addition, MTaPS developed an online dashboard for **OpenRIMS-PV** that was shared with the Rwanda FDA. The online dashboard is awaiting access to **IRIMS** data for inclusion in the dashboard metrics. System documentation, including user and technical manuals, was also updated. Efforts to enhance the system will continue by integrating datasets from OpenRIMS-PV with IRIMS based on common key data elements for dashboard reporting. MTaPS trained one ICT and three PV personnel (one female, three male) from the Rwanda FDA on the updated OpenRIMS-PV database to ensure smooth operation and sustainable functionality of the software.

SUB-OBJECTIVE 3.3: PHARMACEUTICAL SYSTEMS STRENGTHENING RESEARCH AND GLOBAL LEARNING AGENDA ADVANCED

Please refer to Cross Bureau for a full description of progress on this activity.

BEST PRACTICES/LESSONS LEARNED

- Closely monitoring software consultant activities in collaboration with the Rwanda FDA and maintaining consistent communication facilitated the identification of areas for improvement in the software, highlighting the importance of active oversight and partnership in enhancing project outcomes.
- The effectiveness of involving representatives from multiple ministries and soliciting diverse perspectives during workshops underscores the importance of inclusivity and collaboration in decision making processes, leading to more comprehensive and informed outcomes.
- The significant impact of enhanced transparency, accountability, and efficiency in public procurement practices underscores the importance of promoting these principles to ensure fair and effective utilization of public resources.

D. OBJECTIVE 4: PHARMACEUTICAL-SECTOR FINANCING, INCLUDING RESOURCE ALLOCATION AND USE, OPTIMIZED

- ***Sub-Objective 4.1:*** Financial barriers to access to medicines reduced
- ***Sub-Objective 4.2:*** Evidence-based medicines strategies and pharmacy benefits programs developed and implemented
- ***Sub-Objective 4.3:*** Efficacy of pharmaceutical resource allocation and use increased
- ***Sub-Objective 4.4:*** Mobilization of additional and sustainable resources increased

OVERVIEW

Ensuring the availability and appropriate allocation and use of financial resources is critical for enhancing access to essential medicines and strengthening health systems to achieve UHC. Poor allocation and suboptimal use of existing resources, coupled with high financial barriers, can reduce access to medical products and diagnostics within health systems. Putting sound financing strategies into effect minimizes the incidence of stockouts and reduces the inefficient use of resources. MTaPS' objectives include building country pharmaceutical financing systems by strengthening their ability to institutionalize transparent and evidence-based decision-making, building capacity to use robust information to define and cost pharmaceutical benefits coverage, promoting pharmaceutical expenditure (PE) tracking to improve purchasing value, and strengthening pharmaceutical-sector governance.

CUMULATIVE PERFORMANCE TO DATE

This section presents selected MTaPS financing activities to illustrate cumulative performance progress in this objective from the start of the project.

SUB-OBJECTIVE 4.1: FINANCIAL BARRIERS TO ACCESS TO MEDICINES REDUCED

To reduce patient-side financial barriers to accessing medicines, MTaPS works to improve procurement processes, allowing governments to access lower prices and improving regulatory systems to protect patients from high prices at the point of care. Through the **VAMOHS** program, MTaPS explored feasibility of the mechanism to rapidly facilitate access to medical products at higher aggregate volumes and lower unit costs for purchasers and patients in developing countries, particularly MICs.

In **Asia**, MTaPS developed a report on the landscape analysis of country-level pricing policies and available pricing databases for pharmaceuticals in Asian countries in 2021. MTaPS documented publicly available unit price information paid by the public and private sectors for different medicines and reviewed the use of pricing indexes to standardize pharmaceutical purchase prices and negotiation of the best values. MTaPS published a blog in November 2022 on pharmaceutical pricing policies.

In **Nepal**, MTaPS supported the development of an evidence-based policy on a price control mechanism for pharmaceutical products. MTaPS prepared a concept note to describe the current legal provisions, price ceilings, and the pricing of pharmaceutical products. The government's Cabinet Secretariat provided approval to replace the current 1978 Drug Act. MTaPS collaborated with the DDA to draft six regulations, including the pricing regulation, and three codes necessary for the implementation of the updated Drug and Health Product Bill.

In **Mozambique**, MTaPS supported the DNF/ANARME, IP in 2021 in developing two regulations and two guidelines to operationalize Law 12/2017. MTaPS drafted the Guidelines for GRP and the Reliance Guidelines and developed the Price Control Regulation and the Regulation on Distribution, Import, and Export of Medical Products. The Price Control Regulation will enable DNF/ANARME, IP to control product price mark-ups of medicines as they move through the supply chain, hence stimulating wider availability of and access to medicines and other health products.

In **DRC**, MTaPS successfully advocated for the government to grant health products "social product status" instead of "business product status," which has lower or no tariffs and taxes, resulting in a significant cost and price reduction.

SUB-OBJECTIVE 4.2: EVIDENCE-BASED MEDICINES STRATEGIES AND PHARMACY BENEFITS PROGRAMS DEVELOPED AND IMPLEMENTED

Resource allocation decisions are central to pharmaceutical financing, as countries are working with limited resources. HTA is a systematic and multidisciplinary evaluation of health interventions (test, device, medicine, vaccine, procedure, program, or system) to inform decision-making to promote an equitable, efficient, and high-quality health system. HTA helps countries identify health interventions to be included in—or removed from—the benefits package and EML for national health insurance programs. The more advanced use of HTA allows countries to negotiate prices and manage market access for new technologies.

Supported through the **Asia Bureau** and **Cross Bureau** portfolios, MTaPS conducted a systematic review of over 18,000 resources. MTaPS collaborated with 16 authors from 10 institutions to develop the HTA roadmap document for policy action in LMICs. In **Asia**, MTaPS wrote a report exploring the feasibility of an HTA hub or collaborative institution in the region, stemming from a survey and interviews of over 50 stakeholders in Asia. MTaPS also assessed the progression of HTA implementation in nine countries in Asia, which was published in the *International Journal of Technology Assessment in Health Care* in July 2022. MTaPS also finalized the HTA Institutionalization Canvas, adapted from Osterwalder's business model canvas. MTaPS proposed an organized session at the upcoming HTAi conference highlighting the work establishing and strengthening priority setting and resource allocation in Ethiopia, Indonesia, and the Philippines. After a rigorous evaluation, HTAi accepted the proposed organized session, titled "Advancing Health Technology Assessment (HTA) Worldwide: Insights from Global Initiatives."

In **Indonesia**, MTaPS is supporting the MOH in redefining the criteria for selecting HTA topics and drafted the HTA Topic Selection Operational Manual. MTaPS successfully encouraged a wider range of stakeholders to submit topics, from 19 topics in 2022 to 46 HTA topics for 2023, and 131 HTA topics for 2024—increasing the breadth of lifesaving technology options to be evaluated for coverage to Indonesians. MTaPS also organized a capacity building session with HTA researchers from the MOH and Universitas Gadjah Mada and conducted a hands-on activity on incorporating real-world data into a Markov model evaluating trastuzumab, a breast cancer medicine.

In **Ethiopia**, under Cross Bureau funding, MTaPS' manuscript entitled "Institutionalizing Health Technology Assessment in Ethiopia: Seizing the Window of Opportunity" was published in the *International Journal of Technology Assessment in Health Care*. The manuscript details the HTA set-up mechanism and a survey to assess skills needed to perform HTA. Preliminary results show that

stakeholders in Ethiopia do not have enough information on HTA. MTaPS outlined options for setting up an HTA agency in the Ethiopian context.

In the **Philippines**, the MTaPS-supported HTA Method Guide for Clinical Equipment and Devices was finalized and shared with local stakeholders in a three-day workshop in Manila. This is the first specialized HTA methods guide in the country, supporting the Government of the Philippines in allocating resources to expand access to lifesaving medical devices for its citizens. MTaPS also shared best practices and experiences from Nepal on the creation of the Technical Specifications Bank, which would facilitate the Philippines developing its own essential medical devices list.

SUB-OBJECTIVE 4.3: EFFICACY OF PHARMACEUTICAL RESOURCE ALLOCATION AND USE INCREASED

Many pharmaceuticals are costly but essential to target the growing burden of NCDs and infectious diseases. Tracking PE will allow health administrators to learn from past patterns and improve planning and resource allocation, increasing efficiency and accountability. Beyond expenditures, costing exercises look at broader economic resource use, including the labor required to administer the pharmaceuticals, which in turn helps governments better allocate their finite resources.

In **Asia**, MTaPS works to strengthen country capacities for defining and costing evidence-based pharmaceutical benefit programs. MTaPS delivered two training programs on how to use the OHT to cost pharmaceutical benefits with attendees from Kyrgyzstan, Bangladesh, Nepal, and the Philippines, further resulting in Bangladesh's interest to use OHT to cost the Shasthyo Surokhsha Karmasuchi Social Health Protection Scheme benefits package. MTaPS developed a report entitled "Pharmaceutical Benefits and Benefits Packages in Asia: A Cross Country Mapping of Coverage Arrangements," a brief on defining pharmaceutical benefits packages, and a two-part report reviewing costing tools and offering guidance for costing pharmaceutical benefit packages using the OHT.

In **Nepal**, MTaPS evaluated the cost of implementing the SPARS pilot program in 12 districts, which in 44% of the 286 pilot facilities led to significant improvements of pharmaceutical management and resource use. MTaPS drafted a manuscript on this work and received positive feedback from USAID experts and government counterparts.

In **Bangladesh**, MTaPS worked with the MOHFW and others to adopt the international standard to track PE, resulting in a consensus with the HEU on a methodology for tracking MNCH commodities and initiated activities for its implementation. MTaPS supported the PE tracking exercise, documented standard processes on PE tracking for MNCH, and disseminated the progress of the work with the HEU with the participation of WHO and Data International. MTaPS assisted the HEU to complete the PE tracking exercise and develop the standard processes on PE tracking and customization of PE tracking training modules for MNCH commodities following the SHA 2011 guideline and the country context. With continued MTaPS advocacy, the HEU managed to include the PE tracking budgetary provision in the government's next Health Sector Program Operational Plan, an important milestone toward institutionalization of PE tracking to the HEU.

In **Indonesia**, MTaPS conducted a system-wide landscaping of existing and potential PE data sources and produced a summary document. MTaPS also collaborated with the Indonesian health accounts team to compile existing PE data from available national sources and drafted a final report on the implementation of the 2022 PE tracking. MTaPS facilitated a meeting on future management of data for PE tracking,

including data cleaning, validation, mapping, and analysis, as well as the need for a PE tracking team decree. MTaPS also facilitated the PE tracking training workshop, which resulted in the development of the 2023 PE tracking implementation plan.

To support **COVID-19 immunization costing**, MTaPS reviewed 530 articles across 3 databases and conducted 2 online surveys (November 2021 and May 2022) of health experts working in 21 countries to gather real-time COVID-19 vaccine delivery data. MTaPS rolled out a third global survey with a focus on integrating COVID-19 vaccination into immunization programs and primary health care, as well as country efforts to target sub-populations for vaccination. These activities feed into the MTaPS-adapted Harvard/COVAX costing model to estimate the cost of delivering COVID-19 vaccines under various scenarios. In **Malawi**, MTaPS collected vaccine delivery expenditure data in 4 districts through surveys and interviews in the national offices and 20 facilities and analyzed the COVID-19 costing data. MTaPS disseminated findings of vaccine delivery costing in Malawi at the Immunization Economics Special Interest Group Pre-Congress Session of the International Health Economics Association congress in Cape Town.

SUB-OBJECTIVE 4.4: MOBILIZATION OF ADDITIONAL AND SUSTAINABLE RESOURCES INCREASED

In addition to an improved understanding of current expenditures, costing data, and efficient allocation of resources, MTaPS also supports efforts to increase the efficiency of procurement through strategic purchasing; identifying additional financial sources, including public-private partnerships; and identifying and supporting applications for additional external funding.

In **Bangladesh** in year 2, MTaPS assisted the NTP in preparing concept notes for funding through the Global Fund to Fight AIDS, TB, and Malaria for 2020–2023.

In the **Philippines**, MTaPS supported identifying and allocating resources for PSCM through the national strategic plan implementation. MTaPS is advocating for leveraging private-sector capacity to outsource certain components of the PSCM, which is already part of the strategy for increasing PSCM efficiency in the national strategic plan. MTaPS also supported the DOH in developing guidelines for framework agreements to ensure that quality health commodities are procured efficiently. MTaPS facilitated a learning session on quantification of health commodities and on quantification systems, processes, and tools. The estimated quantities and budgets will be used for the DOH's application for multi-year contractual authority for FP and TB commodity procurement. This allows flexibility in the quantity of commodities, reducing the possibility of overstock or stockout.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

SUB-OBJECTIVE 4.1: FINANCIAL BARRIERS TO ACCESS TO MEDICINES REDUCED

No further activities planned for PY6.

SUB-OBJECTIVE 4.2: EVIDENCE-BASED MEDICINES STRATEGIES AND PHARMACY BENEFITS PROGRAMS DEVELOPED AND IMPLEMENTED

MTaPS proposed an HTAi organized session entitled "Advancing Health Technology Assessment (HTA) Worldwide: Insights from Global Initiatives," and received speaker confirmations including Christian Suharlim, Daniel Erku (Ethiopia), Lusiana Siti Masytoh (Indonesia), Catherine Manuela Lee Ramos

(Philippines), and Oresta Piniazhko (Ukraine). MTaPS will continue to work with HTAi and speakers to finalize logistics.

In **Asia**, MTaPS achieved technical alignment with partners Health Intervention and Technology Assessment Program and Health Intervention and Policy Evaluation Research - National University of Singapore (HIPER-NUS) on the support to improve the HTA ecosystem in Asia, including improving the political economy and participation of diverse stakeholders. MTaPS supported participation of seven country representatives (Vietnam, Timor Leste, Indonesia, India, Cambodia, the Philippines, and Lao PDR) at the HIPER symposium, hosted by NUS. With the exception of India, this was the first time HIPER welcomed policymakers from these countries.

SUB-OBJECTIVE 4.3: EFFICACY OF PHARMACEUTICAL RESOURCE ALLOCATION AND USE INCREASED

In supporting the **USAID COVID-19 global activity**, MTaPS is developing a peer-reviewed journal manuscript documenting the findings of the costing exercise in Malawi. MTaPS also drafted a journal manuscript on the third global survey with a focus on integrating COVID-19 vaccination into immunization programs and primary health care, currently under review in the journal *Vaccine*.

In **Bangladesh**, MTaPS assisted the HEU to increase capability on PE tracking toward institutionalization. A draft national institutionalization plan for PE tracking was finalized and discussed with the workshop participants, handed over to HEU and approved by the HEU director general. These activities will contribute to sustained PE tracking led by the HEU as part of the National Health Accounts procedures and optimal health financing in Bangladesh.

SUB-OBJECTIVE 4.4: MOBILIZATION OF ADDITIONAL AND SUSTAINABLE RESOURCES INCREASED

No further activities planned for PY6.

BEST PRACTICES/LESSONS LEARNED

- Peer-reviewed journal manuscripts will expand the reach of MTaPS' success beyond the immediate audience of MTaPS reports and Knowledge Management products. When possible, projects should plan to allocate resources toward developing peer-reviewed journal manuscripts.

E. OBJECTIVE 5: PHARMACEUTICAL SERVICES, INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE TO ACHIEVE DESIRED HEALTH OUTCOMES, IMPROVED

OVERVIEW

Ensuring the availability of safe, effective, quality-assured, and affordable medicines and health technologies is critical for effective health outcomes and requires integration with other objectives, including reliable data for decisions (Objective 3), that address finances and the evidence-based selection of medicines and health technologies (Objective 4); stewardship to allocate resources efficiently (Objective 1); and institutionalizing best practices to improve pharmaceutical care (Objective 2) and patient safety.

CUMULATIVE PERFORMANCE TO DATE

SUB-OBJECTIVE 5.1: AVAILABILITY OF ESSENTIAL MEDICINES AND OTHER HEALTH TECHNOLOGIES IMPROVED

Bangladesh: MTaPS facilitated the development of a long-term procurement strategic plan, and standardized lists of medical equipment and reference prices for tertiary hospitals. Additionally, MTaPS supported the development of a strategy for regular revision of these lists and prices, including the creation of a checklist for monitoring procurement performance using standard indicators. MTaPS conducted a capacity assessment of the procurement entities and provided key recommendations for improvement. MTaPS also promoted the use of family planning data for decision making, ensuring that family planning warehouses maintain a stockout rate below 1%. MTaPS introduced and supported the implementation of the eAMS in all 61 DHs, resulting in the recording of 9,373 assets, handling 183 repair requests, and resolving 128 tickets to date. Furthermore, MTaPS assisted in finalizing 4 e-Learning courses on logistics management, the e-TB Manager, IPC, and procurement, now available on the Muktopaath government platform; a significant but still low number of professionals have enrolled and completed the courses.

Philippines: MTaPS played a pivotal role in various supply chain initiatives, including the development of a three-year supply chain strategy and road map, designing inventory strategies, analyzing stock information for key commodities, and delivering supply chain training modules through the DOH e-Learning Academy. MTaPS supported the establishment of long-term requirements for TB, HIV, and FP commodities to guide budgeting and procurement processes. Additionally, MTaPS supported the inclusion of TLD and pre-exposure prophylaxis (PrEP) in the National Formulary, updating and finalizing the Warehouse Operation Manual (WOM), and training staff across different levels to implement its use effectively. MTaPS also facilitated alignment meetings among various bureaus within the DOH to ensure sustainable supply chain supportive supervision visits at HIV facilities.

Jordan: MTaPS assisted the JFDA and the MOH in achieving procurement reforms to facilitate supplier market entry and product availability. Following the reforms, the GPD, with support from MTaPS, developed an FA, implemented guidelines, trained public-sector procurement personnel, and developed procurement negotiation guidelines. To improve SCM practices, MTaPS assisted the MOH's PSD to complete a comprehensive assessment of the pharmaceutical supply chain, whose findings and

recommendations were used in the development of the PSD's Operational Plan 2023–2025. MTaPS also supported the PSD to develop six priority SCM policies, FA SOPs, and procurement negotiation SOPS, which were granted official approval. Moreover, MTaPS facilitated the recruitment of legal and procurement consultants to draft a policy aimed at enhancing supplier performance evaluation in alignment with existing related GPD policies.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

Rwanda: To improve pharmaceutical services, MTaPS collaborated with the MOH, Rwanda FDA, and the National Pharmacy Council to develop pharmaceutical service accreditation standards and a plan to guide their implementation. Subsequently approved by the Minister of Health and aided by MTaPS, these standards were disseminated with medicine safety information to 440 participants (145 female). Additionally, to improve pharmaceutical management in HCFs via MTCs, MTaPS supported the development of an MTC operational manual, tools, and SOPs, and oriented 313 health care providers (113 female) on these products.

SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED

Bangladesh: MTaPS has strengthened the PV system of the DGDA through the implementation of PViMS in hospitals for online adverse event reporting, scaling up of PV and creating PV units to institutionalize PV-related initiatives; developing and implementing risk management and investigation procedures; supporting periodic evaluation of ADE safety data and submitting to WHO Uppsala Monitoring Center. MTaPS supported the DGDA in achieving the highest GBT score for PV function among the implemented institutional development plans.

Jordan: MTaPS has supported the MOH to establish and implement a targeted spontaneous reporting system on the safety of COVID-19 vaccines, analyzed multiple data, and generated and submitted reports and key messages to be disseminated by the National PV center to encourage vaccine uptake.

Mozambique: MTaPS supported ANARME, IP in the institutionalization of PV and the utilization of PViMS for both active and passive surveillance. The major support provided relating to active surveillance included the implementation of ASM of TLD and TPT and training of ANARME, IP on the protocol of the surveillance. MTaPS also supported the management and analysis of the active surveillance data in PViMS, including causality assessment and report writing; training of provincial and district focal persons, who then cascaded similar trainings to HCWs at the TLD and TPT implementing sites; and the implementation of the activity.

Nepal: MTaPS supported the DDA with a situational analysis of the PV system in the country. Based on the findings of this analysis, PV regulations, guidelines, risk management plans, and SOPs for regulation and reporting were developed and the PV and drug information working group was established. MTaPS also supported capacity development for the DDA through training on signal detection, analysis, and risk management in PV, and also the printing and distribution of PV IEC materials to promote better reporting of AEs by health professionals and the public in general.

Philippines: MTaPS supported the implementation of PViMS for active surveillance for TB medicines in 100% (199) of TB facilities. MTaPS also supported the reporting (to date 597 AEs have been reported through PViMS) and causality assessment of the AE reports submitted through PViMS and ensured

interoperability between PViMS and WHO VigiFlow. MTaPS finalized and shared 2 versions of the PV e-Learning course with the FDA.

Rwanda: MTaPS supported the Rwanda FDA in the institutionalization of PV through development of the PV national plan and capacity development of FDA personnel, National PV Advisory Committee, and AEFI committee members in PV topics. MTaPS also supported the creation of PV IEC materials targeting patients and HCWs and the adoption of PViMS at the central government level. MTaPS assisted in the adoption of active surveillance of DTG-based antiretroviral regimens, causality assessment of AEs, development of a costed multiyear national PV plan, revision of the draft communication strategy to address GBT sub-indicators (VL02.02, VL06.01, VL06.02 and VL06.03), and ensuring the interoperability of PViMS with VigiFlow.

Tanzania: MTaPS supported the revision of the TOR for the National PV Technical Committee, developed qualified persons responsible for PV guidelines for the pediatric population, and trained the Vigilance Technical Committee members on PV to enhance their capacity to assess pediatric AEs and provide feedback to AE reporters. MTaPS also built the capacity of Tanzania Medicines and Medical Devices Authority (TMDA) staff on the assessment of PSURs and risk management plans (RMPs) for ARVs and other medicinal products.

SUB-OBJECTIVE 5.4: ANTIMICROBIAL RESISTANCE CONTAINMENT SUPPORTED

Jordan: MTaPS helped operationalize the NAP-AMR (2018–2022), conduct an AMR/AMS stakeholder analysis, and implement AMS programs in two pilot HCFs. MTaPS also supported the development of a national policy to combat multidrug-resistant organisms (MDROs) and launch a certified IPC training course. Additionally, with MTaPS' support, various protocols, audit tools, and key performance indicators (KPIs) on the rational use of antibiotics in ICU infections, surgical procedures, and urinary tract infections were developed and monitored for implementation using a CQI approach. The PCPD was also supported to lead the first national IPC assessment in dental settings. To strengthen human resource (HR) capacity for AMR containment, MTaPS collaborated with the national HCAC to develop training curriculum on priority IPC needs identified by the MOH National ACIPC and to train more than 200 IPC focal points across MOH and RMS hospitals and MOH primary health care units. Responding to an *Acinetobacter* outbreak in 2022, MTaPS, in collaboration with the MOH IPC department, facilitated the development of a national policy to combat MDROs, institutionalizing AMR response. To raise awareness about AMR, MTaPS collaborated with the MOH SHD and the Ministry of Education to develop and disseminate AMR awareness messages in schools and subsequently incorporate them into the NAP-AMR. MTaPS-supported communication and awareness intervention for school students (CASS) initiatives, such as educational workshops aimed at raising awareness about AMR in schools, were incorporated into the NAP-AMR.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

SUB-OBJECTIVE 5.1: AVAILABILITY OF ESSENTIAL MEDICINES AND OTHER HEALTH TECHNOLOGIES IMPROVED

***Bangladesh*:** MTaPS is awaiting approval to print the procurement handbook for relevant personnel to consult during procurement processing after incorporating the feedback received for the final draft. MTaPS helped the DGFP roll out the online inventory management system in all 58 Upazila Family

Planning Stores in the Rangpur Division and initiated customization of the system based on the insights from UAT. MTaPS' continuous advocacy expedited the DGFP procurement process of 77 million condoms with around 20 million being supplied to the central warehouse in March 2024. These condoms will be distributed to the SDPs by April 2024. MTaPS is also supporting the establishment of the eAMS in one selected tertiary hospital as a pilot to enable the Health Services Division (HSD) to begin rolling out the system to additional tertiary hospitals. MTaPS facilitated a day-long workshop on January 24, 2024, to review the eAMS dashboard. Additionally, a 3-day training session on the eAMS was conducted from February 27 to 29, 2024, for the National Institute of Cancer Research and Hospital staff in Dhaka.

Philippines: MTaPS finalized the WOM addendum, detailing inventory control SOPs for informed allocation decisions, aiming to minimize rejection and overstock of medicines at lower supply chain levels. This initiative targets reducing the supply chain carbon footprint and enhancing climate risk management.

Jordan: The GPD, with MTaPS support, finalized an advanced draft of the FA standard bidding documents (SBD), with the aim to ensure fairness, reduce risks, and select the most qualified bidders for FAs. The SBD will undergo stakeholder review before production of the final version. A workshop with 10 ministries was held to discuss supplier performance expectations and propose evaluation criteria and procedures. Insights from the workshop informed the policy development process, which was subsequently initiated.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

No activities this quarter.

SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED

Bangladesh: PViMS has been customized based on users' feedback. MTaPS also provided technical assistance to the DGDA in updating the PV organogram with TORs, job descriptions, and competency assessments of PV personnel. MTaPS also supported the screening of RMPs and generation of PSURs for the DGDA.

Mozambique: MTaPS completed the data cleaning process for the TPT study in Quarter 2. The preliminary report was then shared with key stakeholders. Representatives from USAID and the CDC provided feedback and requested clarifications. MTaPS supported in facilitating the review process.

Rwanda: MTaPS continued to support Rwanda FDA to enhance the PV system. Updates were made to the OpenRIMS-PV (PViMS) user manual and other relevant documentation. Focal PV members from Rwanda FDA, and others from the information and communication technology (ICT) team, received training on the updated OpenRIMS-PV (PViMS). Continued efforts to support the interoperability of PViMS with VigiFlow are ongoing.

SUB-OBJECTIVE 5.4: ANTIMICROBIAL RESISTANCE CONTAINMENT SUPPORTED

Jordan: With MTaPS' support, the MOH Pharmacy, the PCPD, and the Institutional Development and Quality Control Directorate audited the adherence to the antibiotic prophylaxis and treatment protocols using the previously developed compliance checklist and KPIs. The average adherence of the

two audited hospitals (Al Salt and Al Mafraq) improved from 4% at baseline to 53% at the repeat assessments, demonstrating advancement in achieving optimal AMU. The results were disseminated to various stakeholders and subsequently reported to the MOH digital platform, facilitating institutionalized reporting and evidence-based actions. Similarly, the RMS AMS committee, with MTaPS' support, conducted audits for adherence to 27 empirical treatment protocols for ICU infections. Al Hussein Hospital ICU demonstrated improvement from 20% adherence at baseline to 60% adherence to the ICU infection protocols at the repeat assessment. Due to this success, the RMS AMS committee expanded the orientation workshops on the developed ICU infection treatment protocols to 10 peripheral RMS hospitals, reaching 100 (50 female) service providers from various specialties.

To strengthen HR capacity for IPC, all 28 IPC focal points (17 female) countrywide have been actively enrolled in the locally led health care infection preventionist training program with MTaPS' support. Additionally, a total of 50 IPC focal points (37 female) from the HADs and selected MOH primary health care centers have completed the didactic and practical sessions of the health care certified safety and infection control preventionist course, awaiting final examinations and IPC certification.

To progress toward completion of the national IPC assessment in dental settings, the MTaPS-subcontracted Jordan Experts for Training led two virtual comprehensive orientation sessions for 23 (10 female) survey assessors, supervisors, and the MOH Infection Prevention and Control Directorate (IPCD) team. To raise AMR awareness among practitioners and the public, MTaPS supported the HCAD, PCPD and IPCD in formatting the developed messages on antibiotic use into engaging social media posts. Lastly, as part of the CASS initiative, MTaPS supported the SHD to conduct a TOT workshop for 24 (13 female) participants and a subsequent training workshop for 40 health service providers (30 female) to support the SHD in expanding CASS activities to additional schools targeting antimicrobial perceptions in school-aged youth, intervening before inappropriate attitudes become entrenched.

BEST PRACTICES/LESSONS LEARNED

- Advocacy with the government regarding the necessary prerequisites for effective use of any electronic system for pharmaceutical strengthening is necessary to close gaps in irregular data entry and missing information.
- Engaging relevant parties in decision-making processes fosters more effective and sustainable outcomes. It ensures alignment with the needs and expectations of all stakeholders, and enhances transparency, accountability, and efficiency.
- Future active surveillance implementation should incorporate best practices such as stakeholder consultation, risk assessment, and quality assurance. Integrated technology and tools, such as electronic health records and mobile phone applications, are crucial for efficient data collection and analysis. Regular review and in-service training of health care practitioners are also essential for maintaining surveillance quality.

3. PROGRESS BY HEALTH AREA/FUNDING STREAM

A. GLOBAL HEALTH SECURITY AGENDA/ANTIMICROBIAL RESISTANCE (GHSA/AMR)

OVERVIEW

MTaPS currently provides GHSA support to nine partner countries (Burkina Faso, Cameroon, Côte d'Ivoire, DRC, Kenya, Mali, Nigeria, Senegal, and Tanzania), focusing on AMR containment. The GHSA projects in Uganda, Ethiopia, and Bangladesh closed in the last quarter; the GHSA project also recently closed in Mozambique. MTaPS' GHSA approach is to support collaborating countries to effectively implement their NAPs-AMR. The primary focus is to help countries attain higher IHR capacity levels as measured by JEE and WHO benchmark scores in the three mandated areas of MSC-AMR, IPC, and AMS to enhance their capacity.

CUMULATIVE PERFORMANCE TO DATE

EFFECTIVE MSC-AMR: EXAMPLES FROM TWO COUNTRIES

In **Senegal**, during the previous years, MTaPS supported the revitalization of the AMR TWG in the OHP and its functionality under the aegis of the OH secretariat. To foster the implementation of country-led and specific health security actions, MTaPS supported the development of the country's multisectoral National Health Security Plan (NHSP), informed by an assessment using the e-SPAR Tool. Through multisectoral workshops and meetings, MTaPS facilitated the operationalization of the NHSP by supporting the development of annual and quarterly action plans of the OHP based on the NHSP and evaluation of MSC activity implementation. Finally, with MTaPS' support, the AMR TWG undertook review of the NAP-AMR (2017–2022) to understand implementation progress, and independently formulated the new NAP-AMR (2024–2028), showcasing a significant improvement in local ownership and self-reliance.

In **Côte d'Ivoire**, as of March 2024, MTaPS has supported the completion of 12 out of 17 WHO benchmark actions (2019 version) contributing to MSC-AMR. The country has successfully established MSC-AMR governance mechanisms, including the national OHP, MSC Group (MCG), TS, and TWGs and subcommittees—institutionalized through government decree—to coordinate and monitor AMR containment efforts. Through collaborations and MTaPS' support, the AMR TWG and its multisectoral technical committees, including the Multisectoral Technical Committee 4 (MTC4, also known as the IPC TWG), and Multisectoral Technical Committee 5 (MTC5, also known as the AMS TWG) developed, validated, rolled out, and operationalized at least 15 technical and reference documents. These included the AMR governance manual; the national AMR policy; the multisectoral NAP-AMR (2019–2020), the current NAP-AMR (2021–2025), and the accompanying M&E plans; the AMR operational advocacy plan; the national IPC plan; IPC guidelines for the animal sector; and the national AMS policy, guidelines, and plan, facilitating improved governance, guidance, and localized actions. To strengthen local capacity and further institutionalize localized AMR containment actions, DTCs were officially mandated countrywide through a government ministerial decree, e-Learning modules on IPC and AMS were also developed and

made accessible, and a pool of 18 master trainers and 36 regional AMR trainers was established to independently facilitate rollout of in-service AMR training in HCFs.

IPC Improved and functional: Examples from two countries

In **Mali**, MTaPS worked with the GCMN-RAM to develop TORs for the IPC TWGs, strengthening MSC-IPC. Through regular MTaPS-supported meetings, the IPC-TWG has monitored and evaluated national IPC core components, demonstrating improvements on the WHO IPCAT2, with the average component score increasing from 50% in 2022 to 54% in 2023. To further strengthen IPC systems, MTaPS supported the National Institute of Public Health (INSP) and the DGSHP to develop, print and disseminate the national IPC strategic plan (2023–2027), IPC training toolkit, and various IEC materials. Additionally, with MTaPS' support and collaborations, e-Learning platforms incorporating IPC topics were developed and made accessible through the DGSHP and the Faculty of Medicine and Odontostomatology websites, facilitating continuous capacity building. To further improve IPC practices at sub-national levels, MTaPS aided DGSHP and DPM in setting up IPC committees in 16 HCFs, enhancing capacity via mentorship, fostering CQI plans, and autonomy.

In **Cameroon**, MTaPS supported a baseline assessment of IPC practices in 38 HFs to identify gaps and improvement opportunities, establishment of IPC committees in 12 HCFs, and development of the national IPC guidelines and action plan. Furthermore, MTaPS partnered with IDDS and AFROHUN to develop course content for a master's degree program in infectious diseases and AMR at the University of Buea and to establish a Moodle e-Learning platform on the university's website to facilitate blended learning, institutionalizing pre-service education on AMR and IPC. MTaPS also supported the Directorate of Health Promotion (DPS) in conducting a KAP survey on hand hygiene (HH) among HCWs in 13 HCFs, which helped gain insights into the enablers and barriers to HH and IPC best practices. To further facilitate monitoring of the impact of IPC interventions in the country and foster evidence-based decisions, MTaPS supported the DPS in evaluating key surveillance attributes and some performance indicators of the country's HAI surveillance system, and to develop a national surveillance protocol to monitor HAIs.

Use of antimicrobial medicines optimized: Examples from two countries

In **Tanzania**, MTaPS' support for AMS activities has improved the country's baseline JEE score by supporting 100% (4/4) of capacity level 2, 67% (4/6) of capacity level 3, 43% (3/7) of capacity level 4, and 29% (2/7) of capacity level 5 WHO benchmark actions (2019 version), resulting in an overall achievement rate of 54% (13/24). MTaPS supported the MOH, the Ministry of Agriculture, and the Ministry of Livestock and Fisheries in developing multisectoral AMS policy guidelines and strengthening AMS governance. To further institutionalize appropriate AMU, MTaPS supported the MOH in developing and disseminating DTC guidelines and incorporating the AWaRe classification of antibiotics in the STGs and the NEML. The development and distribution of a national hospital formulary template has prompted HCFs to begin independently developing and/or revising their own hospital formularies. Repeat assessments on the status of WHO AMS core elements in 6 HCFs, conducted with MTaPS' support, have institutionalized periodic monitoring of AMS progress. Moreover, AMS experts, who were trained through MTaPS-supported initiatives, are spearheading the nationwide rollout of training using the in-service AMS curriculum, which was developed with MTaPS technical assistance, benefiting up to 116 (53 female) participants from 14 hospitals as of March 2024. To promote the surveillance of antimicrobial consumption and use (AMC/U), MTaPS supported desk review and analysis of the national

AMC data for the period 2017–2022 and PPS on antibiotic use across 6 referral hospitals in 2020 and 2 hospitals in 2023. Additionally, MTaPS supported the assessment of regulations, policies, and supply chain governance related to antimicrobials in both human and animal health, which partially informed AMS actions in the new NAP-AMR (2023–2028).

In **Kenya**, MTaPS' support has led to the achievement of 75% (3/4) of capacity level 2 benchmark actions (2019 version), 83% (5/6) of capacity level 3 actions, and 29% (2/7) of capacity level 4 actions as of December 2023, progressing the country to a higher JEE level in AMS. MTaPS interventions are centered on enhancing the self-reliance of AMS governance structures at the national, county, and HCF levels, empowering them to effectively implement AMS interventions. These interventions include developing the Kenya National Medicines Formulary (KNMF); reviewing the Kenya Essential Medicines List (KEML) and incorporating the AWaRe categorization of antibiotics; developing and disseminating the national AMS guidelines, regulatory guidance on optimal use of antimicrobials to HCWs and the public, and AMS curricula at the pre-service and in-service levels; training HCWs on AMS; disseminating IEC materials and SOPs; and monitoring implementation of AMS activities using a CQI approach in the focus counties and HCFs.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

GLOBAL THOUGHT LEADERSHIP

During Quarter 2, 6 abstracts prepared by MTaPS were accepted, 3 for oral presentation, 2 for poster presentations, and 1 for a skill-building workshop, at the Global Health Security (GHS) Conference that will be held in Sydney, Australia from June 18 to 22, 2024. Additionally, one abstract was accepted for oral presentation at the 34th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) (April 27–30, 2024, Barcelona, Spain). The abstracts cover topics ranging from MSC to IPC and AMS approaches and implementation experiences and lessons learned. Additionally, 3 abstracts (one each on MSC, IPC, and AMS related to MTaPS/Kenya's GHSA work) were accepted for oral presentation at the upcoming AFROHUN 4th International One Health Conference to be held in Nairobi from April 24 to 26, 2024. Furthermore, invited as a lead discussant to an interactive One Health–focused meeting (held in New York on February 22, 2024, ahead of the UN High-Level Meeting on AMR later this year), MSH's GHSA/AMR expert provided insights and lessons learned from MTaPS' 13-country collaboration experience supporting AMR containment. Lastly, MTaPS published 3 technical briefs highlighting best practices and experiences on IPC, AMS, and MSC-AMR.

EFFECTIVE MSC-AMR

Strengthening MSC governance structures and functions

In **Burkina Faso**, MTaPS supported the OHP TS to organize a workshop to finalize and validate the draft interministerial order officially establishing the AMR thematic committee (AMR-TC) and its subcommissions, facilitating official government approval and strengthening the AMR-TC, which has been operating without government policy, a critical step for accessing government resources and fostering sustainability. In **Kenya**, MTaPS provided TA to NASIC to update the memberships of various TWGs following HR changes and revitalizing them. Furthermore, the newly approved NAP-AMR (2023–2027) and its associated M&E framework, both of which were developed in collaboration with MTaPS, were disseminated to four counties to facilitate their subnational operationalization. Additionally, with MTaPS'

TA, NASIC mentored AMR focal persons from two CASICs, orienting them on the process of CASIC work plan progress review and development of the next iteration of CASIC work plans. With this mentorship, the two CASICs independently conducted end-of-term reviews of their work plans and subsequently formulated the next iteration of their work plans (2024–2026), showing enhanced capacity.

Holding multisectoral meetings or activities

In **Burkina Faso**, MTaPS supported the OHP TS and the AMR-TC to develop a sustainability plan to sustain MSC activities following MTaPS' closure. In **Cameroon**, MTaPS supported the OHP to organize a 2-day meeting to review implementation of the NAP-AMR activities, identifying and highlighting implementation barriers and opportunities. In **Côte d'Ivoire**, MTaPS supported the MTC5 in organizing a bi-monthly coordination meeting to review the MTC5 2024 activity road map and determine the implementation status of the national AMS plan. MTaPS also supported the MTC4 to organize a 1-day meeting to review and validate the online IPC modules. A TOT workshop for tutors of e-Learning courses was then organized for 21 trainers. In **DRC**, MTaPS supported the *Direction de l'Hygiène et Salubrité Publique* (DHSP) to conduct a central-level IPC assessment, including evaluation of the 2023 IPC improvement plan's implementation and the development of a new improvement plan for 2024 based on the assessment findings. The evaluation showed that 8 out of 15 activities were either fully or partially accomplished, and the country's IPCAT2 score had doubled from 20% to 42% between 2022 and 2024, demonstrating improved capacity. In **Mali**, MTaPS supported the GCMN-RAM to organize an AMR coordination group meeting to share the results of the recently conducted WHO 2023 IHR JEE and make recommendations, update plans for transition and sustainability of MTaPS-supported activities after the closure of the program, and update the TOR for GCMN-RAM and its AMS technical group.

Drafting, updating, or implementing multisectoral policies, plans, or guidelines

In **Kenya**, MTaPS provided TA during the Murang'a and Kilifi CIPCAC meetings to review their previous work plans, and to develop a new work plan for the Murang'a CIPCAC. In **Senegal**, MTaPS provided technical support for the AMR multisectoral TWG to finalize and validate the new NAP-AMR (2024–2028). Additionally, under the aegis of the OH secretariat, MTaPS worked with FAO and Breakthrough ACTION to support the Saint Louis region's OH regional health security committee in developing an annual integrated action plan for health security. In **Nigeria**, MTaPS, in collaboration with the AMR Coordinating Committee (AMR CC) chair, supported the national AMR TWG secretariat with editorial review and formatting of the new NAP-AMR (2023–2028), finalization and adoption of M&E tools for the NAP-AMR, and training of the M&E officers on these tools. Similarly, in **Tanzania**, the draft M&E framework for NAP-AMR (2023–2028), developed with MTaPS' technical support, was presented to the MCC; following discussions, the MCC provided preliminary approval.

Strengthening facility IPC governance structures and functions

In **Kenya**, MTaPS held a virtual meeting with the IPC focal persons from Kisumu, Kilifi, Murang'a and Nyeri Counties to disseminate an MTaPS-designed supportive supervision guide that will support the tracking of health facility compliance with IPC practices, even beyond the lifetime of MTaPS. The counties of Murang'a and Kilifi have independently carried out IPC supportive supervisions and mentorship sessions using the disseminated guides.

Developing and implementing IPC policy and guidance documents

MTaPS **Kenya** continued to provide technical and financial support in the development of a mobile app that will play a critical role in disseminating various IPC and AMR documents. MTaPS provided support for a joint meeting of 11 (5 female) participants to review progress toward completion of the app and address any hosting server issues. In **Mali**, MTaPS supported the DGSHP in conducting a workshop that drafted the IPC operational plan for the human health sector. In **Nigeria**, MTaPS supported the national counterparts with the prioritization of activities and development of indicators and tools for data collection for IPC, biosecurity, WASH, and vaccination for inclusion in the new iteration of the NAP-AMR.

Strengthening individual and local capacities

In **Cameroon**, MTaPS supported the DPS in hosting 3 regional meetings for the 13 MTaPS-supported HCFs and 49 staff from non-supported HCFs, sharing IPC implementation experiences and scaling IPC CQI approaches. Repeat IPC assessments conducted in the 13 HCFs showed improved performance on IPCAF. In **Kenya**, MTaPS, in collaboration with the National Nurses Association of Kenya (NNAK), held a virtual webinar on patient safety for 283 (190 female) participants. In **Senegal**, MTaPS supported the targeted level 3 hospitals in Dakar to begin collecting data to document progress in IPC, potentially publish the results in scientific journals, and share lessons learned. MTaPS helped conduct IPC mentorship visits in supported HCFs in **DRC**, **Mali**, and **Tanzania** to prepare HCFs for sustained IPC implementation and self-reliance (even after MTaPS support ends).

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Developing and implementing AMS policies, plans, guidance documents, and IEC materials

In **Kenya**, MTaPS supported the dissemination of IEC materials, SOPs, and AMS-AWaRe guides to 23 MTaPS-supported HCFs. Similarly in **Mali**, MTaPS supported the AMS TWG to print and disseminate IEC materials, including 2,016 posters and 504 flyers, to regional health directorates, hospitals, health centers, pharmacists, and key stakeholders during conferences and field visits. The IEC materials provide guidance to HCFs to improve AMS actions.

Assessing AMS capacity at the national and local levels and developing action plans

In **Burkina Faso,** MTaPS supported HCFs to develop a formative supervision tool on the rational use of antibiotics, which was later tested in one of the MTaPS-supported HCFs. The tool will allow HCFs to autonomously implement mentorship initiatives. In **Côte d'Ivoire**, MTaPS aided the MTC5 and AMR TWG in conducting a self-assessment of their capacities using the WHO AMS toolkit, highlighting key bottlenecks. In **DRC**, MTaPS provided technical support to the National Pharmaceutical Regulatory Authority (ACOREP) and the Centre National de Pharmacovigilance (CNPV) to organize a three-day meeting on promoting and institutionalizing appropriate AMU. Moreover, MTaPS continued to support established DTCs in collaboration with ACOREP and CNPV to conduct CQI data collection and analysis and hold regular meetings. In **Mali**, MTaPS supported the GCMN-RAM and the DPM in organizing a virtual meeting to monitor progress on AMS indicators, demonstrating achievements and highlighting challenges. In **Tanzania**, MTaPS attended a MOH-organized and led virtual AMS TWG meeting on AMS implementation updates, portraying local ownership and potential sustainability of the AMS program. MOHs in **Burkina Faso**, **Côte d'Ivoire**, **Kenya**, **Mali**, and **Senegal** conducted supportive supervision

and mentorship visits to prepare the supported HCFs for sustained AMS implementation and self-reliance following the closure and exit of the MTaPS program.

Strengthening individual and local capacity

In **Kenya**, MTaPS, in collaboration with KEMRI, held a 1-day symposium to explore the use of bacteriophages for AMR containment, which drew 34 participants. During the event, a landscape analysis of the status of opportunities, potential barriers to, and plan of action on the use of bacteriophages for AMR containment was undertaken, extending the boundaries of traditional interventions, and fostering innovation. In **Senegal**, MTaPS supported a trainer from the national pool of trainers to conduct a training on the national antibiotic policy and guidelines for 26 members of the hospital medical committee (HME) of the level 2 hospital in Fatick. The training focused on how to prescribe, manage, and monitor the use of antibiotics and the WHO AWaRe categorization of antibiotics. The use of the trainer from a pool whose capacity was strengthened with MTaPS support speaks to the local capacity built to sustainably support local AMR containment efforts.

BEST PRACTICES/LESSONS LEARNED

- Involving non-supported facilities in lessons learned and experience-sharing workshops can serve as a catalyst to spur expansion of MTaPS' work. For example, facilities not supported by MTaPS have demonstrated interest in the MTaPS approach. As seen in Cameroon, staff from 49 non–MTaPS-supported facilities were invited to a workshop to share experiences in implementing IPC and AMS best practices. This was also evident in Uganda when the project cascaded its best practices to other US Government (USG)-funded projects.
- Updating policies, including TORs and membership for MSC-AMR bodies, is essential to mitigate the disruptions caused by human resource changes, such as departures and underperformance. Implementing a monitoring system for the performance and operations of MSC bodies is needed to ensure their effectiveness and resilience in AMR containment.
- Countries in which facilities' management is highly engaged and active in MTaPS-supported activities have registered great improvements compared with countries in which facility management is less involved.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

	Activity and Description
Global	▪ Facilitate the USAID GHSA quarterly meeting. ▪ Support countries in identifying potential PY7 work plan activities. ▪ Showcase MTaPS GHSA/AMR-supported work in the upcoming AFROHUN, ECCMID) and GHS conferences.
MSC	▪ Continue facilitating meetings of MSC-AMR bodies and/or their TWGs (BF, CM, CI, CD, ML, TZ, SN) ▪ Support MSC-AMR bodies to conduct facility supportive supervision (BF, CI) ▪ Increase e-Learning capacity by scaling up institutionalization, ownership, and uptake of AMR-related e-Learning courses (CM, CI, CD) ▪ Provide support to the NC-AMR and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities (CD, SN) ▪ Support NC-AMR in conducting joint MSC field support supervision visits in the human, animal, and environmental sectors, and use the supervision findings to conduct the annual Tracking AMR Country Self-Assessment Survey (TrACSS) (CD) ▪ Continue support to help institutionalize sustainability of MSC-AMR bodies (CD, KE, SN) ▪ Finalize, launch, and disseminate the AMR mobile App (KE). ▪ Disseminate IPC and HAI surveillance guidelines, assessment tools, SOPs, orientation packages, etc. (KE) ▪ Support validation and launch of NAP 2.0 (NG) ▪ Collaborate for joint supervisory visits to supported facilities with USAID mission staff (NG)

	▪ Support knowledge exchange workshops in Enugu and Kebbi (NG)
IPC	▪ Further strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities through CQI-based and institutionalized actions (CM) ▪ Support locally led efforts to improve functionality and scale up of the pilot systems for HAI surveillance (CM) ▪ Continue supportive supervision for IPC committee and implementation in facilities (CD)
AMS	▪ Support the Directorate for the Fight against Disease, Epidemics, and Pandemics (DLMEP) and DPML to develop/update and disseminate national stewardship and clinical/treatment guidelines (CM) ▪ Support antimicrobial use survey at national and/or facility level (CI, SN) ▪ Disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics (CD) ▪ Provide TA to University of Nairobi for review of the pre-service AMS training materials (KE) ▪ Support finalization and launch of the AMC tool (KE) ▪ Support to conduct a validation workshop for AMS modules and mentorship toolkit (NG)

B. COVID-19

COVID-19 RESPONSE AND VACCINE INTRODUCTION

In May 2023, WHO declared that COVID-19 no longer represented a global health emergency. Most MTaPS countries have completed the activities related to COVID-19 response and support to vaccinations. The governments are looking into health system improvements based on the innovations and lessons from the pandemic response and building on the OHP. The countries that completed and closed COVID-19 activities by the end of Quarter 1 2024 include Bangladesh, Burkina Faso, Mali, Mozambique, Nigeria, the Philippines, Senegal, and Tanzania. Five MTaPS countries—Cameroon, Côte d'Ivoire, Kenya, Madagascar, and Rwanda—continued activities in Quarter 2 of PY6. In these countries, MTaPS supports COVID-19 vaccination integration into national immunization programs, targeting vulnerable and hard-to-reach populations, supporting medicines regulatory authorities, and actively promoting PV for vaccine safety, strengthening diagnostic networks, and engaging private-sector providers and communities.

MTaPS' COVID-19 activities are fully aligned with the objectives and result areas of the USAID Implementation Plan for the US COVID-19 Global Response and Recovery Framework, published in October 2021. The MTaPS COVID-19 interventions have supported two USAID objectives and eight result areas, as described below.

USAID OBJECTIVE 1: ACCELERATE WIDESPREAD AND EQUITABLE ACCESS TO AND DELIVERY OF SAFE AND EFFECTIVE COVID-19 VACCINATIONS

- Result area 1.2: Cold chain and supply logistics
- Result area 1.3: Human resources for health
- Result area 1.4: Service delivery
- Result area 1.5: PV and safety monitoring

USAID OBJECTIVE 2: REDUCE MORBIDITY AND MORTALITY FROM COVID-19, MITIGATE TRANSMISSION, AND STRENGTHEN HEALTH SYSTEMS, INCLUDING TO PREVENT, DETECT, AND RESPOND TO PANDEMIC THREATS

- Result area 2.1: Risk communication and community engagement
- Result area 2.4: Infection prevention and control
- Result area 2.5: Case management
- Result area 2.6: Coordination and operations

CUMULATIVE PERFORMANCE TO DATE: HIGHLIGHTS FROM THE COUNTRIES THAT COMPLETED ACTIVITIES BEFORE THE START OF YEAR 6/QUARTER 2

In **Bangladesh**, at the start of the pandemic, MTaPS, in conjunction with DGHS, rapidly produced information and communication materials on COVID-19 for the population, developed guidelines for health care settings, and trained 5,101 HCWs (1,679 female) on IPC precautions. To avoid the stockouts of vital IPC products at the peak of the pandemic, MTaPS supported the DGHS in developing and rolling out the COVID-19 eLMIS to monitor stock status of emergency IPC commodities in real time across all HFs and medical stores. Stock data can now be managed through the CMSD online portal

(cmsd.gov.bd) for both COVID and non-COVID health commodities. Another element of the DGHS's integrated MIS supported by MTaPS was the COVID-19 Vaccine Logistic Management System (vLMIS). Together with the MTaPS-supported COVID-19 vaccine safety surveillance system, which responded to over 4,500 AEFI reports, this TA contributed to achieving an impressive 82% COVID-19 vaccine coverage in Bangladesh.

In **Burkina Faso**, MTaPS supported the Directorate for Vaccine Prevention in the development of microplans related to the implementation and management of COVID-19 vaccination activities at the regional and district levels and their dissemination through workshops to 585 (80 female) participants. MTaPS trained 888 (405 female, 483 male) HCWs and supported the launch of an IPC e-Learning platform in collaboration with the Ministry of Health's Directorate of Health Information Systems to provide free access to IPC training for all health workers and to promote continuous IPC refresher training for health workers.

In **Ethiopia**, 2,481 (782 female, 1,699 male) health workers working in 122 isolation, quarantine, and treatment facilities received training on COVID-19 IPC with MTaPS support. The training played a critical role in equipping frontline workers with essential skills to contain and manage the spread of the virus. MTaPS supported the development of the National Preparedness and Response Plan and 24 regional and facility IPC guidelines and SOPs for COVID-19, including on a local solution to improve supply of hand hygiene products—alcohol-based hand rubs—to combat the spread of COVID-19 infection in hospitals.

In **Mali**, MTaPS assisted the MOH and the Directorate General for Health and Public Hygiene with launching an e-Learning platform with 10 standard IPC and 6 COVID-19 IPC modules, increasing access to IPC training in a sustainable way. MTaPS directly trained 289 (237 male, 52 female) master trainers and HCPs from 41 HFs at the district level on implementation of and monitoring compliance with the IPC guidelines, including for cleaners, ambulance drivers, and morgue attendants, to protect themselves and their community from infection risks. MTaPS helped the MOH strengthen the capacity of 383 health workers (287 male, 96 female) in vaccine-related topics, including vaccine waste collection, transport, and disposal; vaccine safety surveillance; and AEFI reporting and investigation.

In **Mozambique**, with MTaPS support, more than 6,600 HCWs received training on COVID-19-related IPC and WASH, and COVID-19 e-Learning modules were developed to support ongoing education, skill enhancement, and preparedness to effectively manage and mitigate the spread of COVID-19. MTaPS supported the MOH in the development of a COVID-19 IPC emergency supply chain management strategy, which was crucial for ensuring the timely distribution of essential medical supplies. MTaPS supported the MOH in strengthening IPC for the COVID-19 vaccination campaign by developing training materials and conducting cascade trainings for 130 HCWs (69 male, 61 female) in Maputo City and Maputo Province on COVID-19 vaccination-related IPC and waste management, thus enhancing the safety and efficiency of the national vaccination campaign.

In **Nigeria**, MTaPS supported the government to expand equitable access to COVID-19 vaccines through the engagement of private clinics and pharmacies and communication with communities in the states of Oyo, Akwa-Ibom, Cross River, Rivers, Kaduna, and Federal Capital Territory. MTaPS worked collaboratively with the National Primary Health Care Development Agency and Pharmacy Council of Nigeria, the state primary health care boards, the professional associations for pharmacists and doctors,

and other partners involved in COVID-19 vaccination, such as WHO, UNICEF, and Breakthrough ACTION Nigeria, to develop and implement engagement strategies, a vaccination training manual, SOPs, and minimum requirements for private community pharmacies to participate in the program. MTaPS trained 948 (296 male, 652 female) private HCPs on all aspects of COVID-19 immunization. As a result of the private-sector engagement in the 6 supported states, 122,170 doses of the COVID-19 vaccine have been delivered to 62,011 females and 60,163 males through 82 community pharmacies and 64 private hospitals in the supported states, showcasing a successful public-private partnership in the COVID-19 pandemic response, prompting a national plan for expanding the model to routine immunization.

In the **Philippines**, within the first 6 months of the pandemic, MTaPS conducted widescale emergency trainings of 14,076 (including 10,028 female) health workers and military personnel on IPC, HCWM, and emergency supply chain management for COVID-19, utilizing all available means for virtual training. MTaPS then transferred the training materials to the DOH Academy's e-Learning platform, where an additional 15,600 learners completed the courses. During the same period, MTaPS provided direct TA to 42 hospitals, improving their compliance with good COVID-19 IPC and HCWM practices and thereby safeguarding patient and hospital staff health. With MTaPS' support, COVID-19 vaccine management has been integrated into the national eLMIS, which helped streamline real-time tracking and distribution of vaccines and ensure efficient and transparent management of vaccine inventory. The system was expanded to include tracking of mechanical ventilators and medical devices at the hospitals and transitioned to the DOH supply chain management service. MTaPS also supported the DOH in the development of the terms of reference for engaging third-party logistics providers for COVID-19 vaccines to ensure that these service providers meet compliance standards at both the central and local government unit levels, which improves reliability in the distribution and handling of COVID-19 vaccines and is particularly critical for vaccines that require specific temperature conditions.

In **Senegal**, to minimize stigmatization of households and families visited during the sessions, MTaPS, in conjunction with regional hygiene brigades and the National Hygiene Service, carried out communications campaigns on COVID-19 to promote safe behaviors for individuals, families, and groups. MTaPS helped the MOH to strengthen capacity for decontamination and for dealing with infections at the community level by developing SOPs on IPC precautions; use of PPE; decontamination of treatment centers, households, and nonhospital facilities; and waste management; as well as by supporting 985 decontamination and disinfection sessions in Dakar, Thiès, and Diourbel. Overall, MTaPS trained 1,512 people (768 female) on IPC for COVID-19. When vaccines became available in Senegal, MTaPS supported the MOH in development and implementation of 13 COVID-19 vaccination microplans at the regional and district levels. Microplanning proved to be an efficient tool for delivering vaccines to the population, resulting in the MOH's Expanded Vaccination Program decision to roll out microplanning nationwide.

In **Tanzania**, to support the national response to the pandemic, MTaPS developed, revised, and distributed SOPs on COVID-19, trained 1,373 (640 male, 733 female) workers on COVID-19 IPC, and provided TA on IPC strengthening to 193 HFs. When vaccines became available in Tanzania, MTaPS supported the Tanzania Medicines and Medical Devices Authority (TMDA) in strengthening the AEFI surveillance system for COVID-19 vaccine safety monitoring and trained 424 HCWs (172 male, 252 female) on topics related to recording and monitoring COVID-19 vaccination and AEFIs. This support resulted in the reporting of 887 COVID-19 AEFIs to the TMDA during the project period, including 6

serious events that triggered TMDA investigation, and led to a regulatory response including feedback letters to health providers, increased supervision, and better facility equipment with AEFI kits.

In **Uganda**, a national COVID-19 IPC training manual was developed with MTaPS support to provide a standardized resource for HCPs to guide effective IPC practices across the country to combat the pandemic. MTaPS supported a mentorship program that created 45 district COVID-19 IPC committees and trained 486 mentors linked to 858 HFs in 5 regions, who trained 5,452 HCWs in IPC for the COVID-19 response. Overall, 5,148 mentorship visits were conducted over the 12 months of the program.

QUARTER 2/YEAR 6 HIGHLIGHTS FROM THE MTAPS COUNTRIES THAT CONTINUED TO IMPLEMENT ACTIVITIES THIS QUARTER

In **Cameroon**, MTaPS supported the Expanded Program of Immunization (EPI) to train 82 HCW (51 male, 31 female) from Adamawa, Littoral, Far North, North, Northwest and South West on the SOPs for vaccination waste management and the development of waste management plans. MTaPS supported the production and dissemination of 3,319 copies of the SOP manual on the disposal of biomedical waste in the French and English languages. About 6 tons of vaccination-related waste from the vaccination campaigns was safely disposed of during the reporting period.

MTaPS also supported the EPI to conduct a workshop for 59 participants (28 female) to improve the data collection and validation from vaccination campaigns previously organized in hard-to-reach areas. During this workshop, the aggregated data was entered into the national DHIS 2 platform.

In **Côte d'Ivoire** in Quarter 2, MTaPS provided technical and financial support to the Directorate General for Health in implementing the operational plan for integrating COVID-19 vaccination into routine immunization campaigns against Measles-Rubella, human papillomavirus (HPV), and Poliomyelitis in the 113 districts of Côte d'Ivoire. MTaPS provided technical assistance through supervision in 9 health districts (Guitry, Toumodi, Méagui, San Pedro, Sakassou, Béoumi, Bouaké Sud, Korhogo, and Ouangolo) by collecting, validating, and updating the data on the COVID-19 population target (pregnant women) from each health center. Through a 5-day workshop, the COVID-19 and other vaccine-specific microplans were consolidated to optimize the campaigns. Integration of COVID-19 vaccination into routine EPI campaigns requires additional training on safe vaccine administration for about 890 people. In preparation for the future trainings, MTaPS conducted a workshop for 41 attendees (29 male,12 female) to revise and update management tools and training modules, including on: EPI communication; methods to increase immunization coverage; supervision; surveillance, monitoring, and data management; planning and evaluation; cold chain management; vaccine management; and immunization safety.

MTaPS continued to provide support to the National One Health platform (OHP). MTaPS hired and assigned a consultant to support the update of the National strategic plan of the OHP, development of the operational action plan for the multisector secretariat of OH, and to organize and facilitate the OHP monitoring committee meeting scheduled for April 2024. MTaPS provided technical and logistical support to OHP to conduct monitoring and evaluation activities in line with the M&E plan of the National Action Plan for Health Security (NAPHS). MTaPS delegated three staff members to the OHP to support the implementation of NAPHS and organize a workshop on strengthening the surveillance of zoonotic diseases. The workshop was attended by 53 participants from various fields, including human health, animal health, and environmental health. Participants reached consensus on a road map for

strengthening multisectoral surveillance and risk monitoring of zoonotic diseases at the Human-Animal-Environment interface.

MTaPS supported a technical working meeting attended by specialists representing Human Health, Animal Health, Environmental Health, and technical and financial partners, such as USAID, MTaPS, FAO, and the CDC. The meeting resulted in the launch of the Surveillance and Notification Technical Working Group (SN TWG) and the health information exchange circuit between different sectors of One Health. The group reached consensus on the integration with the "STOP Spillover" initiative that focuses on viral zoonotic diseases and drafted a road map for establishing a coordinated surveillance and monitoring system for health risks at human-animal-environment interfaces.

In **Kenya**, MTaPS focused on supporting strengthening the national PV system. MTaPS supported the PPB to undertake a follow-up assessment of the Kenyan PV system in selected health facilities in Nairobi, Nyamira, Bomet, Uasin Gishu, West Pokot, Nakuru, Kiambu, and Machakos Counties, and five Marketing Authorization Holders (MAHs), and four Public Health Programs (PHPs), including the National AIDS and Sexually Transmitted Infection (STI) Control Program (NASCOP), National Malaria Control Program (NMCP), National TB and Leprosy Program and the Mother, Neonate, and Child Program (MNCP) to ascertain the status and results of the implementation of PV interventions using the standard IGAD-EAC PV system assessment tool. The assessment results will be available in Quarter 3 2024.

MTaPS provided technical leadership to enhance the Pharmacovigilance Electronic Reporting System (PvERS/mPvERS) to allow for direct reporting by MAHs and additional data analytics and streamline Clinical Trial Registry as part of the good clinical practices (GCP) inspection system for safety monitoring. With MTaPS support, the PPB convened the Pharmacovigilance Expert Review and Advisory Committee (PERAC) meeting to analyze serious adverse event reports and make actionable regulatory recommendations aimed at enhancing medications' and vaccines' safety at all levels. Another important result was the development of prioritized guidelines for PV activities, including a comprehensive risk communication and response plan to improve public awareness of side effects from the vaccine and to help counter misinformation.

MTaPS continued to build national capacity in clinical trials. With MTaPS support, the PPB revised the Guidelines on Conducting Good Clinical Practice (GCP) Inspections in Kenya and the Qualification of a GCP Inspector Manual based on the results of internal audit and developed a new SOP on the Assessment of New Clinical Trial Protocols and Protocol Amendments. These results bring the PPB closer to attaining ML 3 status.

In **Madagascar**, MTaPS continued technical support to medical laboratories of Madagascar (LA2M) to improve the surveillance of public health and epidemic diseases such as COVID-19, TB, and HIV. MTaPS conducted a Leadership Development Program Plus (LDP+) workshop focusing on the leadership responsibilities of the National Reference Laboratory development of LA2M improvement plans. The MTaPS expert from the Côte d'Ivoire team helped with drafting of a three-year action plan that included the development of technical specifications for the management software and SOPs for the LA2M Laboratory Information System and networking. MTaPS assisted Directorate of Pharmacy, Laboratory, and Traditional Medicine (DPLMT) to conduct supervisions of clinical biology laboratories and organized

a follow-up meeting on the impact of the 2023 workshop on M&E of the National Strategic Plan for Laboratory Development (PSNDL) implementation.

MTaPS also helped DPLMT to develop and adopt a list of tracer consumables and reagents to track their availability and monitor the performance of procurement supply management.

A training session for 135 (78 male, 57 female) users of the laboratory supply management manual was conducted for laboratory supply coordinators from 14 regions.

In **Rwanda**, MTaPS continued to strengthen GCP capacity by conducting training for 23 (17 male, 6 female) people. Among them were the Rwanda FDA staff, clinical trialists, and clinical researchers. This intervention was developed in response to the findings made during the Rwanda FDA MTaPS-supported site inspections of clinical trials processes.

MTaPS supported Rwanda FDA to address institutional development plan (IDP) actions that resulted from the previous WHO GBT assessment findings and to prepare for the upcoming final assessment for ML 3 by preparing responses to the assessment team's queries on different GBT indicators. The ML 3 assessment was conducted between February 26 and March 7, 2024. The assessment team noted that the Authority is nearly at ML 3 with only 3 of 157 IDPs not yet addressed. Once Rwanda FDA fully acquires ML 3, it will have the capacity to regulate vaccines manufacturing, including COVID-19 and other vaccines to be manufactured in Rwanda by BIONTECH.

MTaPS continued its support to national electronic platforms. The Rwanda FDA information and communication technology (ICT) team and other staff (4 male, 6 female) were introduced to IRIMS architecture, database management, system hosting, and end-user support via an 11-day training conducted by the software developer. This was to enhance their capacity to ensure the sustainability and maintenance of the system, which will also facilitate registration of COVID-19 vaccines among other pharmaceutical products. The same team was also trained on the updates to PViMS meant to enhance registration of COVID-19 vaccines and reporting of adverse events as per WHO standards; this training included building the analytical dashboard to visualize the PV information to support RFDA's evidence-based decision making.

For more information about MTaPS' COVID-19 activities, click here.

Table 1. MTaPS COVID-19 Quarter 2, FY24 indicators[3] (detailed breakdown can be found in Annex 3)

Indicator and Disaggregation		Q2 FY24	Total from March 2020
Objective 1. Accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations			
CV.1.3-3 Number of people trained on COVID-19 vaccine-related topics with MTaPS' support			
	Number of people trained	151	11,697
Sex	Male	90	6,246
	Female	61	5,259
	Unknown sex	0	192
CV.1.3-4 Number of health workers who are remunerated by the US Government (USG) to support workload required for COVID-19 vaccine delivery in the reporting period			

[3] The following countries have approved COVID work plans and completed activities during PY6 Quarter 2: Cameroon, Côte d'Ivoire, Kenya, Madagascar, and Rwanda.

	Number of people renumerated	0	8,137
Cadre	Clinical	0	873
	Community/law	0	271
	Data management	0	1,852
	Supervision and logistics	0	5,141
CV.1.5-9 Number of AEFI reports reviewed with MTaPS' support among those submitted to country monitoring systems			
	Number of AEFI reports reviewed with MTaPS' support	3	9,390
Objective 2. Reduce morbidity and mortality from COVID-19, mitigate transmission, and strengthen health systems, including to prevent, detect, and respond to pandemic threats			
CV.2.3-15 Number of health workers trained in COVID-19 testing or specimen transport with USG support			
	Number of health workers trained	155	245
Sex	Male	91	138
	Female	64	107
	Unknown sex	0	0
CV.2.6-22 Number of policies, protocols, standards, and guidelines across any of the result areas developed or adapted with MTaPS' support			
	Number of policies, protocols, standards, and guidelines	26	149

COVID-19 IMMUNIZATION COSTING

OVERVIEW

LMICs have been facing an incredibly challenging vaccine rollout and COVID-19 vaccine delivery, and the cost to deliver these vaccines is highly uncertain. According to WHO, as of June 2023, just 37% of Africa's population had completed their primary vaccination series, compared with a coverage of 70% at the global level.[4]

Data on the actual costs of delivering COVID-19 vaccines in LMICs are limited. As the supply of vaccines increases, it is important to know how much is spent to deliver the vaccine to inform strategies and plans and identify funding sources and gaps. Although existing data, including pre-COVID-19, on the costs of routine immunization, immunization campaigns, and other health campaigns can be used to generate plausible estimates of these costs, targeted data collection efforts are necessary to refine these estimates and ensure that they remain grounded in the realities faced by LMICs.

There are some resources, such as tools and guidance developed by WHO and its partners, which can be helpful in generating estimates of COVID-19 vaccine delivery costs. The modeled, top-down work conducted by the COVAX Working Group on vaccine delivery costs produced a single estimate of USD 1.41 per dose. Importantly, the COVAX Working Group also limited its early cost estimates work to 20% coverage of the population, even though coverage rates in LMICs continue to languish far below 20%. It is important to build a model that takes a broader perspective on how and where the population will get vaccinated.

CUMULATIVE PERFORMANCE TO DATE

MODELING THE COST OF DELIVERING COVID-19 VACCINES

To date, MTaPS has assessed the available modeling tools, and determined that the Harvard/COVAX model has the granularity and features that can be fit for purpose. MTaPS conducted a model adaptation and developed a scenario builder on the various cost estimates of delivering COVID-19 vaccines under different assumptions. The scenario builder was used four times.

COSTING STUDY MALAWI

Furthermore, MTaPS has been gathering more detailed vaccine delivery expenditure data in Malawi. MTaPS designed protocols for the country studies based on the How to Cost Immunization Programs Guide, WHO's COVID-19 vaccine introduction and deployment costing tool, and ThinkWell's COVID-19 Vaccine Delivery Costing protocol.

In Malawi, MTaPS sought and was granted IRB approval. Data collectors have been gathering expenditure data through surveys and interviews in the national office, supplemented by secondary data collection at 20 facilities. After MTaPS received IRB approval from the National Health Sciences Research Committee (NHSRC) of Malawi, a team of experts immediately started the data collection

[4] https://ourworldindata.org/covid-vaccinations

efforts in the Mangochi, Mwanza, Mzimba South, and Lilongwe districts. Data collection was completed by the end of February 2023. The data cleaning and analysis were completed by the end of June 2023.

Although the global COVAX model was a powerful tool to estimate the cost to deliver COVID vaccinations at a time of great uncertainty, the real cost of delivering the COVID-19 vaccine at 20 health facilities in Malawi was found to be much higher than the modeled estimate, mostly due to hidden expenses, such as the time health workers had to dedicate to the vaccination efforts.

Sharing the findings from MTaPS' work is crucial for the final stages of the project. The team presented the findings of costing data of the vaccine delivery in Malawi to the USAID Malawi mission and the Ministry of Health in Malawi.

GLOBAL SURVEYS

Global estimates require assumptions, which would benefit from in-country intelligence. MTaPS conducted online surveys of health experts working in each of its countries to gather real-time COVID-19 vaccine delivery data, including human resources, types of delivery sites/methods, availability of supplies, capacity of cold chain, implementation of demand generation campaigns, and integration of vaccine services into the health systems. Two surveys, completed in November 2021 and May 2022, identified evolving trends in vaccine delivery at the country level. MTaPS conducted a third online survey of health experts working in each of its countries to gather real-time COVID-19 vaccine delivery data throughout the changing dynamics of the pandemic.

ADDITIONAL WORK

Findings from both the country study and the global surveys were presented at the Immunization Economics Special Interest Group (SIG) Pre-Congress Session of the International Health Economics Association (IHEA) Congress in Cape Town in July 2023 and to USAID in September 2023. The findings of two rounds of global surveys were published by the journal *Vaccine* in September 2023.

Lastly, MTaPS has supported ad hoc requests beyond the scope mentioned in the work plan. In January–February 2022, MTaPS conducted a desk review across 3 databases, screened 530 articles, and identified 20 studies relevant to social mobilization and campaign/outreach strategies. The purpose of this exercise was to gather insights to improve the MTaPS-adapted Harvard/COVAX costing model.

MTaPS has conducted assessment of Cooperative for Assistance and Relief Everywhere (CARE) studies on the cost of COVID-19, conducted comparative assessment with Access to COVID-19 Tools (ACT) Accelerator studies, and led two large presentations with major stakeholders at the USAID-UNICEF–led Funders Forum and the USAID COVID-19 Task Force Leadership.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

Two manuscripts have been developed for journal submission to present the results from the third global survey, which has been submitted to the journal *Vaccine*. The findings from the costing work in Malawi is under final review and will be submitted in Quarter 3.

BEST PRACTICES/LESSONS LEARNED

None this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Submit the results of the Malawi costing study to journal.	May 2024

C. MATERNAL, NEONATAL, AND CHILD HEALTH (MNCH)

OVERVIEW

The goal of the MTaPS MNCH core-funded portfolio is to ensure the availability and appropriate use of safe, effective, and quality-assured medical products and effective pharmaceutical services to reduce maternal, newborn, and child mortality by strengthening pharmaceutical systems. Strengthening pharmaceutical systems is essential to achieving SDG 3 targets 3.1 and 3.2 for MNCH and requires a holistic look beyond product availability and logistics to additionally strengthen other system components—such as governance, regulation (including PV), financing, information, human resource capacity, and pharmaceutical services—that affect access to and appropriate use of medicines, technologies, and supplies.

CUMULATIVE PERFORMANCE TO DATE

OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE INCREASED

Sub-objective 1.3: Stakeholder engagement and empowerment, including civil society and consumers, increased for access to medicines, technologies, and supplies for women, newborns, and children

In PY3, MTaPS developed a discussion paper and an accompanying summary brief of key messages and action points on engaging civil society in social accountability to improve access to and appropriate use of safe, effective, and quality-assured MNCH medical products and services. In Quarter 3 of PY5, MTaPS and the MOMENTUM Knowledge Accelerator cohosted a knowledge exchange on best practices in social accountability for more than 60 experts from other USAID-funded projects to discuss the lessons learned from the MTaPS discussion paper, underscoring similarities across varied contexts in the challenges and approaches to addressing social accountability.

OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES, INCLUDING REGULATION OF MNCH PRODUCTS, STRENGTHENED

Sub-objective 2.1: Regulatory system for MNCH medical products improved

Following the PY2 mapping of challenges in registering MNCH medical products in 9 countries, MTaPS supported Mozambique's regulatory authority, ANARME, IP, to build capacity of 13 assessors from ANARME, IP in the assessment of bioequivalence studies for generic oral medicines, including MNCH medicines. MTaPS also helped ANARME, IP to increase the visibility and transparency of registration procedures through a workshop with 70 manufacturers, importers, and distributors. In PY4, MTaPS held a regional knowledge exchange with regulators from SADC member states and selected manufacturers of MNCH medicines on the optimization and prioritization of MNCH medical product registration. A follow up ZAZIBONA special session on joint review of MNCH medicines was held in Tanzania in October, facilitated by MTaPS, WHO, and the ZAZIBONA coordinators. Four maternal health products (misoprostol tabs, tranexamic acid injection, magnesium sulphate injection, and calcium gluconate injection) were reviewed by the group representing 15 SADC countries, and outstanding questions were prepared for the manufacturers after review of the technical files. MTaPS has developed an advocacy document for NRAs to prioritize the registration of MNCH medicines in their countries. A summary of this work was presented at the International Maternal and Newborn Health Conference in

Cape Town in May 2023 and at a side meeting at the 6th Biennial Scientific Conference on Medical Products Regulation in Africa (SCOMRA) in Egypt in December.

Additionally, to strengthen the regulation of MNCH medical devices and ensure their quality, safety, and effectiveness, MTaPS supported the AMDF to develop a guideline on specific considerations for regulating MNCH medical devices, which was disseminated across the continent through a virtual orientation hosted by AMDF. Additionally, MTaPS supported the AMDF to hold an in-person capacity building workshop in Tanzania, hosted by the Tanzania Medicines and Medical Devices Authority (TMDA). The workshop provided guidance on the assessment of technical files for MNCH medical devices for medical device assessors from 10 African countries. The participants appreciated the opportunity to review technical files of 3 MNCH medical devices to learn from the process and to apply the specific guidance that the AMDF published with MTaPS' support.

OBJECTIVE 3: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION OF MNCH MEDICINES FOR DECISION MAKING INCREASED AND GLOBAL LEARNING AGENDA ADVANCED

Sub-objective 3.1: PSS global learning agenda advanced for MNCH

In PY1, MTaPS seconded a pharmaceutical advisor to the GFF who developed resources for GFF country focal points and country teams on the management of medicines and supplies and guidance on quality in medicine procurement. MTaPS conducted webinars for GFF country teams on the importance of prioritizing a robust pharmaceutical system to support MNCH interventions and successfully advocated for inclusion of a section on managing medicines in the GFF annual report. As a result of the secondment, the GFF recruited a pharmaceutical advisor as staff.

In Liberia, the MTaPS senior principal technical advisor supported the MOH and the WB PBF team to establish an FA for county procurement of specific MNCH medicines and supplies from approved wholesalers when the Central Medical Stores are unable to supply them. The FA is a means for counties implementing PBF to ensure availability of quality medicines.

As part of the global learning agenda on pharmaceutical systems for MNCH, MTaPS developed a microlearning seminar series to raise awareness and understanding of why PSS is important for women's and children's health outcomes. Three microlearning videos complement MTaPS' training programs on PSS and are posted as a key part of the PSS 101 e-Learning course.

In PY2, MTaPS described the subnational procurement practices in Liberia, Nigeria, and Tanzania in a technical brief highlighting key areas that should be considered to ensure the quality of products procured. In Nepal, through a mapping conducted in PY2 and PY3 and disseminated in PY4, MTaPS supported the MOHP in understanding the challenges of subnational procurement of essential medicines, including for MNCH. MTaPS also supported the MOHP in identifying key interventions to improve the quality of and access to medicines procured at subnational levels and including those interventions in annual budgets and plans at the national and subnational levels. Building on the mapping of subnational procurement practices in Nepal, MTaPS developed a global guidance document on best practices in subnational procurement of MNCH commodities in the public sector (a summary was also included in the procurement and supply management (PSM) manual on procurement of MNCH medicines) and disseminated it in an external webinar.

OBJECTIVE 5: PHARMACEUTICAL SERVICES FOR WOMEN, NEWBORNS, AND CHILDREN—INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE—IMPROVED

Sub-objective 5.1: Availability of essential medicines, supplies, and other health technologies for MNCH improved

In PY2, MTaPS updated the 2016 forecasting supplement for lifesaving essential reproductive, maternal, newborn, and child health (RMNCH) commodities aligning it with updated WHO recommendations. The updated RMNCH forecasting supplement, available in English and French, has been disseminated through several webinars to more than 160 people and 8 country teams and is referenced in the recent Global Fund (GF) guidance to countries to consider the inclusion of nonmalaria commodities in their GF proposals. To support countries to include nonmalaria commodities at the community level in their GF funding requests, MTaPS developed tools for countries to estimate their needs and facilitate completion of the commodities gap analysis table required for GF funding requests. MTaPS participated in the mock Technical Review Panel for malaria in Dakar and Ethiopia, engaging with countries submitting funding requests in windows 2 and 3. MTaPS worked with 7 countries (Angola, Ethiopia, Gambia, Kenya, Liberia, Madagascar, and Rwanda) to consider including nonmalaria iCCM commodities in their GF funding request, and 3 countries included nonmalaria commodities.

After identifying a gap in support for countries to ensure quality of medical oxygen, MTaPS developed a technical resource document for the quality assurance of medical oxygen, from the source throughout the distribution chain, to delivery to the patient, through a consultative process. The document was disseminated in a well-attended virtual event, with panelists and oxygen champions from across Africa and was also used in a workshop on quality assurance (QA) of oxygen in Rwanda, co-hosted with the RBC, to reflect on how QA practices of medical oxygen can be modified and/or improved. The workshop resulted in a draft QA framework for medical oxygen systems in Rwanda.

Sub-objective 5.2: Pharmaceutical services for women and children improved

In PY1, MTaPS updated a set of job aids and dispensing envelopes for HCPs and caregivers to promote adherence to correct treatment protocols for amoxicillin dispersible tablets (WHO-recommended first-line treatment for pneumonia in children under 5 and, in combination with gentamicin, for possible serious bacterial infections in newborns). Following preparations in PY3, MTaPS, in collaboration with UNICEF, USAID, GHSC-PSM, and PQM+, held a series of consultative meetings in PY4 with wide stakeholder engagement to address bottlenecks in access to and appropriate use of amoxicillin and gentamicin. Key points are summarized in a call-to-action paper that provides actionable solutions for countries and was widely disseminated, for example at the 2nd Global Pneumonia Forum in Madrid in April 2023 and during webinars for USAID missions and with the CHTF to spark action at the country level.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES, INCLUDING REGULATION OF MNCH PRODUCTS, STRENGTHENED

Sub-objective 2.1: Regulatory system for MNCH medical products improved

Building capacity for regulating medical devices in a region, with a focus on MNCH medical devices: MTaPS provided support to the TMDA to improve regulation of medical devices with a focus

on devices for MNCH to position them to be potentially considered as a regional center of excellence once the criteria are established by the AMDF.

This support to the TMDA included an exchange visit of TMDA staff to a strong regulatory authority for medical devices. In February, two assessors from TMDA made a weeklong study visit to the Saudi Food and Drug Authority (SFDA), a WHO collaborating center for medical device regulation, in Riyadh. During the visit, they reviewed technical files of medical devices and IVDs as part of the study visit (a pregnancy test and a pulse oximeter/patient monitor). They identified regulatory procedures, particularly for the renewal of applications, post-market surveillance, and sample requirements, which they plan to integrate into their practices at TMDA. Following their return to Tanzania, MTaPS worked with the assessors to document their key learnings and action points. The plan is to share the lessons learned with other TMDA regulatory personnel and incorporate new approaches into the TMDA system for regulation of medical devices. The visit also established cooperation between the TMDA and the SFDA for future consultations and information exchange.

Gudula Mpanda and Shani Maboko from TMDA visiting Saudi FDA in February 2024. Photo credit: TMDA

The TMDA also hosted three regulators from the African continent as a twinning visit to gain capacity to mentor and build capacity of the visiting regulators. MTaPS supported the TMDA to develop a program for the twinning visit and arranged the logistics for the travelers from Burundi, Burkina Faso, and Togo. Medical devices regulatory officials visited the TMDA in Dodoma from March 4 to 9, during which time they reviewed the TMDA's regulatory procedures for medical devices and the filing system in use. They also reviewed technical files for a CPAP system, an ovulation test kit, and an umbilical cord clamp. Additionally, the regulators developed action plans delineating practices they intended to implement within their respective agencies. They established a mentorship relationship with the TMDA to assist in executing these action plans.

Supporting the streamlining of registration of MNCH medicines at the continental level: MTaPS met with the Africa CDC to advocate for the inclusion of MNCH tracer medicines in the priority list of medical products to be considered for continental assessment for public health need and emergencies. The team learned that the list has not yet been developed, but that MTaPS will be connected to the process as the list is developed.

MTaPS is also finalizing the document to help NRAs advocate for the prioritization of registration of MNCH medicines, taking into account the feedback received at the side event hosted by AUDA-NEPAD and MTaPS at the 6th Biennial SCOMRA in Egypt in December 2023. The revised document and the side event meeting report will be shared with AUDA-NEPAD in early April 2024 to determine the next steps in dissemination and action.

OBJECTIVE 5: PHARMACEUTICAL SERVICES FOR WOMEN, NEWBORNS, AND CHILDREN—INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE—IMPROVED

Sub-objective 5.1: Availability of essential medicines, supplies, and other health technologies for MNCH improved

Improving access to new and essential maternal and newborn commodities: MTaPS held conversations on developing a caffeine implementation guide with the Clinton Health Access Initiative (CHAI) and GHSC-PSM. MTaPS drafted an outline and is collaborating with CHAI and GHSC-PSM to pool technical resources from which to draw key practical guidance.

Technical support to countries to implement GF guidance for procurement of nonmalaria commodities for community case management: MTaPS participated in a webinar on supply chain for community health workers on January 23. The webinar was hosted by the commodities and iCCM subgroups of the CHTF with GHSC-PSM. The MTaPS presentation focused on the opportunity of the GF to finance commodities for community use, the importance of being able to estimate the needs of the community level, and the financing of the rest of the supply chain, not just for procurement. The webinar had over 600 registrants and 263 participants.

MTaPS began holding discussions this quarter regarding support to countries to utilize GF funding for nonmalaria commodities. MTaPS had conversations with the CHTF and the Building Integrated Readiness for Community Health (BIRCH) project (led by Last Mile Health) to discuss potential collaboration and will continue discussions about next steps, how GF funding has been used for iCCM, and bottlenecks identified by the BIRCH project.

Supporting countries to define actions to improve uptake of amoxicillin and gentamicin: MTaPS held conversations this quarter with MOMENTUM country and global leadership around the selection of countries to support, with Zambia and Madagascar identified as countries of interest.

Promoting improvement in QA of oxygen: MTaPS and the RBC presented at the oxygen collaborators call on January 31, providing a summary of the November 2023 workshop in Rwanda on oxygen QA and presenting next steps. The Rwanda workshop report is now available on both MTaPS' and RBC's websites. MTaPS also provided input to ensure that QA practices were integrated in the Rwanda national oxygen strategy, which is being updated.

Kate Kikule and Jane Briggs from MTaPS have been invited to attend the WHO meeting: "National Oxygen Scale-Up Framework: Road to Oxygen Access," which will take place in Dakar, Senegal in May. MTaPS has also been working to ensure the participation of a colleague from the RBC to present on the oxygen QA framework developed during the November 2023 workshop. MTaPS has prepared a poster on the QA resource document and the work supported in Rwanda for the WHO meeting, which is being reviewed by USAID and RBC before being shared with WHO. Additionally, USAID and MTaPS provided input to the WHO technical specifications for health facility–based medical oxygen system products.

BEST PRACTICES/LESSONS LEARNED

- Using global collaborative centers in medical products regulation facilitates progress in new areas of regulation. South-to-south collaboration can also be a useful approach as evidenced by TMDA hosting a twinning visit with other regulatory authorities on the continent.
- Bringing together specialists from the different levels of medical oxygen delivery yields cooperation and understanding of the unique roles each plays in QA of the product throughout the distribution chain. The QA of medical oxygen workshop in Rwanda revealed key health professionals who need to be brought on board, as well as the importance of their roles to improve the delivery of safe and quality-assured medical oxygen to patients.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Share the advocacy document on prioritization of registration of MNCH medicines with the Evaluation of Medicinal Products Technical Committee for dissemination on the continent.	April 2024
Develop draft caffeine implementation guide.	June 2024
Plan country activities to increase uptake of amoxicillin.	June 2024
Attend the WHO meeting on "National Oxygen Scale-Up Framework: Road to Oxygen Access" in Dakar, Senegal in May.	May 2024

D. OFFICE OF POPULATION AND REPRODUCTIVE HEALTH (PRH), COMMODITY SECURITY AND LOGISTICS (CSL)

OVERVIEW

USAID's CSL division promotes the long-term availability of a range of high-quality contraceptives, condoms, and other essential RH supplies, and strengthens global and country systems from manufacturers to service sites. MTaPS, with CSL funds, contributes to the division's goal of promoting the long-term availability of, and improving accessibility to, a range of essential FP/RH commodities by analyzing and recommending approaches for increasing financing and strengthening supply and logistics services.

MTaPS' strategic approach is based on the understanding that implementing a systems strengthening approach in a country will lead to better commodity security. If MTaPS effectively engages with the various entities in a country—including the private sector, providers, and other community stakeholders—through targeted advocacy and evidence-based technical assistance, government financing of FP/RH commodities will increase. This will contribute to stronger supply and logistics services that will result in the improved availability of, and access to, these commodities at service delivery points.

CUMULATIVE PERFORMANCE TO DATE

INCREASING GOVERNMENT FINANCING OF FP COMMODITIES AND SUPPLY CHAIN IN A DECENTRALIZED HEALTH SYSTEM: A PEA

MTaPS conducted a PEA in Uganda to examine the factors that influence domestic financing of FP products and associated supply chain costs and may shape decisions around increasing government financing within the country's decentralized health system. The PEA enabled the MOH, USAID, and other stakeholders to be better informed about the factors that influence priority setting and financing and procurement allocations for FP commodities, essential medicines, and health products more broadly (at different levels of the system) as well as possible entry points and interventions. In addition, the PEA is a useful contribution to the development and implementation of a 10-year supply chain roadmap aimed at supporting the GOU to achieve self-reliance in the supply chain and securing essential medicines and supplies. Based on the analysis of the desk review and PEA interview data, along with a stakeholder validation meeting, MTaPS developed a policy brief entitled "Increasing Government Financing and Resource Allocation for FP Commodities and Supply Chain Operations in Uganda: A Political Economy Analysis." MTaPS also developed a module that will allow others to apply the streamlined PEA methodology that MTaPS found effective. The PEA in Uganda was included in a webinar entitled "How Can Thinking and Working Politically Strengthen Your Health Commodity Supply Chain?" which was organized by the USAID LHSS, and the policy brief and methods module were referred to in the USAID LHSS primer entitled "The importance of political economy analysis for strengthening health commodity supply chains."

ADVOCACY FOR GOVERNMENTS TO LEVERAGE PRIVATE-SECTOR LOGISTICS CAPABILITIES TO INCREASE ACCESSIBILITY AND AVAILABILITY OF FP COMMODITIES

In 2021, MTaPS—in collaboration with government counterparts—undertook the first phase of a project to leverage the capabilities of best practice 3PLs and lead logistics service providers (LLPs),

which started with political economy, operational capability, and cost-benefit analyses in Nigeria and the Philippines. Following analyses of evidence and deliberations, MTaPS developed and disseminated technical reports for Nigeria and the Philippines describing study results and recommendations. In addition, MTaPS produced two advocacy briefs—one for each country—entitled "Building a More Efficient Public-Health Supply Chain through 4PL." MTaPS also facilitated a webinar for USAID staff in July 2022 on leveraging best practice 3PL or 4PL providers. As part of this phase of the activity, MTaPS developed and used an outsourcing decision framework. This tool could help public-sector decision-makers navigate critical factors and steps to leverage private-sector service providers in supporting the public health supply chain.

USE OF RETAIL PHARMACIES AS A SOURCE OF FP PRODUCTS AND OTHER ESSENTIAL MEDICINES FOR PUBLIC-SECTOR CLIENTS IN LMICS: A THOUGHT LEADERSHIP PAPER

MTaPS developed a thought leadership paper on using retail pharmacies as a source of FP products and other essential medicines for public-sector clients in LMICs. The paper identified and documented examples of high-income countries and LMICs using private-sector outlets to serve public-sector clients with FP and other essential medicines. MTaPS developed an analytical framework to guide the assessment on how the public sector in high-income countries incorporates retail pharmacies in the provision of FP and essential medicines and mitigates risks associated with the engagement of private-sector pharmacies. MTaPS developed country case reports from three high-income countries (Spain, Sweden, and the United Kingdom) and three LMICs (Namibia, Ghana, and South Africa) and a thought leadership paper highlighting the key considerations, advantages, and disadvantages of engaging retail pharmacies as a source of essential medicines and FP products in LMICs along with lessons learned in the context of COVID-19. The paper was disseminated at an internal USAID webinar and a global learning series webinar and was published in the Journal of Pharmaceutical Policy and Practice.

EVALUATING THE EFFICACY OF USING A DIGITAL CONSUMTION TRACKING AND WORKFLOW MANAGEMENT TOOL TO DECREASE UNMET DEMAND AND FOSTER CONTINOUS CONTRACEPTIVE USE AT LAST-MILE POINT OF CARE

MTaPS completed an impact evaluation of Open Smart Register Platform (OpenSRP), an application to manage clients, stock, and workflow on unmet FP needs at the last mile in Luapula Province, Zambia. The study design was a two-arm cluster-randomized trial with the aim of assessing the impact of the OpenSRP intervention on unmet FP demand among last mile people of childbearing potential. This effectiveness evaluation was paired with a concurrent implementation evaluation, making it a Type 2 Hybrid Design. The evaluation had three key objectives:

- Assess the impact of the intervention on satisfaction and continued use of modern FP methods among people with childbearing potential at the last mile
- Understand the impact of the intervention on community-based distributors' (CBDs') FP stock management and dispensing
- Understand the key drivers of the stock management, dispensing, quality service provision, and clinical outcomes associated with the implementation of OpenSRP at the last mile

For the intervention, we developed the application on OpenSRP for the integrated management of FP services and commodities among CBDs. The tool included functionalities for client identification and registration; service provision; FP method selection and counseling; tracking dispensing and unmet need;

scheduling of follow-ups; client referrals; stock management; and reporting. We trained 104 CBDs from the intervention arm of the study—divided into four cohorts—in two-day sessions and provided each CBD with a configured tablet and accessories. During the six-month post-intervention period, the team supported the CBDs through monthly supervisory visits in coordination with their affiliated health facilities and remote technical support via a hotline and WhatsApp.

We employed mixed methods for data collection and collected data using three main sources at baseline and endline from the intervention and control sites: 1) short phone surveys with people of childbearing potential in the community; 2) existing stock management records (eLMIS and paper records, depending on study arm); and 3) in-depth interviews with CBDs and health systems staff.

DISABILITY INCLUSION IN THE HEALTH SUPPLY CHAIN WORKFORCE

MTaPS conducted a study to understand the status of disability inclusion in the health supply chain labor market in LMICs and to provide recommendations on strategies for improving inclusive employment practices in the health supply chain. MTaPS formed a TWG to facilitate and guide the study, including identifying key stakeholders and nascent disability inclusion efforts in the various contexts with which TWG members are familiar. MTaPS completed a landscape analysis, a global survey on disability inclusion efforts disseminated in English and French to health supply chain stakeholders, and a case study in Ethiopia. A key finding was that although countries are becoming increasingly aware of the importance of disability inclusion in the labor market, no specific efforts for the health supply chain relative to the broader labor market are underway. The number of related policies and guidelines developed may have increased, but implementation, enforcement, and monitoring remain a key challenge.

ENGAGING 3PLS/4PLS TO SUPPORT THE PUBLIC HEALTH SUPPLY CHAIN

In 2022–2023, MTaPS focused on implementation of some of the major recommendations from the first phase of the activity in Nigeria. MTaPS—in close collaboration with the National Products Supply Chain Management Program (NPSCMP), state health supply chain management teams, and development partners—produced an implementation guide, "Operationalizing a Third-Party Logistics Service Provider (3PL) or a Lead Logistics Service Provider (LLP) Supply Chain Model," that is expected to be incorporated into a larger government document to guide outsourcing of components of the health product logistics services to the private sector. The guide is expected to facilitate the operationalizing of the federal MOH's policy on engaging with private-sector service providers. Kaduna State was chosen for further assessment and technical assistance from MTaPS. Consequently, MTaPS—in collaboration with national- and state-level stakeholders—developed service specifications and a performance management plan to increase the effectiveness and efficiency of engagement of best practice 3PL and LLPs for outsourcing the distribution of health commodities, including FP products, in Kaduna State. Though the documents focus on Kaduna State, the general approaches can easily be modified to be used in any state for any single element of the supply chain or the entire end-to-end supply chain operations. In addition, MTaPS facilitated two face-to-face advocacy and learning workshops in Nasarawa, Nigeria, involving 38 (10 female and 28 male) stakeholders from NPSCMP, the MOH, and state and development partners. The workshops were used to create awareness, strengthen local capacity, and advocate for more effective and efficient leveraging of private-sector capabilities to support public-sector health commodity logistics management. The resources developed for national- and state-level use were also validated during the workshops.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

ACTIVITY 1: EVALUATING THE EFFICACY OF USING A DIGITAL CONSUMPTION TRACKING AND WORKFLOW MANAGEMENT TOOL TO DECREASE UNMET DEMAND AND FOSTER CONTINUOUS CONTRACEPTIVE USE AT LAST-MILE POINT OF CARE

MTaPS completed the endline analysis for the impact evaluation of a client, stock, and workflow management application (OpenSRP) on unmet FP needs at the last mile in Luapula Province, Zambia. Regarding the primary outcome of FP resupply, over 96% of the intervention group received their resupply from a CBD at endline compared to 84% at baseline, a statistically significant increase. FP clients in the intervention and control groups found it easy to obtain the FP products (96%) and they reported high levels (97.5%) of satisfaction with the counseling they had received. Significantly higher ease of FP use and higher satisfaction was reported among those clients receiving resupply from CBDs in the intervention arm. There was also a statistically significant and programmatically meaningful improvement in the CBD stock levels at endline. Health facility and district staff emphasized the application's utility in improving counseling quality, and stock management and planning, while CBDs emphasized improvements in their record keeping and workflow efficiency. The findings indicate that the rollout and scale up of OpenSRP would improve FP services at the last mile. The team has submitted the draft endline report to USAID for feedback.

MTaPS also delivered an oral presentation entitled "Strengthening community health workers' capacity for stock management and service provision at the last mile" at the People that Deliver (PtD) Global Indaba in March in Bangkok, Thailand.

Tamara Hafner presenting the OpenSRP study at PtD Bangkok. Photo credit: Lauren Herzog

ACTIVITY 2: DISABILITY INCLUSION IN THE HEALTH SUPPLY CHAIN WORKFORCE

MTaPS completed a study to understand the status of disability inclusion in the health supply chain labor market in LMICs to provide recommendations on strategies for improving inclusive employment practices in the health supply chain. The study found that while it is now common for countries to have disability inclusion policies and strategies to guide employment, there is a substantial gap between policy and implementation. Implementation challenges are linked to enforcement and monitoring inadequacies, negative attitudes toward persons with disabilities, inaccessible physical infrastructure, and poor communication and coordination among government entities responsible for policy formulation and

implementation. MTaPS received feedback from USAID on a draft manuscript and will incorporate their feedback before finalizing and submitting for peer review. The team also presented the study as a poster at the PtD Global Indaba in Bangkok in March.

Lauren Herzog presenting the poster on disability inclusion in the health supply chain workforce at PtD, Bangkok. Photo credit: Jenny Froome

ACTIVITY 3: ENGAGING 3PLS/4PLS TO SUPPORT THE PUBLIC HEALTH SUPPLY CHAIN

The team met with Mrs. Azuka from Africa Resource Centre (ARC) Nigeria and agreed to collaborate on supporting Kaduna State to build on what MTaPS has done so far in supporting outsourcing. MTaPS and ARC have exchanged resources and will conduct follow-on meetings, and ARC plans to use the resources developed by MTaPS in Kaduna State and other states as appropriate. MTaPS has been finalizing all the products on outsourcing from Nigeria (service specifications, performance management plan, guidance document on operationalizing a 3PL supply chain model, and workshop reports) and uploading them to the MTaPS web page: Tools and Practices to Leverage Private Sector Logistics Services to Enhance Performance of Public Sector Health Supply Chains.

The resources have also been shared with Nigeria government counterparts including NPSCMP and Kaduna State Health Supplies Management Agency. NPSCMP has promised to disseminate these resources to the wider stakeholders in Nigeria, including all states and partners supporting public-sector supply chain management.

MTaPS also collaborated with USAID's CSL team to prepare for a technical meeting (Topical Tuesday) to be held next quarter, developing presentation materials with the objective of sharing achievements and challenges from the activity with wider USAID CSL staff.

BEST PRACTICES/LESSONS LEARNED

- Improving disability inclusion in the health supply chain workforce requires addressing enforcement gaps, establishing strong follow-up and accountability mechanisms, and creating awareness to bring changes in attitudes and perceptions regarding persons with disabilities.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1. Evaluating the efficacy of using a digital consumption tracking and workflow management tool to decrease unmet demand and foster contraceptive continuous use at last-mile point of care **Activity description:** Draft and finalize manuscript for submission	June 2024

Activity 2: Disability inclusion in the health supply chain workforce **Activity description:** Finalize manuscript for submission	May 2024
Activity 3: Engaging 3PLs/4PLs to support the public health supply chain **Activity description:** Present on the outsourcing work during Topical Tuesday with USAID CSL	April 2024

E. OFFICE OF HEALTH SYSTEMS, CROSS BUREAU

OVERVIEW

USAID's OHS works across the Bureau for Global Health's programs and is responsible for technical leadership and direction in strengthening health systems, enabling countries to address complex health challenges and protect against extreme poverty. PSS is one of its areas of work. MTaPS uses OHS Cross Bureau funds to demonstrate and advance technical leadership in PSS, in line with the program's overall goal and objectives. Through the Cross Bureau portfolio, MTaPS works to develop evidence-based approaches and tools and identify best practices in PSS that address emerging health problems. MTaPS collaborates with regional and global stakeholders to shape the norms and discourse on pharmaceutical systems and coordinate efforts to identify and promote best practices. The tools and best practices developed or documented by this effort are intended to be adopted and applied at the regional and/or country level in LMICs. Ultimately, Cross Bureau activities aim to identify innovative strategies and tools to advance USAID's technical leadership in PSS and improve equitable access to and appropriate use of medical products and pharmaceutical services, especially for preventing child and maternal deaths; controlling the HIV/AIDS epidemic; and combating infectious diseases, including the COVID-19 pandemic.

CUMULATIVE PERFORMANCE TO DATE

OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES INCREASED, INCLUDING REGULATION OF MEDICAL PRODUCTS

MTaPS has been engaging with AUDA-NEPAD on medical product regulation on the African continent—especially in the wake of the COVID-19 pandemic—and has participated in advocacy initiatives for the creation of the African Medicines Agency (AMA) for improved regulation of medical products in Africa. MTaPS also supported AUDA-NEPAD to conduct a quality review of the AMRH program management guidance tool to streamline regulatory harmonization program implementation and strengthen the impact and sustainability of program results and outcomes. In collaboration with the USAID PQM+ Program, MTaPS developed a set of minimum common standards for regulatory IMS, which the programs validated through a consultative process with key global stakeholders and representatives from national regulatory authorities. MTaPS and PQM+ also developed an advocacy brief and finalized a guidance document to promote and guide adoption of the standards in LMICs. As part of the dissemination strategy, MTaPS and PQM+ have shared the standards and supporting documents with partners, including WHO, USAID Missions, and regulatory networks such as the AMRH IMS technical committee. MTaPS has also been working with the AMRH Secretariat to develop, for AMA's consideration, a continental reliance framework and strategy for digitalization of the regulatory IMS. MTaPS has worked with various AMRH technical committees, such as the African Medical Devices Forum, Evaluation of Medical Products, IMS, and Medicines Policy and Regulatory Reforms, to strengthen and harmonize regulatory systems on the continent.

OBJECTIVE 3: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION FOR DECISION MAKING INCREASED AND GLOBAL LEARNING AGENDA ADVANCED

MTaPS has advanced the global PSS learning agenda through several efforts, including launching the PSS 101 and Good Governance courses on the USAID-supported GHeL platform. Through the GHeL, the

program issued 7,943 certificates between October 2022 and March 2024 to participants across the globe for completing PSS 101 (1,404 certificates), Good Governance in the Management of Medicines (942 certificates), Antimicrobial Resistance (Part 1) (3,779 certificates), and Antimicrobial Resistance (Part 2) (1,818 certificates).

Previously, the program conducted two peer-to-peer learning exchanges: one on medical products pricing strategies and the other on preventing and managing conflicts of interest in national pharmaceutical committees. Together, the two learning exchanges engaged approximately 60 government officials from more than 30 countries. MTaPS has submitted more than 140 global conference abstracts and has published 21 peer-reviewed manuscripts since the start of the project.

OBJECTIVE 4: PHARMACEUTICAL-SECTOR FINANCING, INCLUDING RESOURCE ALLOCATION AND USE, OPTIMIZED

MTaPS developed and successfully launched a policy and guideline document entitled "Practical Guide for Systematic Priority Setting and Health Technology Assessment (HTA) Introduction in LMICs," which provides a stepwise approach for HTA implementation. MTaPS has also collaborated with the USAID LHSS project to develop an approach for tracking pharmaceutical expenditure using the SHA2011 framework. The team drafted a pharmaceutical expenditure tracking guide and, following pilots in two countries, developed two policy briefs that will serve as resources for countries to capture population per-capita pharmaceutical expenditure per disease or drug therapeutic class more accurately. The team also published a manuscript entitled "Institutionalizing health technology assessment in Ethiopia: seizing the window of opportunity" in the International Journal of Technology Assessment in Health Care. The paper outlines a problem-driven policy analysis for the formulation, adoption, and implementation of HTA and an evidence-informed priority setting approach in Ethiopia.

OBJECTIVE 5: PHARMACEUTICAL SERVICES, INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE, TO ACHIEVE DESIRED HEALTH OUTCOMES IMPROVED

MTaPS collaborated with the West African Health Organization and the 15 Economic Community of West African States member states to develop and successfully launch a web-based platform for improving PV systems in the region. The platform will allow member states to share PV data and support the strengthening of PV systems in the region. MTaPS also completed a case study in Bangladesh to identify gaps in the integration of IPC/WASH critical conditions into the quality of care and quality improvement tools and processes. In PY5, MTaPS developed a chapter entitled "Institutional and Individual Capacity Building in Pharmacovigilance" for inclusion in a book on PV, which is with the publishers.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

ACTIVITY 3.3.1: PSS 101 COURSE

MTaPS delivered the PSS 101 course—which included the newly developed module on AMR—through USAID University in March 2024 with 33 participants from 12 countries. Certificates will be issued in April to participants who complete all requirements. The GHeL PSS 101 and Good Governance courses saw 261 and 139 certificates, respectively, earned this quarter. The AMR (Part 1) and AMR (Part 2) courses saw 681 and 279 certificates earned, respectively.

ACTIVITY 3.3.2: MTAPS CLOSEOUT ACTIVITIES

Sub-activity 3.3.2.1: Journal special issue

MTaPS received a publishing agreement from Taylor & Francis—the publisher of the *Journal of Pharmaceutical Policy and Practice*—and submitted it to the MSH Office of General Counsel for legal review. If approved, MTaPS will work with the MSH procurement team and Taylor & Francis to finalize. Concurrently, MTaPS submitted a manuscript entitled "Costs of the supervision, performance assessment and recognition strategy (SPARS) for medicines management in Nepal: evidence from a pilot study."

Sub-activity 3.3.2.2: Francophone PSS skills exchange

A virtual workshop is scheduled for April 22–24, 2024. Preparations are under way, including finalization of materials and coordination with speakers and local organizations. The team is completing a second round of advertising, and 139 people from 33 countries have already registered.

Sub-activity 3.3.2.3: Collaboration with one global initiative to integrate PSS into its scope

MTaPS held discussions with the Global Fund and Gavi regarding the possibility of a technical exchange on PSS for staff in Geneva; next steps will depend on internal discussions between the points of contact and their counterparts regarding interest and timeline.

Sub-activity 3.3.2.4: Global event participation

At the People that Deliver Global Indaba, which took place March 6–8, 2024, in Bangkok, Thailand, MTaPS delivered the following presentations:

- "Including persons with disabilities in the health supply chain workforce" (poster)
- "Improving DRC's supply chain management by strengthening local supply chain organizations to promote linkage between public and private sectors"
- "Strengthening community health workers' capacity for stock management and service provision at the last mile"
- "Innovative approaches ensuring a systems approach to workforce when undertaking procurement and supply chain management strategic change"
- "Enhancing pharmaceutical systems through remote capacity strengthening: results and sustainability"
- « Un programme virtuel pour équiper les institutions locales afin de renforcer les systèmes pharmaceutiques »
- "What can the private sector teach us about professionalization of the procurement and supply chain management workforce—a South East Asian perspective"

MTaPS also hosted a side event, with over 150 participants, on March 7 at the Global Indaba. The event engaged conference participants on the intersection of regulatory systems strengthening and health supply chains, disseminated the various tools and resources developed during the program, and advocated for PSS as a critical capacity for the health supply chain workforce.

MTaPS also coordinated six abstract submissions to three global meetings this quarter. Of the four abstracts submitted to the 25th International AIDS Conference, scheduled for July 22–26, 2024, one, entitled "Building local capacity for improved HIV treatment safety in Mozambique," has been accepted

to be presented as a poster. MTaPS submitted an abstract entitled "Pharmaceutical systems governance: the critical role of national pharmaceutical services units" for consideration for the 82nd International Pharmaceutical Federation (FIP) Congress of Pharmacy and Pharmaceutical Sciences conference, scheduled for September 1–4 in Cape Town, South Africa. A sixth abstract, entitled "Equipping local organizations to transform country pharmaceutical systems to ensure availability and use of quality medicines—a pre-requisite to meeting health SDGs," was submitted to Health Systems Research. MTaPS also started preparing several abstracts for the International Society of Pharmacovigilance annual meeting, which will be finalized for submission next quarter.

EXTENDED YEAR 5 ACTIVITIES

ACTIVITY 2.4.6: SUPPORT AUDA-NEPAD IN THE ONGOING CREATION AND OPERATIONALIZATION OF THE AMA

MTaPS continued to collaborate with AMRH, its different technical committees (TCs) and health organizations on the continent to promote the convergence of medicine registration systems and advance the harmonization agenda. MTaPS held discussions with the Evaluation of Medicinal Products (EMP) TC representative on the finalization of the draft of the AMRH continental reliance framework document submitted by MTaPS. The draft document will be presented at the upcoming EMP TC meeting scheduled for August 2024 in Yaoundé, Cameroon. The feedback received will be incorporated, with the aim of presenting the final document to the AMRH steering committee during the annual AMRH meeting in Maputo, Mozambique in November 2024.

MTaPS participated in a virtual meeting of the 3rd Medicines Policy and Regulation Reforms (MPRR) TC, held from February 27–29, 2024. The aims included reviewing the progress on the 2023 MPRR TC work plan and finalizing the 2024 work plan, providing input on the African Union Model Law on Medical Products Regulation and its domestication process, reviewing a gap analysis report on the Model Law, and analyzing draft provisions for its amendment. MTaPS also supported the development of the Code of Conduct (COC) for Clinical Trials by Ethics Committees and National Regulatory Authorities, which will serve as a foundation and guidance for ethical considerations in line with the African Vaccine Regulatory Forum (AVAREF) committee objectives and for use by member states. Support included the development of the draft COC document and stakeholder engagement with AVAREF committee members and NRA focal points on clinical trials oversight.

MTaPS shared the draft strategy on the digitalization of the regulatory information management system (RIMS) with USAID and the AMRH Secretariat/IMS TC in January for review. MTaPS updated the strategy to reflect the feedback received in February and developed an executive summary that will be circulated to key stakeholders alongside the detailed strategy. MTaPS and PQM+ jointly undertook preparations for a virtual stakeholder workshop planned for April 25, 2024 to obtain input on the draft strategy.

ACTIVITY 3.3.1: MEASURING PSS, INCLUDING ACCESS TO MEDICINE

The team submitted the technical report for PSS Insight—including the finalized list of indicators and associated indicator reference sheets—to USAID in January 2024 and received approval. MTaPS has drafted a manuscript on the tool development and piloting, and it is undergoing an internal review.

MTaPS also received USAID approval for procuring website development services for PSSInsight.org, and that process is now under way. Once the website development is complete, MTaPS will submit for the USAID privacy impact assessment.

ACTIVITY 3.3.4: PSS LEARNING SERIES WEBINARS

The team held two webinars in February 2024, with the first focusing on the importance of PSS for MNCH and the second on National Pharmaceutical Services Units (NPSUs). The MNCH webinar had 151 participants (47% female), and the NPSUs webinar had 141 participants (35% female). Final preparations are underway for the third and fourth webinars in the series planned on RSS and RIMS. The webinars are scheduled for April 17 and 18, 2024, with speakers confirmed and promotion ongoing.

ACTIVITY 3.3.5: HIGH-PERFORMING HEALTH CARE (HPHC) TOOL IMPLEMENTATION

Dissemination of the HPHC tool assessment findings in Bangladesh continue to be on hold as MTaPS has been unable to obtain approval from the relevant directorates due to ongoing changes in leadership.

In Tanzania, MTaPS adapted the protocol for tool implementation and submitted to the IRB for approval. The government requires the IRB process, which will also ease the process for publishing the findings, one of the ultimate goals for the government. Concurrently, the team has been assembling a list of organizations, which will be used as the sampling frame for the data collection phase of the tool implementation. The team anticipates starting data collection next quarter pending IRB approval.

EXTENDED YEAR 4 ACTIVITIES

ACTIVITY 2.2.1: DEVELOPING A METHODOLOGY FOR ASSESSING THE ROLES OF NPSUS AND THEIR CAPACITY TO FULFILL THEIR MANDATE

The manuscript has been drafted and has undergone the first round of reviews. The team is incorporating feedback and anticipates finalization and submission by May 2024.

ACTIVITY 5.4.1: TESTING BEHAVIORAL NUDGES FOR AMS

The team is drafting the manuscript, with the first draft expected by the end of April 2024. The draft manuscript will be shared with USAID for review by the end of May.

BEST PRACTICES/LESSONS LEARNED

- Adequate consultations and key stakeholders' involvement in the development of regional guidance is crucial and cannot be omitted despite the long duration of the consultation process. The continental reliance framework and strategy for digitalization of RIMS in Africa requires lengthy processes of consultation before the consideration of approval of guidance and implementation. With the appropriate cooperation with recipient organizations, smooth navigation of the process can be achieved.
- The NPSU study substantiates the need for a pharmaceutical policy and governance unit that stewards the pharmaceutical system and is empowered to monitor and evaluate system performance and coordinate efforts to improve system function and performance.
- MTaPS' experience developing the francophone PSS skills exchange highlights the need for PSS resources in French. MTaPS and other programs need to be more intentional about providing PSS

and other health systems strengthening resources in French and other languages to accommodate their counterparts and partners in non-Anglophone countries.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
PSS 101 course: Finalize report on March delivery	April 2024
Francophone PSS Skills Exchange: Complete delivery of three sessions	April 2024
Support AUDA-NEPAD in the ongoing creation and operationalization of the AMA: Hold virtual stakeholder workshop on strategy for digitalization of Regulatory IMS	April 2024
Measuring PSS, including access to medicine: Finish web development of PSSInsight.org	June 2024
Circulate journal manuscript for USAID and WHO review	June 2024
PSS Learning Series webinars: Hold webinars on RSS and RIMS	April 2024
Testing behavioral nudges for AMS: Finish development of manuscript and share with USAID for review	May 2024

F. GENDER

OVERVIEW

The goal of the MTaPS gender core-funded portfolio is to address both the biological (sex) and social (gender) differences that impact equity in pharmaceutical systems. This focus is critical to MTaPS' goal of ensuring sustainable access to and effective use of affordable medicines that are equitable for all sexes and genders. A pharmaceutical system consists of people, resources, processes, and interactions within the broader health system to ensure access to and appropriate use of safe, effective, quality-assured, and affordable medical products and related services to improve health outcomes. Each of these conditions requires that sex and gender be integrated to ensure sustainable and equitable access to safe, effective, quality-assured medical products and related services to improve outcomes for all sexes and genders.

These outputs support the broader crosscutting goal of ensuring that MTaPS' activities are sex and gender responsive to promote equitable access to medicines.

CUMULATIVE PERFORMANCE TO DATE

Core-funded gender activities focused on bringing gender to the forefront of MTaPS through the activities described below.

In year 2, the GWG helped to connect those across the different MTaPS portfolios in discussions of gender activities and areas of possible collaboration and learning. In addition, the GWG has been used to discuss and get feedback on document development and utility. While more active in years 2 and 3, the working group in year 4 met only as needed due to the concern of line-item funding for participation in this group by other members.

In coordination with the monitoring, evaluation, and learning team, the MTaPS gender advisor provided key inputs and recommendations for useful gender indicators, which resulted in two indicators specifically measuring gender inclusion across the program: number of pharmaceutical-sector-related policy, legislation, regulation, or operational documents with gender-inclusive language that are developed or updated with TA from MTaPS and number of gender-related technical guidance documents and other capacity-building products produced by MTaPS. These gender-specific indicators have been used going forward and assist the entire program in measuring progress against these two broad indicators.

Three key capacity-building documents and presentations stand out as important to highlight as key successes in year 2. The first, entitled "A Checklist for Gender Considerations for Pharmaceutical Systems," was developed in collaboration with LeaderNet, an online learning and exchange platform managed by MSH for global health professionals working to strengthen health systems in low- and middle-income countries. Another key capacity-building document, entitled "MTaPS Gender Guide for Work Planning," was developed by the MTaPS gender advisor with inputs from the SMT and disseminated to all program staff to assist their gender-inclusive activities into third-year work plans. Last was a presentation entitled "Transforming Health and Pharmaceutical Policies to be Gender Inclusive," given by the MTaPS gender advisor during a biweekly MTaPS staff meeting in August 2020. This presentation gave an overview of what a gender-inclusive policy entails across distinct levels within a health system and why it is a critical element of gender mainstreaming and provided context-specific

examples of how gender-inclusive policies fit across MTaPS' five program objectives. Each of the above key activities built on and increased MTaPS' gender capacity and learning within the program as well as integrated MTaPS gender indicators.

The year 3 focus for core-funded gender activities was to better define the impacts of not just gender but also sex on PSS health outcomes and to find better ways of bringing sex and gender to the forefront of MTaPS. To clarify the gaps in understanding of how sex and gender impact PSS, a survey was developed and launched to assess the use and usefulness of the gender integration guide (developed in year 2) for year 3 work planning. The survey, developed and led by MTaPS' partner, Overseas Strategic Consulting, with input from the SMT, was distributed to all staff. In brief, only one-third of respondents had a good understanding of sex and gender considerations in PSS. Important findings of the survey included that the guide was understandable, easy to read, and of the right length and had relevant entry points. However, it was less useful for work planning and training was needed to utilize the guide efficiently. Only one-third of respondents used the guide, and only 25% to 30% of respondents added sex/gender-specific activities to year 3 work plans. When gender activities were added, they focused largely on "equal" participation and did not consider important sex/gender pharmacodynamics, especially within the GHSA portfolios. A review of approved year 3 work plans found that 75% did not include any sex/gender activities, and there were many missed opportunities for sex/gender activities in year 3 work plans. Based on survey findings, it was determined that training was necessary for MTaPS staff on sex/gender considerations in PSS and that practical examples would be helpful for staff to integrate sex/gender into work planning.

Based on survey results—and to address MTaPS staff's lack of understanding of how sex and gender need to be integrated into PSS—the gender advisor started an informational series called the "Gender Gist" blog, geared for field practitioners, highlighting sex and gender considerations important to PSS that are tied to MTaPS activities. The Gist includes useful, concise, and practical information for different topics in PSS. Five blogs were published in year 3.

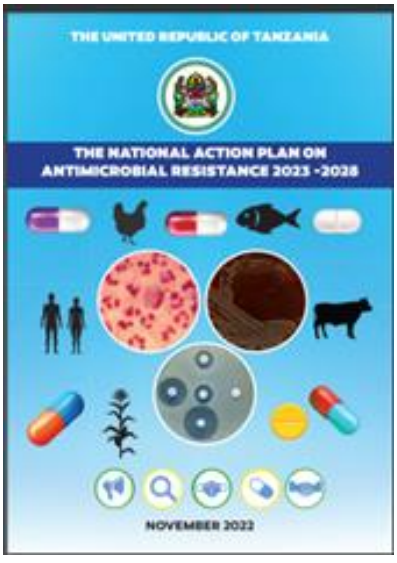
- Lawry LL. Creating sex/gender-responsive health supply chains: COVID-19 reminds us again. https://www.mtapsprogram.org/news-blog/creating-sex-gender-responsive-health-supply-chains-covid-19-reminds-us-again/
- Lawry LL. The importance of being gender responsive for COVID-19 vaccine introduction: build it right or they won't come. https://www.mtapsprogram.org/news-blog/build-it-right-or-they-wont-come-being-gender-responsive-for-covid-19-mass-vaccination/
- Lawry LL. How sex and gender impact antimicrobial resistance risk. https://www.mtapsprogram.org/news-blog/how-sex-and-gender-impact-antimicrobial-resistance-risk/
- Lawry LL. Sex, gender, and vaccines: considerations for COVID-19. https://www.mtapsprogram.org/news-blog/sex-gender-and-vaccines-considerations-for-covid-19-vaccine-immunity/
- Lawry LL. We can only fix what we know about—why sex-disaggregated data in pharmaceutical systems is crucial. https://www.mtapsprogram.org/news-blog/we-can-only-fix-what-we-know-about-why-sex-disaggregated-data-in-pharmaceutical-systems-is-crucial/

To reinforce the necessity of sex and gender integration in PSS, MTaPS knowledge exchange series and staff meeting presentations were given to the COR and MTaPS staff.

Throughout year 3, MTaPS' gender advisor identified opportunities for interventions to mitigate sex and gender disparities within pharmaceutical systems and their beneficiaries within technical activities that were country specific and/or crosscutting to the project, such as for AMS under the GHSA. In addition to the blogs and presentations, as well as contributions to the journal article "Point Prevalence Survey of Antibiotic Use across 13 Hospitals in Uganda," one-on-one meetings were conducted with country teams to educate, mentor, and assist in developing sex and gender activities for year 4. Finally, technical reviews of the year 4 work plans for MTaPS countries were conducted and the gender advisor finalized sex and gender indicators in MERL plans, with careful review to ensure that sex and gender differences were noted and accounted for in relevant indicators.

The year 4 focus for the core-funded gender portfolio included country-specific sex and gender activities and continuing the momentum of bringing sex and gender to the forefront of MTaPS through scholarly activity, education, and mentorship. Capitalizing on gains in sex and gender awareness, year 4 included the development of knowledge products, such as IEC materials and eLearning modules; writing and publishing academic products, such as journal articles, to address the need for standardized PSS tools to incorporate sex-disaggregated data; and the development of technical guidance on incorporating sex-disaggregated data and gender considerations as part of AMS interventions and an MTaPS-supported MIS. To continue building sex and gender awareness in MTaPS, the senior gender advisor held knowledge exchange and webinar presentations for staff, the COR, and partners and presented a module in PSS 101 for USAID staff. A panel presentation in support of the GHSA action package on AMR entitled "GHSA-Supported AMR Investments: Results and Lessons Learned in Strengthening Infection Prevention and Control (IPC); Enhancing Inclusion; and Enabling Rapid COVID-19 Response and Future Pandemic Preparedness" was presented at the 2022 Global Health Security Conference in June/July 2022 in Singapore. A Gender Gist blog following the conference was published to add to the series from previous years. These blogs remain among the top pages viewed on the MTaPS website. At the end of year 4, due to new requirements of the Philippine DOH, the eLearning modules developed in quarter 3 required additional knowledge checks and pre-/posttest questions.

In year 5, the portfolio capitalized on normalizing sex and gender impacts as a crosscutting issue in MTaPS countries and across PSS activities. One of the most important successes for this year is the inclusion of sex and gender concepts into Tanzania's NAP-AMR 2023–2028.



The highly successful Gender Gist blogs continued, with blogs published in the first and third quarters:

- Lawry LL. Where the wild things are: missing the forest for the trees. https://www.linkedin.com/feed/update/urn:li:activity:6998747695725121536/
- Lawry LL. I bang my head less often: reflections on integrating gender in pharmaceutical systems strengthening. https://www.mtapsprogram.org/news-blog/i-bang-my-head-less-often-now-reflections-on-integrating-gender-in-pharmaceutical-systems-strengthening/?fbclid=IwAR1GHhEdSTaRV4uiY7BOncHx-pVSFRnb3f-aoa94L5wGZKkjn00oCih2bV8

The year consisted of finalizing/publishing technical documents like the MIS guidance and Philippines workforce development plan written during quarter 1. Finalizing the animation of the eLearning modules for the Philippines and using a blended-learning approach to provide training on gender to participants from the DOH, CHD, and LGUs through webinars and the eLearning module on DOH Academy is a key focus for year 6. The gender advisor worked with MTaPS Nepal on surveying and educating journalists on sex and gender AMR-specific reporting. The PSS 101 course, like in the previous year, included a sex and gender section as well as participatory exercises to illustrate sex and gender concepts in the small groups. Peer-reviewed publications in year 5 that included or were solely focused on sex and gender in PSS are as follows:

- Lieberman Lawry L, Konduri N, Gitonga N, Kiggundu R, Mbaye M, Stergachis A. Gaps in data collection for sex and gender must be addressed in point prevalence surveys on antibiotic use. Front Antibiot. 2023; volume 2. https://doi.org/10.3389/frabi.2023.1154506
- Waswa JP, Kiggundu R, Konduri N, Kasujja H, Lieberman Lawry L, Joshi MP. What is the appropriate antimicrobial use surveillance tool at the health facility level for Uganda and other low- and middle-income countries? J Global AMR. 2023. https://doi.org/10.1016/j.jgar.2023.07.003

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

Quarter 2 also included drafting and editing of quarterly reports and development and editing of the end-of-project report for the gender portfolio. During this quarter, a presentation for the Philippines Gender and Development (GAD) meeting was developed and presented to GAD for the launch of the eLearning modules. This presentation was a summary of the eLearning materials and a primer for adult learning as a means for follow-up after learners utilized the eLearning modules. The gender advisor reviewed and edited a survey for GAD and the Philippines technical brief on the eLearning module process. PSS 101 was implemented during this quarter; a sex, gender, and PSS module was included in the course.

BEST PRACTICES/LESSONS LEARNED

- MTaPS should expand sex, gender, and PSS module access to all staff and partners to improve understanding of how sex and gender impact PSS.
- The development process for eLearning should not take years as requirements and priorities change with staff rotations.
- Gender activities should be tracked by all countries on a centralized spreadsheet.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Finalize the Q2Y6 report	April 2024
Finalize the gender portfolio end-of-project summary	June 2024
Participation in biweekly staff, quarterly technical, and expanded COR meetings	May, June, and July 2024
PSS Skill 101 participation	2024 (TBD)

4. PROGRESS BY COUNTRY

A. BANGLADESH

FIELD SUPPORT ACTIVITIES

OVERVIEW

The goal of MTaPS in Bangladesh is to strengthen pharmaceutical systems to ensure sustainable access to and appropriate use of safe, efficacious, quality-assured, and affordable medical products and related pharmaceutical services to the population, aligned with the GOB's health objectives and commitment to achieving UHC. MTaPS' overall strategic approach is to support the GOB and its strategic partners in strengthening pharmaceutical services and the supply chain management system.

CUMULATIVE PERFORMANCE TO DATE

In PY1, MTaPS supported the government in developing a long-term strategic procurement plan. In PY2, MTaPS developed the TOE—a prescribed standard of organization, staffing, and equipment for different units of HFs—and updated its reference prices in PY4. The program updated the specifications of the MSR list in PY2 and assisted the MSR List Updating Committee in developing a strategy for regularly reviewing standard reference prices on the updated list in PY3. In PY4, with TA from MTaPS, the procurement oversight bodies at the MOHFW and DGHS started implementing a paper-based system to monitor procurement performance, including standard key performance indicators, through quarterly assessments. Enhanced offline versions of the UIMS and WIMS were incorporated into the eLMIS in PY1 to streamline the functionalities of the two inventory management systems, ensure real-time logistics transactional data, and contribute to better management of supply chain functions. MTaPS supported FP warehouses to ensure uninterrupted availability of FP commodities, maintaining a stock-out rate below 1% at SDPs (May 2019–September 2023) and saving financial resources. MTaPS completed the scale-up of the eAMS in all 61 DHs countrywide in PY2. MTaPS supported the NTP in developing a phased transition plan with options for storage integration following an assessment of the peripheral storage system for TB medicines. Of the 484 peripheral stores located outside the Upazila Health Complexes and managed by IPs, 478 have been integrated into the Upazila Health Complexes. MTaPS continued assisting the NTP in recording and reporting quality TB data through e-TB Manager, with all 868 TB sites countrywide using it to manage cases and generate reports for the NTP. In PY3, e-TB Manager was enhanced for electronic reporting of aDSM and interoperability with the Janao app to capture TB data from the private sector. In PY5, the system was enhanced with a dashboard of selected indicators for easier analysis of reports and timely decision making. MTaPS, in collaboration with the NTP, rolled out the eLMIS for TB commodities in all 64 districts and 485 sub-districts (upazilas) across the country. For improved patient safety, MTaPS has supported the evaluation of more than 4,000 AE reports with more than 30 regulatory decisions from PY1 to PY6. MTaPS assisted the DGDA in developing an inspection strategy to help ensure good pharmacy practices in PY2 and launched an electronic inspection and licensing system for pharmacies in PY3 in collaboration with the Better Health in Bangladesh project. In PY4, MTaPS supported the DGDA in addressing WHO GBT assessment gaps, including establishing an effective QMS and employing regulatory convergence and good review practices. In PY5, MTaPS assisted with training and dissemination of the DGDA five-year strategic plan (2022–2026) and the

implementation of the DGDA Regulatory Information Management System (RIMS) for online registration of vaccines and biosimilars and PViMS for online AE reporting. In PY3, MTaPS supported the DGDA in achieving the highest GBT score for PV function by developing good PV practices guidelines and updating the national PV guideline, which the MOHFW endorsed in PY5. In PY6, the DGDA approved the registration of 10 biosimilar products in the DGDA RIMS. In support of the implementation of pharmaceutical-related components of the Bangladesh Health Care Financing Strategy (2012–2032) in PY1, MTaPS conducted a situational analysis to identify potential gaps in the pharmaceutical-related components of the Health Care Financing Strategy and proposed intervention and areas of collaboration and support in coordination with the MOHFW and other stakeholders. In PY4, the MOHFW's HEU developed standard processes for pharmaceutical expenditure (PE) tracking and conducted PE tracking for selected MNCH commodities; in PY5 it customized training modules based on existing procedures.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED

Activity 1.1.1: Provide technical assistance to the MOHFW and the DGHS to improve procurement functions of different procuring entities.

MTaPS continued its support to procurement entities under the MOHFW and DGHS to review procurement documents and assisted in the implementation of Annual Procurement Plan-approved activities. With MTaPS' support, TOR for the DGHS Procurement and Monitoring and Evaluation Cell were developed, and all members of the cell have been appointed by the DGHS. The procurement handbook was shared with the DGHS for feedback. MTaPS incorporated all feedback received into the handbook and is waiting for approval from the DGHS for printing. The checklist on procurement performance monitoring is finalized and will be used to measure improvement in the procurement performance of the supported procurement entities.

Activity 1.2.1: Assist the DGHS and the CMSD in implementing the comprehensive eLMIS in selected districts as part of the transition plan.

With the approval of the Director General of the DGHS, MTaPS assessed the store management of four districts (Gopalganj, Feni, Moulvibazar, and Nilphamari) to identify inconsistencies in the commodity receiving process, recordkeeping, and distribution. MTaPS initiated the customization of the DGHS' comprehensive eLMIS, which is used in the CMSD, to fit the needs of HFs and contribute to the effective and equitable use of health commodities for quality health care services. MTaPS facilitated a UAT on the DGHS's comprehensive eLMIS for HF staff in the selected districts and the CMSD. The objectives of the UAT were to test the functionality of the system, assess user engagement and acceptance for their daily activities, and refine the tool based on feedback. This system will enable evidence-based decisions, including procurement planning and replenishment of supplies.

Activity 1.2.2: Assist the DGFP in implementing the DGFP eLMIS in selected Maternal and Child Welfare Centers as part of the transition plan.

MTaPS initiated the implementation of the DGFP eLMIS for selected Maternal and Child Welfare Centers (MCWCs) in two pilot districts to strengthen their inventory management system and provide real-time logistics data. The assessment of logistics management and the readiness of these facilities has been completed. Based on assessment findings, the system customization has been initiated. In

collaboration with the DGFP, MTaPS conducted a UAT with relevant staff (5 female, 3 male) of the selected MCWCs to check the functionality of the system and perform any additional customization based on feedback. The DGFP is committed to rolling out the eLMIS to other districts beyond the pilot with its own resources. Scaling up the system to MCWCs at the union level will contribute to enhanced evidence-based decision making for equitable availability of FP and MCH commodities and quality health care services to the population.

Activity 1.2.3: Assist the DGHS to roll out eAMS in a selected tertiary-level hospital as part of the transition plan.

In collaboration with the DGHS, MTaPS oriented National Institute of Cancer Research and Hospital (NICR&H) staff on the eAMS and developed an action plan to complete stepwise asset information entry in the system. The NICR&H director issued an official memo to system users, ensuring the implementation of the action plan in the hospital. Implementing the eAMS within a specialized tertiary-level hospital is expected to enhance the tracking and management of medical and nonmedical equipment, ultimately leading to improved health care provision within this top-tier HF. DGHS units have proposed rolling out the system at other tertiary-level hospitals in the country during the next Health Sector Program (expected from July 2024). Additionally, MTaPS assisted the NTP in implementing the eAMS in four of the five Regional TB Reference Laboratories (RTRLs) and the National TB Reference Laboratory. To date, 253 assets from three RTRLs have been entered into the eAMS (entries for the fourth RTRL will be completed next quarter). Since the inception of the eAMS, 342 maintenance tickets, including 7 this quarter, have been raised by DHs, with 128 resolved so far.

Activity 1.2.4: Assist the NTP in ensuring the functioning of the quantification and EWS technical sub-group, as part of the PSM coordination mechanism.

In collaboration with the NTP, MTaPS facilitated a workshop on annual quantification and the early warning system (EWS), which also included a refresher orientation for NTP staff on e-TB Manager and eLMIS for TB commodities. The outcome of this workshop and orientation will contribute to the sustainable use of electronic tools to ensure the recording and reporting of individual TB patients, improve the quality of data, and enhance the forecasting of EWSs to strengthen an uninterrupted supply of TB medicines. The sub-group on quantification and EWS within the NTP Procurement and Supply Management (PSM) Working Group uses QuanTB quarterly to perform quantification and supply planning. The regular use of QuanTB and the EWS contribute to improved decision making, resulting in reduced stock disruption and sustainable access to life-saving TB medicines for the population.

Activity 1.3.1: Strengthen the use of the eLearning courses in collaboration with a2i of ICT division.

MTaPS is discussing with a2i the possibility of developing an updated dashboard for eLearning courses. This initiative aims to enhance data utilization among government entities, allowing them to track the usage status of these courses by their staff. MTaPS will share usage data of four eLearning courses (Basic Logistics Management, Procurement Basics, e-TB Manager Basics, and Infection Prevention and Control) with stakeholders. By providing insights into course utilization, the updated dashboard will enable stakeholders to access data on usage status, identify areas where intervention is needed, and intervene to increase the number of course participants.

OBJECTIVE 2: PHARMACEUTICAL REGULATORY SYSTEMS STRENGTHENED

Activity 2.1.1: Assist DGDA to implement CAPA plan and scale-up of DGDA RIMS and PViMS toward attaining the DGDA's ML3.

Since May 2023, the DGDA RIMS has received 26 applications for registration of biosimilar products (12 this quarter), 10 of which were approved for registration by the Director General. The system was customized for the registration of new vaccines and went live on the DGDA website in March 2024. Based on feedback from the DGDA and MA holders, system customization for the processes of handling variation and renewal of registration for introduced vaccines is in progress. In this quarter, 14 DGDA officials (5 female, 9 male) and 4 MA holders (13 cumulatively) were capacitated through a TOT on the DGDA RIMS to cascade the training after MTaPS ends. PViMS has been customized based on user feedback, and the dashboard is being enhanced to fine-tune the evaluation of AEs. MTaPS also provided TA to the DGDA to update the PV organogram with TOR, job descriptions, and a competency assessment of PV staff. TA was extended for screening the risk management plan and generating PSUR to the DGDA, which helps to ensure the safety of the introduced vaccines. Feedback from a stakeholder consultation workshop on the GRP guideline drafted by MTaPS was considered. All of these RSS efforts will contribute to improving the quality of medicine safety data and registration applications submitted to the DGDA RIMS, the efficiency of the DGDA, and evidence-based decision making toward achieving ML3 as per the WHO GBT.

OBJECTIVE 3: SYSTEMS FOR EVIDENCE-BASED DECISION MAKING INSTITUTIONALIZED

Activity 3.1.1: Assist the NTP in ensuring the functioning of TB eLMIS and e-TB Manager.

All 485 Upazila Health Complexes submitted indents for January–March 2024 on time, and all 64 district health authorities approved the indents using the eLMIS for TB commodities, thus contributing to an uninterrupted supply of TB commodities in all Upazila Health Complexes. MTaPS continued upgrading system features based on NTP requirements for inclusion of TPT case data and reports, the new regimen for DR-TB cases, inaccessibility of the old e-TB Manager, and TB eLMIS reporting forms. As part of the transition plan, capacity strengthening-related documents (e.g., lists of all e-TB Manager and TB eLMIS training, orientation, UAT, and workshop participants) were reviewed, finalized, and shared with the NTP and the USAID Tuberculosis Implementation Framework Agreement (TIFA) project for inclusion in the Training Management Information System—an NTP training-related database managed by TIFA. Access to these data will enable the NTP to streamline its capacity-strengthening plans and initiatives.

Activity 3.2.1: Support the transition of MTaPS-developed IT systems to the relevant stakeholders.

In collaboration with GOB stakeholders, MTaPS developed transition plans for the DGDA RIMS, PViMS, DGDA web portal, eLMIS (DGHS and DGFP), eLearning course, and eAMS and shared them with USAID for review. MTaPS has received comments on seven plans and has responded to three plans and sent them for endorsement and finalization. The transition plans will be handed over to the GOB once the quality review process is completed. As part of the handover, MTaPS is executing activities as per the transition plans, such as strengthening capacity through on-the-job training of stakeholders to facilitate a sustainable transition of the systems to the respective government bodies.

OBJECTIVE 4: No activities were planned for this objective under the field support workplan.

OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED

Activity 5.1.1: Assist the HEU to increase capability on pharmaceutical expenditure (PE) tracking toward institutionalization.

Government staff at a workshop session on pharmaceutical expenditure tracking toward institutionalization, Dhaka, February 14–19, 2024 (photo credit: Azad, MTaPS)

The HEU organized a capacity-strengthening workshop on PE tracking toward institutionalization for members of the National Health Accounts team and MOHFW, DGDA, DGHS, and WHO staff, which MTaPS facilitated. A draft national institutionalization plan for PE tracking was finalized and discussed with participants, handed over to the HEU, and approved by the HEU Director General. Six local PE tracking champions were identified among workshop participants. The HEU notified the champions' directorates to enable the HEU to carry out PE tracking toward institutionalization. The champions will conduct regular PE tracking exercises, provide training for staff, and contribute to developing policy briefs. These activities will contribute to sustained PE tracking led by the HEU as part of the National Health Accounts procedures and optimal health financing in Bangladesh.

BEST PRACTICES/LESSONS LEARNED

- Solely providing training on an electronic system may not always equip government partners for effective system utilization. It is crucial to engage in advocacy with the government to address the prerequisites for utilizing any electronic system in PSS initiatives. For example, while the DGHS' MIS unit has implemented the MTaPS-developed eAMS and begun entering asset information for Upazila Health Complexes, there are gaps in data entry and information. These issues could potentially be mitigated through enhanced advocacy efforts.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Provide technical assistance to the MOHFW and the DGHS to improve procurement functions of different procuring entities. Organize eGP training, TOT on basic procurement, and orientation on the procurement handbook for DGHS stakeholders; assist the Director P&R in issuing notification to PEs to use the checklist; and facilitate job orientation on the checklists to medical officers.	April–June 2024
Activity 1.2.1: Assist the DGHS and CMSD in implementing the comprehensive eLMIS in selected districts as part of transition plan. Conduct training on comprehensive eLMIS for four selected districts.	April–June 2024
Activity 1.2.2: Assist the DGFP in implementing the DGFP eLMIS in selected Maternal and Child Welfare Centers (MCWCs) as part of the transition plan. Conduct training on DGFP eLMIS for MCWCs of two selected districts.	April–June 2024
Activity 1.2.3: Assist the DGHS to roll out eAMS in selected tertiary-level hospital as part of the transition plan. Assist RTRL and HFs in entering asset information in the eAMS; assist district and national-level managers in using eAMS data for decision making.	April–June 2024

Activity and Description	Date
Activity 1.2.4: Assist the NTP in ensuring the functioning of the quantification and EWS technical sub-group as part of the PSM coordination mechanism. Coordinate quantification and EWS sub-group meeting; support NTP for mapping of TB eLMIS training for urban facilities.	April–June 2024
Activity 1.3.1: Strengthen the use of the eLearning courses in collaboration with a2i of ICT division. Continue the partnership with a2i to obtain usage data from the Muktopaath platform and strengthen the use of data by decision makers.	April–June 2024
Activity 2.1.1: Assist DGDA to implement CAPA plan and scale-up of DGDA RIMS and PViMS toward attaining the DGDA's ML3. Support AE evaluation and M&E framework development and address feedback on DGDA RIMS and PViMS.	April–June 2024
Activity 3.1.1: Assist the NTP in ensuring the functioning of the TB eLMIS and e-TB Manager. Review the use of tools and share findings with NTP; hand over training documents; and upgrade e-TB Manager and TB eLMIS features as per NTP requirements.	April–June 2024
Activity 3.2.1: Support the transition of MTaPS-developed IT systems to the relevant stakeholders. Finalize the transition plans, meet with stakeholders, and hand over plans and system-related resources.	April–June 2024
Activity 5.1.1: Assist the HEU to increase capability on PE tracking toward institutionalization. Review the drafted deliverable.	April–June 2024

Table 2. Quarter 2, FY24, Activity Progress, Bangladesh—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Provide technical assistance to the MOHFW and the DGHS to improve procurement functions of different procuring entities. **Activity Description:** MTaPS will provide TA to the MOHFW and its key directorates to strengthen the pharmaceutical system, including the procurement of health commodities.	1.1	MTaPS is advocating with the PLMC Member Secretary to hold regular meetings of the PLMC next quarter and include the DGHS CMSD as a member. Twenty participants from DGHS procuring entities were identified for the first session of the eGP training, which MTaPS will facilitate. Preparation for the training is underway. The DGHS selected 21 participants to attend the TOT on the public procurement process for procurement cell members, which will be conducted next quarter.
Activity 1.2.1: Assist the DGHS and the CMSD in implementing the comprehensive eLMIS in selected districts as part of the transition plan. **Activity Description:** MTaPS will provide TA to the MOHFW in initiating the use of the eLMIS in selected districts to ensure the equitable availability of medical products in HFs for quality service delivery.	1.2	MTaPS conducted an assessment of the District Reserve Store, DH, Upazila Health Complex, and Upazila Health Office of the four selected districts to assess store management practices. Findings from the assessment of inventory management practices will help identify the system's customization and implementation needs. MTaPS initiated the customization of the DGHS' comprehensive eLMIS and conducted UAT with nine participants (1 female, 8 male) from District Reserve Stores, DHs, Upazila Health Complexes of four districts, and the CMSD. The system has been customized based on feedback received in the UAT. A stock-out rate of 59.2% as of March 2024 compared to 1% for May 2019–September 2023 was observed for widely used FP commodities up to SDPs across the country. This challenge was attributed to the sub-optimal programmatic intervention of the DGFP and MOHFW concerning delayed decisions on procurement of contraceptives and suboptimal budget allocation for transportation and administrative purposes, despite advocacy and continuous situation analysis and active communication supported by MTaPS. To mitigate this challenge, the DGFP withdrew surplus stock of major contraceptives (injectables) from Cox's Bazar RWH (as part of the Health and Gender Support Project in Cox's Bazar implemented by the MOHFW) at risk of expiration and redistributed it to other districts of the Chattogram division, which mitigated the stock-out situation countrywide. MTaPS has provided TA in this process. MTaPS' continuous advocacy expedited the DGFP procurement process of 77 million condoms, with around 20 million being supplied to the central warehouse in March 2024. These condoms will be distributed to SDPs by April 2024.

<table>
<tr><th>Activity</th><th>MTaPS Objective(s)</th><th>Activity Progress</th></tr>
<tr><td>Activity 1.2.2: Assist the DGFP in implementing the DGFP eLMIS in selected MCWCs as part of the transition plan.

Activity Description: MTaPS will provide TA to the MOHFW in initiating the use of the eLMIS in selected districts to help ensure the equitable availability of FP and MCH commodities and micronutrients in health centers for quality service delivery.</td><td>1.2</td><td>MTaPS provided TA to the inventory committee of the DGFP Logistics and Supply Unit to conduct the annual and two monthly physical inventories at the Central Warehouse, including verifying stock data, ensuring the physical existence of stock, and implementing a first to expire, first out policy. During the physical inventories, the inventory committee identified a few items in the store that were nearing expiration and instructed them to be disbursed to selected facilities immediately.

MTaPS conducted an assessment of the existing practice of logistics management at the MCWCs in the Nilphamari and Gaibandha districts and their readiness to implement the DGFP eLMIS. UAT to implement the DGFP eLMIS at the MCWC level was conducted on March 30, 2024, and feedback will inform system customization and finalization.</td></tr>
<tr><td>Activity 1.2.3: Assist the DGHS to roll out eAMS in selected tertiary-level hospital as part of the transition plan.

Activity Description: MTaPS will support the establishment of an eAMS in one tertiary hospital as a pilot. Based on that experience and lessons learned, the Health Services Division will start rolling out the system to other tertiary hospitals as part of the provisions in the upcoming fifth Health Sector Program.</td><td>1.2</td><td>MTaPS facilitated a one-day workshop to review the eAMS dashboard on January 24, 2024, which was chaired by the Director of MIS at the DGHS. Thirty participants (7 female, 23 male) attended.

A three-day training session on the eAMS was held February 27–29, 2024, for NICR&H staff in Dhaka. The NICR&H director presided over the event, which was attended by 21 participants (6 female, 15 male). The event was organized by the DGHS Hospital Management Services Unit, and MTaPS facilitated the technical sessions. After the training, users started entering asset information in the system.</td></tr>
<tr><td>Activity 1.2.4: Assist the NTP in ensuring the functioning of the quantification and EWS technical sub-group as part of the PSM coordination mechanism.

Activity Description: MTaPS will provide TA to the PSM Unit of the NTP to strengthen the procurement and supply chain management of TB commodities with a special focus on quantification and EWS of TB medicines.</td><td>1.2</td><td>A workshop titled "Annual Quantification & EWS and Refresher Orientation on Data Use of e-TB Manager and TB eLMIS" was held at the MIS, DGHS, March 10, 2024, with 24 participants (6 female, 18 male) from the NTP and MIS. The line directors of TB and leprosy and of HIS and eHealth participated at the workshop and shared their insights for program improvement. Participants were oriented on all NTP digital systems, which will contribute to improved decision making, decrease stock disruption, and help ensure a sustainable supply of TB medicines to the population.</td></tr>
<tr><td>Activity 1.3.1: Strengthen the use of the eLearning courses in collaboration with a2i of ICT division.

Activity Description: MTaPS will collaborate with stakeholders to analyze the data generated by the Muktopaath eLearning platform for all MTaPS-supported courses to monitor user enrollment trends, course completion rates, and the successful attainment of certificates.</td><td>1.3</td><td>The numbers of participants enrolled and certificates obtained for the four eLearning courses as of March 31, 2024, are:
<table>
<tr><th>eLearning Course</th><th>Participants Enrolled</th><th>Certificates Obtained</th></tr>
<tr><td>Basic Logistics Management Training</td><td>3,765 (M-2,576, F-1,157, Other-32)</td><td>986 (M-659, F-323, Other-4)</td></tr>
<tr><td>e-TB Manager Basics</td><td>1,138 (M-951, F-182, Other-5)</td><td>273 (M-241, F-32)</td></tr>
<tr><td>Procurement Basics</td><td>1,219 (M-937, F-270, Other-12)</td><td>204 (M-178, F-23, Other-3)</td></tr>
<tr><td>Infection Prevention and Control</td><td>3,062 (M-1,842, F-1,209, Other-11)</td><td>754 (M-531, F-221, Other-2)</td></tr>
</table></td></tr>
</table>

Activity	MTaPS Objective(s)	Activity Progress
Activity 2.1.1: Assist DGDA to implement CAPA plan and scale-up of DGDA RIMS and PViMS toward attaining the DGDA's ML3. **Activity Description:** MTaPS will provide technical guidance and mentoring to the DGDA to implement outstanding CAPA plan/GBT requirements in the national regulatory system, specifically for the MA and PV functions, and will address feedback from the implementation of the DGDA RIMS and PViMS regarding their expansion and transition to the government.	2.1 & 2.2	The process for vaccine registration went live for the DGDA RIMS on the DGDA website on March 5, 2024. Process flows for handling renewal and variation of applications are under development. As part of addressing the DGDA's feedback on PViMS, the yellow card in the system was shortened from four pages to one page (aligned with the hard copy of the yellow card), which is more user-friendly and self-explanatory and decreases reporting time. The change was made on January 1, 2024. TA was provided to the DGDA to update the PV organogram with TOR and job descriptions for PV staff, process the flowchart for PV reporting and management, determine procedures for managing AEFI, and assess staff competency for PV. Guidance was provided to the DGDA, and three PV staff were awarded certificates of completion for the WHO eLearning course on PV inspection. On January 15, 2024, MTaPS provided a TOT on the DGDA RIMS for 14 DGDA officials (5 female, 9 male). MTaPS assisted the DGDA in addressing feedback from a stakeholder workshop on the MTaPS-supported GRP Guideline draft. All of these efforts will contribute to increasing WHO GBT scores toward ML3.
Activity 3.1.1: Assist the NTP in ensuring the functioning of TB eLMIS and e-TB Manager. **Activity Description:** MTaPS will assist the NTP to oversee the quality of data and increase their use for decision making.	3.1	The training and user manuals for e-TB Manager and the TB eLMIS were reviewed and finalized in collaboration with the NTP as part of the transition plan. MTaPS assisted the NTP in finalizing the quantification of TPT and SLDs to initiate the procurement process. e-TB Manager and TB eLMIS features have been modified to meet user requirements and upgrade the systems. MTaPS prepared participant lists for all documents related to capacity strengthening activities on e-TB Manager and TB eLMIS and shared them with the NTP and USAID TIFA project for incorporation in the NTP's training database so that the NTP has access to the full list of trained staff on different systems to consider for capacity strengthening plans and activities.
Activity 3.2.1: Support the transition of MTaPS-developed IT systems to the relevant stakeholders. **Activity Description:** MTaPS will support the directorates of the MOHFW in implementing activities stated in the transition plans for MTaPS-developed systems.	3.2	To date, MTaPS has received feedback on seven of the nine transition plans; addressed the comments on three (DGDA RIMS, PViMS, and eAMS); and sent them to USAID for final review. The team is addressing comments of the remaining four plans (AMR Web Portal, DGDA Portal, CMSD eLMIS, and TB eLMIS). Additionally, MTaPS is engaged in executing plan activities to facilitate the smooth transition of the system to government stakeholders.
Activity 5.1.1: Assist the HEU to increase capability on PE tracking toward institutionalization. **Activity Description:** MTaPS will capacitate the HEU to conduct quality PE tracking toward institutionalization through training, identifying a pool of champions, and proposing government funding allocation.	5.1	Following a cost-sharing approach with the HEU, a four-day training on PE tracking toward institutionalization was organized by the HEU of the MOHFW and facilitated by MTaPS for participants from the DGDA, DGHS, MOHFW HEU, and WHO. An institutionalization plan was developed, reviewed by the training participants, and approved by the HEU Director General. Six champions (four from the HEU, one from the DGHS, and one from the DGDA) were identified among the participants based on their performance during the training and endorsed by the HEU with official notification to the champions' directorates to enable them to assist the HEU to carry forward the PE tracking activities toward institutionalization and optimization of health financing in Bangladesh.

B. BURKINA FASO

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The GHSA-related goal of the MTaPS program in Burkina Faso is to support AMR containment by slowing the emergence of resistant pathogens and preventing the spread of resistant infections. AMS is one of the five strategic objectives in the 2015 WHO GAP on AMR, which also strongly emphasizes MSC. To advance its goal, MTaPS is assisting the Government of Burkina Faso to make progress toward the next JEE capacity level through activities focused on the MSC and AMS components of AMR in both the human and animal health sectors.

Burkina Faso has a clear strategy in place to ensure the availability of, access to, and appropriate use of quality-assured antimicrobials in the human and animal health sectors. MTaPS' support is focused on building structures that ensure the enforcement and compliance monitoring of existing regulations, policies, and guidelines, including the recently updated infectious diseases STGs and EML. Such enforcement is needed to address the sale and use of antibiotics without prescription. MTaPS follows a sustained, systematic approach to train, coach, and mentor health workers in both the human and animal sectors to be good stewards of antimicrobials and to monitor their practices. This approach requires strong central- and facility-level governance and stewardship mechanisms, such as establishing DTCs in more HCFs and capacitating those that already exist to provide supportive supervision in their facilities and promote AMS practices. In FY23, in addition to activities to strengthen facility-level DTCs, MTaPS is supporting the OHP TS and the OHP's AMR technical committee (TC) to strengthen governance and effective MSC on AMR and to optimize the use of antimicrobial medicines in the human and animal sectors.

CUMULATIVE PERFORMANCE TO DATE

MTaPS supported the AMR-TC to organize two semi-annual meetings and five meetings of the RUA sub-commissions. MTaPS facilitated the participation of 10 MOH representatives in an interuniversity diploma course on antibiology and antibiotherapy in sub-Saharan Africa (*Diplôme Interuniversitaire d'Antibiologie et Antibiothérapie en Afrique Subsaharienne*), organized by the University of Nazi Boni in Bobo-Dioulasso, Burkina Faso, in collaboration with the University of Montpellier in France.

Also, MTaPS—in collaboration with the FAO and other partners—supported the DGSV to develop guidelines and draft a ministerial order regulating antimicrobial use in the animal sector. The ministerial order was then submitted to the Minister of Agriculture, Animal Resources, and Fisheries (MARAH) for approval and signature. In addition, MTaPS—in collaboration with the DGSV—organized an official handover ceremony of the guidelines to regulate RUA in livestock in Burkina Faso. The ceremony was held at the MARAH. Following this ceremony, MTaPS supported the DGSV to organize two concurrent workshops in Koudougou and Bobo-Dioulasso to inform participants on the decree enforcing the RUA in the animal sector and to also disseminate the guidelines regulating the use of antimicrobials within the livestock sector. MTaPS also supported the MARAH to sign the ministerial order 2023-316/MARAH/SG/DGSV/DSPVL establishing the pharmacovigilance system in Burkina Faso.

Additionally, MTaPS supported the Directorate of Hospital Pharmacy (DPH) to establish and train DTC members in 10 selected HCFs. A total of 250 DTC members (190 male, 60 female) received AMS training. Each DTC developed an action plan to implement and oversee AMS activities in its respective facility. The DTC members conducted a situational analysis on the causes of inappropriate antibiotic use in their facilities. The results of the situational analysis are being used to strengthen the functioning of DTCs in Burkina Faso. To address the inappropriate use of antibiotics, MTaPS supported the General Directorate of Access to Health Products (*Direction Général de l'Accès aux Produits de Santé* [DGAP]) and the DPH to develop training modules based on the facility-level infectious disease STGs and trained 350 health professionals (including 158 females) in the 10 selected HCFs. MTaPS also supported the *Direction de la Qualité des Soins et de la Sécurité des Patients* (DQSS) and DPH in printing and disseminating 500 copies of the STGs.

Aligned with what has been achieved in previous years, MTaPS supported the DGAP, DPH, and *Direction de l'Information Pharmaceutique et de l'Usage Rationnel des Produits de Santé* to conduct supervision visits to 10 MTaPS-supported HCFs to assess the functionality of their respective DTCs. MTaPS also assisted the DGAP in printing 250 copies of the *Guidelines for the Organization and Functioning of DTCS at Hospitals in Burkina Faso*. DGAP subsequently disseminated the guides to the health facilities. MTaPS worked with the DPH to conduct audits of antibiotic use in Centres Hospitaliers Regionaux (CHRs) of Banfora, Koudougou, and Tenkodogo. To better address the weaknesses highlighted by the audits, MTaPS developed policies targeted to antibiotics prescribing. MTaPS also supported the DPH and the regional hospitals of Banfora, Koudougou, and Tenkodogo to develop a list of authorized prescribers, prescribing criteria, and a guide regulating visits from pharmaceutical company representatives visiting the facility to promote their products. MTaPS, in collaboration with the DPH, also supported the three regional hospitals and the Centre Hospitalier Universitaire Regional (CHU-R) of Ouahigouya to draft and validate the administrative note, which restricts the prescription of antibiotics, taking into consideration the AWaRe classification.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Strengthen the functionality of the TS-OHP

From January 29 to 30, 2024, MTaPS—in collaboration with the TS-OHP—organized a workshop to finalize the draft inter-ministerial order officially establishing the AMR-TC and its sub-commissions. The workshop took place in Koudougou and was chaired by the AMR-TC President, Professor Armel Poda. A total of 17 participants (13 male and 4 female) from technical ministries including the Ministry of Health and Public Hygiene, MARAH, and Ministry of Environment, Water, and Sanitation—as well as MTaPS, WHO, the FAO Emergency Centre for Transboundary Animal Diseases (ECTAD), and other technical and financial partners—attended the workshop. The objective of the workshop was to update and validate the draft inter-ministerial order. On February 29, 2024, the OHP's Executive Secretary submitted the validated inter-ministerial order to respective ministers for signature.

Activity 1.1.2: Improve the institutional sustainability of the AMR-TC and the RUA sub-commission

On February 11, 2024, MTaPS supported the TS-OHP and the AMR-TC to organize the first semi-annual meeting of the AMR-TC. The attendees included representatives from ECTAD/FAO, CDC/Atlanta, DQSS, Direction de l'Information Pharmaceutique et de l'Usage Rationel des produits de santé (DIPUR), DGSV, Direction des Laboratoires et de Biologie Médicale (DLBM), NMRA, and the ministries in charge of environment, agriculture, and the professional orders of midwives, nurses, and pharmacists. Aligned with the closure of MTaPS, the meeting was held to discuss the sustainability of these meetings and the scope of MTaPS activities. During the meeting, the OHP Executive Secretariat shared the contributions of the Global Fund through the Pandemic Fund, a mechanism of financing to be implemented by WHO, UNICEF, and FAO. This fund is structured to advance the TS-OHP's agenda. In addition, during the meeting, Professor Poda shared key achievements and credited the work of the AMR-TC including MTaPS activities. Finally, a sustainability plan was developed to outline activities to conduct within MTaPS' scope of work. The outline included a timeline, the government entity in charge of implementation, and a potential NGO partner.

On February 23, 2024, MTaPS supported the TS-OHP to organize the RUA sub-commission's quarterly meeting. A total of 10 participants from the TS-OHP and ministries in charge of human health, animal health, agriculture, and environment attended the meeting. The objectives of the meeting were to present the validated draft inter-ministerial order establishing the AMR-TC and sub-commission by the Chairman of the sub-committee, Professor Armel Poda, and to present the supportive supervision tool developed by three infectiologists.

From March 12 to 13, 2024, MTaPS, the AMR-TC, and its sub-commissions supported the TS to organize the celebration of WAAW. The support included joining the organization of a symposium[5] on AMR with Le Réseau Burkinabè de Recherche et Lutte contre la Résistance Antimicrobienne (RAM-Burkina) and Actions des Jeunes contre la Résistance aux Antimicrobiens (AJRAM). The theme of the symposium was "AMR Pandemic Response in Burkina Faso: Key Stakeholder Roles and Responsibilities." A total of 450 participants including experts, practitioners, students, and scientists from research centers attended the symposium. Directorates from the central level of the MOH such as DLBM, DQSS, DIPUR, and Agence Nationale de Régulation Pharmaceutique were represented at the symposium. In addition, donors and implementing partners including USAID, WHO, Jhpiego, ECTAD/FAO, BioMérieux Laboratory, and the Institute Louis Pasteur also attended the symposium. The symposium highlighted detection, surveillance, and response efforts to contain AMR.

Activity 3.5.1: Support the DPH, AMR-TC, and DTCs to monitor the implementation of AMS interventions in selected health facilities

From January 17 to 19, 2024, MTaPS supported the DPH to organize a workshop at the MTaPS Burkina Faso office in Ouagadougou with the objective to design and develop a formative supervision tool on RUA. Three infectiologists from Ouahigouya, Yalgado Ouedraogo, and Ziniaré hospitals; the chief officer in charge of standardization of hospital pharmacy practices; and MTaPS representatives attended the

[5] For more information about the symposium, please see the following link: https://www.facebook.com/rtburkina/videos/1101897614396122/?mibextid=rS40aB7S9Ucbxw6v

workshop. The workshop participants developed a supervision tool composed of nine sections: i) internal policies and AMS sub-commission, ii) theoretical knowledge of health workers on RUA, iii) antibiotic prescribing procedures, iv) compliance with the guidelines for good antibiotic prescriptions, v) antibiotic prophylaxis in surgery, vi) demand and supply of microbiology tests, vii) summary of the supervision (strengths and weaknesses), viii) the problem-solving plan, and ix) recommendations and suggestions. In addition, the participants developed a supervisor's workbook.

On January 22–26 and February 1–March 15, 2024, MTaPS supported the DPH, three infectiologists, and other supervisors to conduct supervision visits to Centre Médical avec Antenne Chirurgicale Pissy and Zorgho; CHRs of Banfora, Gaoua, Kaya, Koudougou, and Ziniaré; Centre Hospitalier Universitaire Sanou Soura in Bobo-Dioulasso; and CHU-R in Ouahigouya. The supervision objectives were to test the newly developed supervision tool (in Banfora only) and to monitor the implementation of CQI plans, the RUA practices at the hospital, and the functioning of the DTCs. The findings showed: i) availability of infectious disease standard treatment protocols, ii) demonstrated knowledge of monotherapy, combination therapy of molecules and use, iii) concordance between the patient's record and the nursing care sheet, iv) concordance between the patient's file and the anesthesia sheet, v) performance of routine microbiology tests, and vi) availability of quality human resources in the laboratory. In contrast, the supervisors noted that there is: i) limited use of standard treatment protocols, ii) limited availability of recommended antibiotic, iii) absence of a designated antibiotic therapy referent who should be consulted if there are concerns related to antibiotic use, iv) non-functioning of the HCAI Prevention and Control Committee, v) weak communication between clinical services and the laboratory and pharmacy, and vi) inadequate management (collection, transport, tests, and results) of samples for microbiology tests.

Regarding highlighted weaknesses, supervisors made the following recommendations: i) formally designate antibiotic therapy referent in each health facility, ii) continue to sensitize health care professionals to adhere to the recommended infectious disease STG, iii) ensure procurement and availability of first and second generation of Cephalosporins for surgical prophylactic, iv) strengthen communication between clinical services, laboratory, and pharmacy, and v) enforce proper management of microbiology test samples.

BEST PRACTICES/LESSONS LEARNED

- The 2023 "AMR Pandemic Response in Burkina Faso: Key Stakeholder Roles and Responsibilities" symposium was the first in Burkina Faso that uniquely focused on AMR. The symposium demonstrates proactive efforts to tackle AMR. It serves as a model for future events and initiatives aiming to raise awareness and foster collaboration around AMR. Additionally, it serves as a valuable platform for participants to exchange experiences and ideas, facilitating crucial learning and collaboration around AMR.

ACTIVITIES & EVENTS FOR NEXT QUARTER

All planned activities were completed by March 29, 2024.

Table 3. Quarter 2, FY24, Activity Progress, Burkina Faso—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Support the functionality of the TS-OHP	5.4	1.1	MTaPS supported the OHP to organize a three-day workshop to finalize and validate the drafted inter-ministerial order on the creation, composition, and functioning of the AMR-TC. In that spirit, MTaPS supported the TS to hold the first of two AMR-TC meetings.
Activity 1.1.2: Strengthen the functionality of the AMR-TC and the RUA sub-commission	5.4	1.1	MTaPS supported the TS of the OHP and the AMR-TC to organize the symposium on AMR with RAM-Burkina and AJRAM.
Activity 3.5.1: Support the DPH, AMR-TC, and DTCs to monitor the implementation of AMS interventions in selected health facilities	5.4	3.5	MTaPS supported supervision visits to the 10 supported facilities and revised CQI plans accordingly.

C. CAMEROON

PRESIDENT'S MALARIA INITIATIVE (PMI) ACTIVITIES

OVERVIEW

The MOPH has adopted artemisinin-based combination therapy as the first-line treatment for malaria, due to the development of resistance to previously extensively used antimalarial combinations. The 2018 WHO Quality of Selected Antimalarial Medicines Circulating in Six Countries of Sub-Saharan Africa (QAMSA) study found that in Cameroon, 37% of the 41 tested antimalarial samples, including artemether/lumefantrine, failed quality testing. This underscores the essential responsibility of both the General Inspectorate of Pharmaceutical Services and the National Pharmaceutical Regulatory Authority. Legislators in Cameroon have adopted a number of laws to govern the production, importation, and distribution of pharmaceutical items, including Law No. 90-035 of August 10, 1990. The DPML is Cameroon's national pharmaceutical regulatory authority, which operates under the MOPH. The National Laboratory for Medicine Quality Control, the Health Research Division, and the National Ethics Committee support the regulatory function of the DPML.

To improve its regulatory system, the DPML carried out a self-assessment in 2020 using the WHO GBT. The WHO GBT is a tool designed to assess various regulatory functions and assign a country's regulatory system an ML score ranging from 1 (few elements of regulatory functions) to 4 (regulatory system operating at an advanced level). The results of this assessment showed that the DPML was operating at ML 1, and that it had not fully implemented 167 of the 195 indicators required to reach WHO ML 3, which corresponds to a stable, high-performing, and integrated regulatory system.

Under its Malaria Operation Plan FY21 (revised in January 2022), the US President's Malaria Initiative (PMI) allocated funding to the MTaPS program to support the MOPH to strengthen the registration process for antimalarial commodities.

CUMULATIVE PERFORMANCE TO DATE

MTaPS engaged a consultant in FY23 to work with the MOPH, regional, and HQ teams to facilitate support to national counterparts. MTaPS supported the DPML to train individuals on evaluating MA applications for pharmaceutical products, thus strengthening the capacity of registration personnel to perform quality assessments and make informed regulatory decisions on MA of medical products. MTaPS also supported the DPML to organize four workshops to develop registration guidelines and variations guidelines for MA of pharmaceutical products. These activities contributed toward enhancing the regulatory framework for registration of medicines, including antimalarials, to assure market entry of safe and quality-assured products.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

MTaPS supported the development of TORs and the recruitment of a national and an international consultant for the development of a curriculum and training modules in supply chain management, and a national consultant to support the digitization of the registration of health care products.

OBJECTIVE 1: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES STRENGTHENED

Activity 1.4.1: Support the development of continuous professional development training curricula, including e-Learning modules in supply chain management.

During this quarter, MTaPS supported the development of TORs and the recruitment of a national and an international consultant to provide technical support to the MOPH for the development of a curriculum and training modules in supply chain management. Both consultants have signed their contracts and have started working on their deliverables.

OBJECTIVE 2: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION FOR DECISION MAKING INCREASED AND GLOBAL LEARNING AGENDA ADVANCED

Activity 2.1.1: Support the MOPH to implement OpenRIMS for the electronic submission and evaluation of pharmaceutical products registration applications.

MTaPS supported the recruitment of a national consultant, in collaboration with the DPML, to support the digitization of the registration of health care products. The selected candidate received an orientation from MTaPS' HQ technical subject matter experts on the configuration of the OpenRIMS software platform and is currently working on the deliverables.

BEST PRACTICES/LESSONS LEARNED

No lessons learned or best practices for this quarter.

ACTIVITIES & EVENTS FOR NEXT QUARTER

Activity & Description	Date
Activity 1.4.1: Support the development of continuous professional development training curricula, including e-Learning modules in supply chain management. ▪ Organize a brainstorming meeting with academics on supply chain training curriculum. ▪ Organize a workshop to review the SCM training curriculum. ▪ Organize a workshop to validate the SCM training curriculum. ▪ Organize a SCM training modules review workshop. ▪ Organize a SCM training modules validation workshop.	April 2024 to June 2024
Activity 2.1.1: Support the MOPH to implement OpenRIMS for the electronic submission and evaluation of pharmaceutical products registration applications. ▪ Organize a workshop to develop an OpenRIMS action plan. ▪ Organize a workshop for OpenRIMS user training and testing.	April 2024 to June 2024

Table 4. Quarter 2, FY24, Activity Progress, Cameroon—GHSA

Activity	PMI Result(s)	Activity Progress
Activity 1.4.1: Support the development of continuous professional development training curricula, including e-Learning modules in supply chain management.	2.4	MTaPS supported the development of TORs for the recruitment of a national and an international consultant to provide technical support for the development of a curriculum and training modules in SCM. The consultants were selected, and contracts signed. They have begun working on their deliverables.
Activity 2.1.1: Support the MOPH to implement OpenRIMS for the electronic submission and evaluation of pharmaceutical products registration applications.	2.4	MTaPS supported the recruitment of a consultant to support the digitization of the registration of health care products. The selected candidate has signed his contract and has already started working on his deliverables.

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The GHSA-related goal of MTaPS in Cameroon is to support AMR containment, slow the emergence of resistant bacteria, and prevent the spread of resistant infections. In Cameroon, MTaPS provides support to strengthen governance for MSC, improve IPC practices and services, and strengthen governance for AMS, including capacity building. Through MTaPS, USAID is supporting Cameroon to make progress toward higher JEE capacity levels in the AMR technical area. Activities in Cameroon fall under MTaPS sub-objective 5.4, and many of them are being implemented in coordination with other partners, especially those funded by USAID and the CDC.

MTaPS uses the OH approach to strengthen the operationalization of AMR governance in Cameroon by supporting the establishment of IPC and AMS TWGs with TORs and the organization of routine coordination meetings of AMR stakeholders to plan, monitor, and evaluate AMR activities. MTaPS is also supporting the operationalization of the OHP through technical assistance to revise the OH strategic policy document.

To ensure accountability, MTaPS supported the government to put a strong governance mechanism in place, starting from the central and regional levels with the appointment of national and regional IPC and AMS focal persons, and culminating with the establishment of IPC committees and DTCs with clear TORs and action plans at HFs. MTaPS uses a sustained, systematic approach to train, coach, and mentor health care workers to improve IPC practices and AMS in HFs. MTaPS also supported the development of reference policy documents and tools, including the national IPC guidelines, national IPC action plan, IPC training curricula, and the integrated national AMS action plan. MTaPS is also supporting the MOPH to establish a surveillance system to monitor HCAI in HFs as well as to strengthen compliance of health workers with IPC guidelines, including those for hand hygiene.

CUMULATIVE PERFORMANCE TO DATE

MTaPS' GHSA work in Cameroon is guided by the WHO JEE benchmark actions for IPC, AMS, and MSC. As of September 2023, MTaPS has supported the achievement of 37 (60%) of the 62 total WHO benchmark actions.

Since MTaPS began its work in Cameroon in 2019, the program has supported MSC on AMR through contributing to the organization of 19 routine meetings of the TS of the AMS MCC, the AMS and IPC TWGs, and other OHP members and partners to monitor the implementation of AMR activities. MTaPS supported the organization of a coordination meeting between the TS-MCC and the OHP to strengthen linkages between these two bodies and to advocate for officially creating the MCC. MTaPS also supported a workshop for OHP stakeholders to review the regulatory framework of the OHP, as well as a workshop to review and finalize Cameroon's NAP-AMR. Additionally, MTaPS supported the celebration of AMR-related events, including WAAW, a conference of the Society of Cameroonian Microbiologists, and World Hand Hygiene Day, to strengthen the technical capacity of key government stakeholders and health care providers. MTaPS supported the TS-MCC, OHP, and other relevant technical departments of the MOPH to develop a NAP-AMR monitoring framework to monitor and track implementation progress of the plan across different health sectors. MTaPS also supported the

organization of a NAP-AMR evaluation meeting using this monitoring framework. MTaPS partnered with IDDS and AFROHUN to develop course content for a master's degree program in infectious diseases and AMR at the University of Buea and to establish a Moodle e-Learning platform on the university's website to facilitate blended learning. In December 2023, MTaPS supported the Bafoussam Reference Hospital Center to organize activities marking the celebration of the WAAW.

MTaPS supported a baseline assessment of IPC practices in 38 HFs, the development of IPC training curricula, the establishment of IPC committees in 12 HFs, the development of the national IPC guidelines and action plans, the training of 174 health staff (79 female, 95 male) in IPC, CQI of IPC practices in 12 HFs, and the development of a national surveillance protocol to monitor HCAIs. MTaPS has also supported IPC committees to become more autonomous, implement self-initiated IPC activities, and continue to implement a CQI approach with incremental self-improvement targets to ensure effective activity progress.

MTaPS supported the Directorate of Health Promotion (DPS) to evaluate selected surveillance attributes and performance indicators of the HCAI surveillance system in the CQI process. MTaPS provided assistance to the IPC committees via the DPS to carry out a cross-sectional KAP survey of health care workers on hand hygiene in MTaPS-supported HFs, using the adapted WHO tools to improve compliance of health staff on hand hygiene. MTaPS also supported the DPS to conduct follow-up assessments of IPC program core components at the national and HF levels, using the WHO IPCAT2 and IPCAF tools, respectively, to identify the areas still requiring action and to update the national and facility IPC action plans.

MTaPS supported the DPML to carry out a situational analysis of AMS-related policies in the animal and human health sectors, to develop a national integrated AMS action plan, to establish DTCs in 12 HFs, to train 239 health care providers (134 female, 105 male) in AMS, to conduct CQI of AMS activities in supported HFs, and to classify antibiotics in Cameroon's NEML according to the WHO AWaRe categorization. Under the leadership of the DPML, MTaPS continued to support DTCs to take ownership over the implementation of their own AMS programs. MTaPS supported the DTCs to implement self-initiated AMS activities and continue to implement a CQI approach with incremental self-improvement targets. In October 2023, MTaPS supported the DPML to organize a workshop for the restitution of self-initiated activities implemented by DTCs. MTaPS also supported the development of TORs for the recruitment of a consultant to support the development of draft STGs based on Cameroon's previously developed list of antibiotics according to the WHO AWaRe categorization.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Support the TS-MCC and the OHP to institutionalize regular review of the status of NAP-AMR implementation using the recently finalized monitoring framework.

MTaPS supported the OHP to organize a 2-day meeting from January 30 to 31, 2024, to assess the implementation of AMR-related activities in the NAP-AMR from January to December 2023. Of the 24 participants invited, 17 attended the meeting, including 5 (29.4%) females. The various sectors—MOPH, *Ministère de l'Elevage, des Pêches, et des Industries Animales* (MINEPIA), *Ministère de l'Environnement, de la*

Protection de la Nature, et du Développement Durable, (MINEPDED), and *Ministere de l'Agriculture et du Développement Rural* (MINADER)—presented on activities they carried out during the assessed period, as well as challenges they encountered. Overall, none of the activities in the NAP-AMR were implemented. This was mainly due to inadequate financial resources and because the NAP-AMR had only recently been validated in January 2024. Meeting participants advised that even though the NAP-AMR was not yet politically endorsed, the various sectors should still select activities from the plan according to its implementation timeline and look for funding sources to implement the activities. They also strongly recommended that the AMR focal points advocate for their leadership to include and budget for AMR activities in their annual work plans.

RESULT AREA 2: IPC

Activity 2.2.1: Further strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities through CQI-based and institutionalized actions.

From February 12 to 19, 2024, MTaPS supported the DPS and Regional Delegations of Public Health in the Center, Littoral, West, and South regions to organize the onsite supervision of IPC committees in 13 MTaPS-supported HFs. The objective of this activity was to assess the level of implementation of IPC activities from the facility work plans, evaluate the status of IPC core components using the IPCAF and HHSAF tool, and to follow up on the implementation of recommendations from the previous onsite supervision visits. This onsite supervision provided an opportunity to troubleshoot implementation challenges and brainstorm solutions. To foster ownership of this activity by MOPH stakeholders and move toward sustainability, this supervision was mainly conducted by MOPH counterparts, with MTaPS only providing financial support to the activity and accompanying the MOPH counterparts to provide technical support through the supervision process. The table below presents the HFs' IPC scores from this supervision in comparison with those from previous supervisions:

N°	Health Facility	2019/2020	2021	2022	2023	2024
1	DH OBALA DH	304	460	510	595	612.5
2	JAMOT Hosp	140	427	572	532.5	610
3	Ref Hosp SANGMELIMA	360	512	537	572.5	597.5
4	RH EBOLOWA	405	438	525	555.5	595
5	RH EDEA	237	519	410	570	597.5
6	RH NKONGSAMBA	238	491	540	610	647.5
7	DH BONASSAMA	360	705	620	727.5	737.5
8	GH DOUALA	368	515	578	675	737.5
9	RH BAFOUSSAM	343	506	368	480	377.5
10	DH BANGANGTE	303	505	406	515	512
11	DH MBOUDA	408	523	532	602.5	572.5
12	DH FOUMBOT	175	528	473	515	440
13	CHR BAFOUSSAM				612.5	685

0–200	Inadequate	Red
201–400	Basic	Yellow
401–600	Intermediate	Green
601–800	Advanced	Blue

It is worth noting that 1 new facility was added to the 12 MTaPS-supported HFs in 2023. The table above shows that 6 (46%) facilities attained an advanced level in IPC, and 6 (46%) scored at the intermediate level. However, 1 facility (8%) dropped to the basic level, which can be explained by a lack of engagement from HF leadership to support IPC activities.

MTaPS supported the DPS to lead and organize 3 2-day regional meetings to share experience from CQI of IPC committees. These meetings were organized in 3 regions as follows: West (March 6–7, 2024), Littoral (March 13–14, 2024), and South (March 13–14, 2024). Participants consisted of staff from 13 MTaPS-supported HFs, the DPS, the DPML, 49 non–MTaPS-supported HFs, and Regional Public Health Delegations for the Center, Littoral, and West regions. The general objective was to scale up the MTaPS-supported IPC committees' CQI capacity-strengthening approaches to non–MTaPS-supported HFs. These meetings were facilitated by the AMS and IPC focal points. Each MTaPS HF gave a presentation on their CQI of IPC and AMS. The presentations were followed by discussion sessions, during which the non–MTaPS-supported HFs had the opportunity to ask questions and clear their doubts about the CQI approach. The participants were thereafter divided into 5 groups to cogitate on solutions for the implementation challenges presented. The regional representatives shared the experience of their collaboration with MTaPS through the years and presented mechanisms to map funds to support the HFs continue the work after the end of the MTaPS project. MTaPS then made a presentation on the CQI approach and lessons learned over the years. This activity highlighted the work carried out by the IPC and AMS committees, with support from MTaPS. It also enabled the other HFs to anticipate the difficulties involved in setting up such committees, as well as the resources available to them for conducting the activities and the benefits that can be derived from them.

RESULT AREA 3: OPTIMIZE USE OF ANTIMICROBIAL MEDICINE IN HUMAN AND ANIMAL HEALTH AND AGRICULTURE

Activity 3.1.1: Support the DLMEP and DPML to develop and disseminate national stewardship and clinical/treatment guidelines that include the AWaRe categorization for antibiotics integrated into the NEML last year.

MTaPS developed TORs and supported the recruitment of two consultants to support the DPML and the Department in charge of the fight against Diseases, Epidemics and Pandemics (DLMEP) in the development of STGs based on the antibiotic list previously established by Cameroon in accordance with the WHO AWaRe categorization. The two selected candidates have signed their contracts and started working on their deliverables.

BEST PRACTICES/LESSONS LEARNED

- The regional meetings organized with the attendance of the IPC and DTCs of current MTaPS-supported HFs and non MTaPS-supported HFs showcased MTaPS' support in IPC and AMS activities and encouraged the non–MTaPS-supported HFs to learn from MTaPS support. The Regional Delegate of Public Health suggested that MTaPS organize such meetings frequently.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Support the TS-MCC and the OHP to institutionalize regular review of the status of NAP-AMR implementation using the recently finalized monitoring framework. ▪ Support the TS-MCC and the OHP to organize 2 2-day meetings to evaluate the status of implementation of the NAP-AMR using the NAP-AMR monitoring framework.	June 2024
Activity 1.2.1: Help improve institutionalization, ownership, and uptake of AMR-related e-Learning courses through multisectoral efforts. ▪ Support the University of Buea to organize an open house during the WAAW to sensitize the public on the availability of the continuous professional development e-Learning courses on the university website. ▪ Support the assessment of the functionality of e-Learning platform at the Buea University.	April 2024
Activity 2.5.1: Further strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities through CQI-based and institutionalized actions. ▪ Support the DPS to organize sensitization activities during World Hand Hygiene Day.	May 2024
Activity 2.5.2: Help facilitate locally led improvement in the functionality and scale-up of the pilot systems for HCAI surveillance to support AMR containment and pandemic preparedness. ▪ Support the DPS to organize a 3-day workshop to revise HCAI surveillance tools.	April 2024
Activity 3.1.1: Support the DLMEP and DPML to develop/update and disseminate national stewardship and clinical/treatment guidelines that include the AWaRe categorization for antibiotics integrated into the NEML last year. ▪ Support the DLMEP to organize a 5-day workshop with relevant experts in the field to review the draft STGs. ▪ Support the DLMEP to organize a 3-day workshop to validate the draft STGs. ▪ Support the DLMEP to print 200 copies of the validated STGs. ▪ Support the DLMEP to organize a 2-day meeting to disseminate the STGs.	April 2024–June 2024

Table 5. Quarter 2, FY24, Activity Progress, Cameroon—GHSA

Activity	MTaPS Objective(s)	MNCH Result(s)
Activity 1.1.1: Support the TS-MCC and the OHP to institutionalize regular review of the status of NAP-AMR implementation using the recently finalized monitoring framework.		MTaPS supported the OHP to organize a 2-day meeting to assess the implementation of AMR-related activities in the NAP-AMR from January to December 2023. Of the 24 participants invited, 17 attended the meeting, including 5 (29.4%) females. The various sectors (MOPH, MINEPIA, MINEPDED, and MINADER) presented activities they carried out during the assessed period as well as challenges encountered.
Activity 2.2.1: Further strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities through CQI-based and institutionalized actions.		MTaPS also supported the DPS to organize IPC committee CQI experience-sharing meetings in the West, Littoral, and South regions.
Activity 3.1.1: Support the DLMEP and DPML to develop/update and disseminate national stewardship and clinical/treatment guidelines that include the AWaRe categorization for antibiotics integrated into the NEML last year.	5.4.6	MTaPS developed the SOW and supported the recruitment of two consultants to support the DPML and DLMEP with the development of STGs based on the antibiotic list previously established by Cameroon in accordance with the WHO AWaRe categorization. The candidates selected for both consultancies have signed their contracts and started drafting the STGs. The next step will be the review and validation of the draft STGs in April 2024.

D. CÔTE D'IVOIRE

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The GHSA-related goal of MTaPS in Côte d'Ivoire is to support sustained AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. MTaPS is supporting strategic objectives 4 (reduce incidence of infections through effective sanitation, hygiene, and prevention measures) and 5 (improve RUA in human and animal health and environmental sectors) of the Côte d'Ivoire NAP-AMR. IPC and AMS are two of the strategic objectives in the 2015 WHO GAP on AMR and in Côte d'Ivoire's NAP-AMR, and both documents strongly emphasize MSC. MTaPS has been providing technical support to consolidate MSC on AMR, in addition to supporting the IPC and AMS technical areas, with direct technical assistance to the national AMR TWG and relevant ministries. Planned activities for FY23 were built on the work done during the previous four years of the program, including supporting the Government of Côte d'Ivoire to strengthen the governance of IPC committees, improve IPC practices, conduct AMS practices in health facilities, and develop and implement systems to monitor antimicrobial use and consumption nationally and at health facilities.

CUMULATIVE PERFORMANCE TO DATE

MTaPS' support to the Government of Côte d'Ivoire to strengthen AMR containment is guided by WHO IHR benchmark actions. MTaPS aims to help the country move to the next JEE tool level across the three result areas. As of March 2024, MTaPS has supported the completion of 41 WHO benchmark actions—11 contributing to MSC/AMR, 19 to IPC, and 11 to AMS with 4 benchmark actions in progress.

Since MTaPS' inception in September 2018, Côte d'Ivoire has successfully established an MSC mechanism for zoonotic diseases and a TS and TWGs to monitor AMR activities. MTaPS assessed IPC practices and AMS regulations and supported the development of IPC guidelines and an AMS action plan. Through a decree in April 2019, the Ivorian government formalized the OHP to institutionalize a national MSC mechanism to address public health threats, including AMR. MTaPS supported the country to establish an AMR TWG to monitor AMR activities. This TWG is connected to the OHP through a national coordinating body called the MSC Group (or MCG). MTaPS helped to finalize the TOR and guidance manual for this body and its subcommittees. In collaboration with WHO, USAID, the US CDC, and FAO, MTaPS supported the AMR TWG, Multisectoral Technical Committee 4 (MTC4, also known as the IPC TWG), and MTC5 (also known as the AMS TWG) to develop and validate more than 15 reference documents, including the AMR governance manual, national AMR policy, 2019–2020 multisectoral NAP-AMR, national IPC plan, animal-sector IPC guidelines, and the national AMS policy, guidelines, and plan. MTaPS also supported the AMS MTC to develop the AMR M&E plan and the AMR operational advocacy plan and to update the inter-ministerial decree officially establishing DTCs in Côte d'Ivoire.

MTaPS supported a situational analysis of the capacity and functionality of ICCs and DTCs in 4 university teaching hospitals, 12 regional hospitals, and 4 private clinics in the human health sector, as well as in the veterinary clinic of the Ministry of Animal Resources and Fisheries' Regional Directorate of Bouaké and

in the Antirabic Center of Cocody in the animal health sector. MTaPS facilitated the development and validation of documents and training modules in IPC and AMS, training of HCPs, and the establishment of a CQI process in 20 HFs. Supported ICCs and DTCs are now functional, with clear TOR and capacity building plans. MTaPS also supported the AMS TWG to develop and finalize a list of antibiotics based on the AWaRe classification. The IPC TWG and the AMS TWG identified and selected three MTaPS-supported facilities as COEs for IPC and AMS activities. MTaPS assisted the AMR TWG in the deployment of the AMR 2021–2025 M&E system through the development of an AMR 2021–2025 M&E plan, data collection tools, and the training of MTC M&E focal points in the use of these data collection tools. Also, MTaPS supported the development of e-learning modules for training on IPC and AMS and assisted the AMR TWG to establish a regional pool of AMR trainers, including 18 master trainers and 36 regional AMR trainers. With high scores on the IPCAF and DTC evaluations, MTaPS was able to support the AMR TWG to establish three COEs for IPC and AMS activities. MTaPS supported the AMR TWG to validate the decree governing the functioning of drug committees and to finalize the AWaRe categorization of antibiotics.

On November 18, 2023, through the AMR TWG, MTaPS supported the OHP to organize activities for the 2023 One Health Day and WAAW. In addition, MTaPS supported the AMR TWG, MTC4, and MTC5 to update the TWG governance manual and trained 106 people (including 18 females) in IPCAF-minimum requirements tools and routine data collection tools to improve data quality. Further, MTaPS trained 62 people (including 7 females) in the use of drug committee evaluation tools and AMS routine data collection tools. As part of strengthening the AMR TWG's M&E system, MTaPS provided support to the AMR TWG through MTC5 and MTC4 in the digitization of these data collection tools. The support provided by MTaPS for MSC in the fight against AMR and for optimizing the use of antimicrobial agents in human health contributed to achieving a score of ML3 for both MSC and AMS as assessed by the December 2023 JEE.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

RESULTS AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Enhance capacity of MCG to monitor implementation of the approved NAP-AMR

On January 24, 2024, MTaPS supported the MTC5 to organize a bi-monthly coordination meeting to monitor implementation of the national stewardship plan. During the meeting, the report of activities carried out in 2023 in the human health sector was presented. In total, 16 participants, including 8 females, took part in the meeting. According to the report presented at the meeting, out of the 28 planned activities for 2023 in the human sector, 12 were fully implemented, 3 partially implemented, and 13 not implemented. Since the report detailing 2023 activities for the agriculture, environment, and animal sectors was not finalized, activity implementation data could not be presented during the meeting. The 2024 roadmap for the MTC5 activities was also reviewed and validated.

Activity 1.2.1: Support the AMR TWG to use e-learning platforms to scale up training on AMS and IPC for health professionals

On February 20, 2024, MTaPS supported the MTC4 in collaboration with the Directorate of the Pharmaceutical Activity (DAP) to organize a one-day meeting to review and validate the online IPC modules. This meeting was attended by eight people, including three females. The aim of the meeting

was to validate the online training modules for HCPs on IPC. The DAP "e-learning pour la Chaîne d'Approvisionnement des Produits de Santé" platform was presented by the DAP's information technology team. Participants reviewed the modules and the evaluation questions and integrated their relevant observations into modules for revision.

Following the IPC module review and validation meeting, MTaPS, in collaboration with the DAP, supported the MTC4 and MTC5 to organize the training workshop for HCPs on AMS and IPC. A total of 21 participants were trained, including 5 females. The trainers are from the IPC and AMS regional trainer pool.

RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINE OPTIMIZED

Activity 3.1.1: Support the AMR TWG and its MTC5 to strengthen AMS program at the national level

On March 28, 2024, MTaPS supported the MTC5 to assess its own capacities under the supervision of the AMR TWG and in collaboration with other partners, using the WHO tool for assessing AMS capacities at the national level. A total of 24 people took part in the meeting, including 11 females. The overall score for this assessment was 52%. A major weakness identified was the lack of collaboration between AMS committees and health programs such as Programme National de Lutte Contre le SIDA, Programme National de Lutte Contre le Paludisme, Programme National de Lutte Contre la Tuberculose, and Programme National de Santé de la Mère et de l'Enfant, as well as the lack of collaboration between IPC-WASH and AMS committees. A problem-solving plan will be drawn up and validated on April 11, 2024, in the presence of all stakeholders.

Activity 3.5.1: Support the AMR TWG and its MTC5 to establish and improve a governance and oversight system for AMS in health facilities, including monitoring the implementation of related policies, guidelines, and standards

On January 31, 2024, MTaPS supported the MTC in holding an online meeting in preparation for the February 2 meeting to discuss the PPS. The meeting was attended by 5 people—1 from the AMR Secretariat office, 1 from the Ivorian Pharmaceutical Regulation Authority, and 3 from MTaPS. The meeting included 2 females and 3 males and focused on how to restart the PPS process. Key highlights of the meeting were: (1) organize a meeting to review roles and responsibilities of coordination team members; (2) identify an additional structure under the MOH to include in the coordination team; (3) prepare for protocol submission and training of supervisors and resource persons for data collection in the 20 health facilities; and (4) discuss resource (budget) mobilization.

From February 26 to March 22, 2024, MTaPS supported the AMR-TWG through the MTC5 to organize a supervision visit in 18 supported health facilities. The aim of the visits was to monitor AMS activities implementation. The supervision visits were conducted by teams composed of the AMR secretariat, MTC5, and AMS regional trainers. MTaPS personnel attended four supervision visits with the national counterparts. The supervision visits were conducted by the central level following self-assessments conducted in August–September 2023. These self-assessments were carried out by DTCs with the help of regional pharmacists and regional trainers. The DTC supervision tool and the WHO facility-level AMS capacity assessment tool were used during this activity to assess the DTCs' capacity and functionality. Of the 18 supervised DTCs, 12 showed improvements, 4 regressed, and 2 facility scores were not available

(figure 2). The 4 DTCs whose scores highlighted a regression faced internal leadership problems. It was noted that there are cases where hospital management administrative decisions and the ministerial order establishing the DTCs are contradictory to one another, thereby creating confusion.

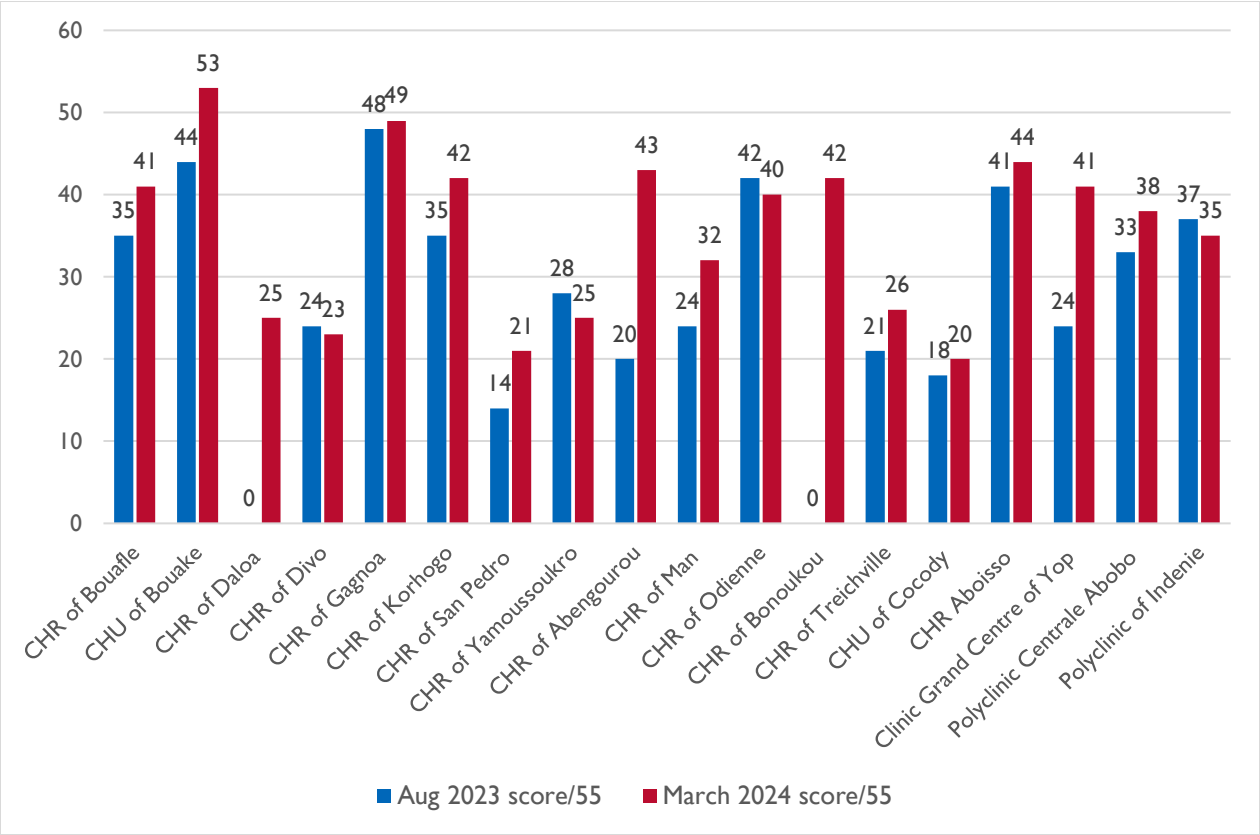


Figure 2. Summary of the scores obtained by the DTCs with the DTC supervision tools, 2023 vs. 2024

BEST PRACTICES/LESSONS LEARNED

- The full engagement of a hospital's management team is critical to improving DTC activities and performance. The involvement and commitment of the Bouafle Regional Hospital director and head physician in DTC activities has emphasized and advanced the DTC agenda which led to an improvement in the DTC score, organization and record keeping of DTC documents and procedures, and an increased rate of action plan implementation. This serves as a best practice and a similar engagement process has been implemented at CHR of San Pedro and CHR of Daloa.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Enhance capacity of MCG to monitor implementation of the approved NAP-AMR **Activity Description:** Support the AMR MCC to hold a meeting to restitute the joint external evaluation that took place in December 2023 and to review the NAP-AMR (MSC and AMS)	April 2024

Activity and Description	Date
Activity Description: Support MTC4 to organize a one-day bimonthly coordination meeting to review the NAP-AMR (IPC)	June 2024
Activity 1.2.1: Support the AMR TWG to use e-learning platforms to scale up training on AMS and IPC for health professionals **Activity Description:** Support MTC4 and MTC5, in collaboration with the DAP, in launching the e-learning on AMS and IPC and to train 600 learners on AMS and IPC	April 2024
Activity 2.5.1: Strengthen the functionality of IPC committees in the human health sector and the capacity of HCPs to implement guidelines using multimodal strategies **Activity Description:** MTaPS, in collaboration with the AMR TWG, will support the regional focal points and IPC regional trainers to supervise the IPC committees' members of the 20 MTaPS-supported facilities. Then, MTaPS and the AMR TWG will support IPC committee members to supervise HCPs from maternity, medicine, surgery, and laboratory services in 20 targeted health facilities.	April–May 2024
Activity 3.5.1: Support the AMR TWG and its MTC5 to establish and improve a governance and oversight system for AMS in health facilities, including monitoring the implementation of related policies, guidelines, and standards **Activity Description:** Support the AMR-TWG to conduct an antimicrobial use survey using the WHO PPS in the 20 MTaPS-supported health facilities	April–June 2024
Activity 3.5.1: Support the AMR TWG and its MTC5 to establish and improve a governance and oversight system for AMS in health facilities, including monitoring the implementation of related policies, guidelines, and standards **Activity Description:** Support regional trainers, members of DTCs, and regional pharmacists to conduct AMS self-assessments using the WHO health facility-level AMS assessment tool in the 20 MTaPS-supported health facilities	May 2024

Table 6. Quarter 2, FY24, Activity Progress, Côte d'Ivoire—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	MNCH Result(s)
Activity 1.1.1: Enhance capacity of MCG to monitor implementation of the approved NAP-AMR **Activity Description:** MTaPS supported the MTC5 to organize a coordination meeting.	5.4	1.1	MTaPS provided technical support to monitor implementation of the NAP-AMR.
Activity 1.2.1: Support the AMR TWG to use e-learning platforms to scale up training on AMS and IPC for health professionals **Activity Description:** MTaPS supported MTC4 and MTC5, in collaboration with the DAP, in organizing the training workshop of e-course tutors for the online training of HCPs on AMS and IPC.	5.4	1.2	MTaPS supported the AMR TWG to test the IPC and AMS modules on the online platform. Further, MTaPS supported the training of 21 e-course tutors to coach learners from the 20 health centers supported by MTaPS.
Activity 3.5.1: Support the AMR TWG and its MTC5 to establish and improve a governance and oversight system for AMS in health facilities, including monitoring the implementation of related policies, guidelines, and standards **Activity Description:** MTaPS supported the MTC5 to prepare for the PPS. MTaPS supported the MTC5 to organize supervision visits.	5.4	3.5	MTaPS supported the organization of a joint supervision visit to each of the remaining 20 facilities to introduce and assist in the implementation of the minimum AMS action package. MTaPS supported the AMR TWG and MTC5 to set up the protocol for the PPS in 20 facilities.

E. DRC

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The goal of MTaPS' AMR work in DRC is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. To achieve this goal, MTaPS works to build the capacity of in-country stakeholders through a system-strengthening approach. The MTaPS GHSA portfolio is focused on three GHSA-specific result areas—MSC on AMR strengthened, IPC improved, and AMS improved.

The strategic approach and actions are focused on supporting the critical path to achieving higher capacity levels as outlined in the JEE tool and WHO benchmarks for IHR capacities. In DRC, the goal of achieving good patient outcomes will be met using multidisciplinary and multisectoral collaboration to improve MSC, IPC, and AMS. MTaPS' strategy is to base its activities and implementation on guidance from WHO benchmarks and the JEE tool while relying on other published guidance on best practices; to collaborate with the appropriate partners at the global, regional, and country levels; and to combine planning and implementation with an embedded monitoring and knowledge-sharing element to capture, document, and disseminate experiences and results. Through MTaPS, USAID is contributing to DRC's attainment of higher WHO IHR capacity levels in AMR and IPC technical areas.

CUMULATIVE PERFORMANCE TO DATE

Since MTaPS began its implementation in DRC in 2019, the program has supported DRC in making significant progress in the fight against AMR. This progress has included the establishment of an NC-AMR and the development of a NAP-AMR. MTaPS supported the NC-AMR in establishing three thematic TWGs (or subcommittees) for IPC, the rational use of antimicrobials, and AMR detection and surveillance. MTaPS supported the NC-AMR and the related TWGs to implement the NAP-AMR and achieve progress in the MSC, AMS, and IPC technical areas.

As a pilot, MTaPS supported the establishment of 12 DTCs in 5 provinces to oversee AMS interventions at the HF level and to promote the rational and appropriate use of medicines, including antimicrobials, to prevent AMR. To this end, MTaPS supported DTCs in implementing AMS CQI activities by iteratively collecting antibiotic prescription patterns and determining patients' knowledge on antibiotic prescriptions, as part of a CQI effort. MTaPS collaborated with WHO to support the National Pharmaceutical Regulatory Authority (ACOREP) in revising the NEML and integrating the WHO AWaRe categorization of antibiotics into the revised version. In collaboration with WHO, MTaPS supported ACOREP in conducting a national survey on the aggregate consumption of antimicrobials in DRC using the atomical, therapeutic, chemical/defined daily dose model. The survey revealed that at least 70% of antibacterial medicines consumed were in the WHO access category, which is above WHO's recommended minimum of 60%. In collaboration with WHO and FAO, MTaPS supported the Directorate of Animal Disease Control (*Direction de Lutte contre les Maladies Animales* [DLMA]) in conducting IPC assessments in the animal health sector. Using an adapted IPCAF tool, the DLMA, ACOREP, and the MOH's Directorate of Hygiene (*Direction d'Hygiène*) carried out the assessment at

four farms and four animal health clinics. Based on the results obtained, each facility developed an improvement plan to reduce HCAIs and inappropriate AMU. MTaPS also supported the Directorate of Hygiene in using the WHO IPCAT2 to assess hygiene conditions in the human health sector at the central level and to develop an improvement plan, which is currently being implemented. Finally, MTaPS supported ACOREP, in collaboration with the *Cliniques Universitaires de Kinshasa* (CUK), *Cliniques Universitaires de Kisangani*, *Hôpital Saint Joseph*, INRB, *Département de Pharmacologie Clinique et Thérapeutique* of the University of Kinshasa, and *Département de Soins de Santé*, in developing the National Guidelines for the Use of Antibiotics in Healthcare Facilities and Services in the Democratic Republic of the Congo, which will serve as the country's standard guidelines for the appropriate use of antibiotics and take into consideration the WHO AWaRe categorization of antibiotics.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.2.2: Develop and disseminate information, education, and communication materials related to AMR containment through the establishment of an e-Learning platform to continuously train and update NC-AMR members and professionals

Between February and March, MTaPS contacted other potential partners, including i+solutions, to discuss the possibility of hosting the IPC and AMS courses on its platform (*Académie de Gestion d'Approvisionnement des Produits de Santé* window). MTaPS also contacted *Le Centre de Connaissances en Santé* (a local training institution) to discuss the possibility of uploading the courses in their existing e-Learning platform.

During the next quarter, MTaPS will continue to discuss with stakeholders, analyze their offers and propositions, and choose an organization or existing platform with which to work.

RESULT AREA 2: IPC

Activity 2.1.1: Support the NC-AMR to institutionalize the regular assessment of IPC practices, including implementing guidelines and regulations in both the animal and human health sectors

From January 19 to 30, 2024, MTaPS supported the *Direction de l'Hygiène et Salubrité Publique* (DHSP) and the DPS of North Kivu and Ituri to organize IPC assessments in seven HFs, including three in Kinshasa (CUK, Saint Joseph, and Monkole hospitals), two in Ituri (*Hôpital Général de Référence* [HGR] Bunia and CME Bunia), and two in North Kivu (Heal Africa and Kyeshero). The IPC assessments were an opportunity to evaluate the remedial action plans developed in June 2023 and to reassess the facilities. The assessment findings show that out of the three hospitals in Kinshasa, CUK and Saint Joseph hospitals have maintained their score of intermediate, with only slight changes since the 2023 assessment. The results are summarized in figure 3. Since the baseline, however, Saint Joseph has seen a significant improvement in IPC practices from inadequate to intermediate level. Moreover, the assessment findings for Bunia and Goma (figure 4) show that HGR Bunia improved from inadequate to intermediate, and CME in Bunia went from basic to intermediate as a result of the implementation of many of the recommendations included in their 2023 improvement plans. Alternatively, the Heal Africa and Kyeshero facilities (in Goma) have made slight progress but maintained the same score since their previous assessments (advanced and intermediate, respectively).

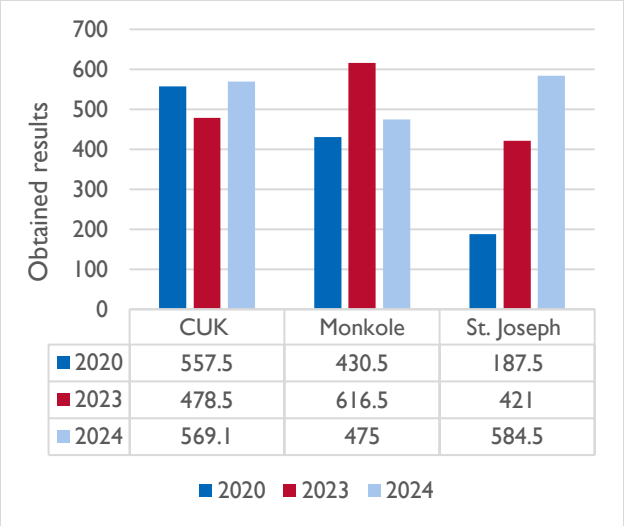


Figure 3. 2020, 2023, and 2024 IPC trend results for Kinshasa hospitals

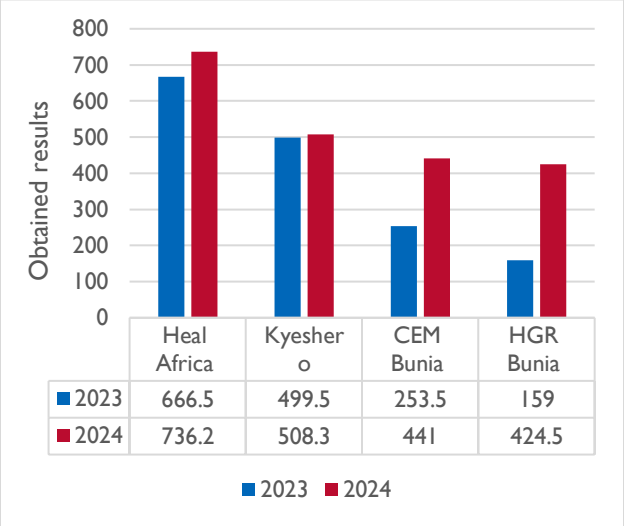


Figure 4. 2023-2024 IPC trend results for Goma and Bunia hospitals

Legend: Level: 0–200 (inadequate), 201–400 (basic), 401–600 (intermediate), and 601–800 (advanced)

Additionally, MTaPS supported the One Health Coordination structure to organize a review meeting on the activities implemented with USAID/MTaPS support to combat monkeypox in the provinces of Tshopo and Kasaï. This meeting allowed participants and the represented organizations to discuss the development of the advocacy note for the MOH and government authorities to provide leadership in the fight against monkeypox in DRC.

From March 7 to 14, 2024, MTaPS supported the DHSP to conduct a central-level IPC assessment. The activity was carried out in three stages: 1) an evaluation of the status of implementation of the 2023 improvement plan; 2) an evaluation of current (2024) IPC components; and 3) the development of a new improvement plan for 2024 based on weaknesses noted during the evaluation. The evaluation of the 2023 improvement plan revealed that out of 15 action items, 4 were fully implemented, 4 are in progress, and 7 have not yet started. Action items that were not yet started (mainly related to HCAIs and laboratories) were reformulated and are included in the 2024 action plan. Results of the 2024 IPC components are displayed in table 7.

Table 7. Central IPC evaluation results per component (2022–2024)

Component	2022	2023	2024
IPC	38%	70%	74%
Guidelines	33%	97%	64%
Education	47%	33%	18%
HCAI surveillance	0%	7%	0%
Multimodal strategies	0%	25%	35%
M&E	0%	36%	58%

In general, the surveillance of HCAIs remains a challenge to overcome, since there is not yet a well-organized data collection system for this in the country. The hygiene department requested technical support from MTaPS to address this challenge.

RESULT AREA 3: OPTIMIZE USE OF ANTIMICROBIAL MEDICINE IN HUMAN AND ANIMAL HEALTH AND AGRICULTURE

Activity 3.5.1: Strengthen and institutionalize DTCs to oversee the implementation of AMS interventions and conduct stewardship practices at their respective facilities

MTaPS technically supported ACOREP and the *Centre National de Pharmacovigilance* (CNPV) to hold a three-day meeting in January in Kinshasa. The objective of the meeting was to contribute to the promotion of the rational use of medicines in general and antimicrobials specifically to prevent AMR and institutionalize this activity in the country. During this meeting, MTaPS presented the importance of DTCs in HFs, the establishment process for DTCs, and tools used in CQI AMS programs. Moreover, MTaPS shared challenges related to DTC functionality, including the challenge of ensuring that HFs take ownership over their DTCs.

Moreover, MTaPS continued to support established DTCs in collaboration with ACOREP and CNPV to conduct CQI data collection and analysis and hold regular meetings.

Nord Kivu Province

The CQI data collection was conducted at Kyeshero and Heal Africa hospitals. For Kyeshero Hospital, the CQI review showed that the number of medications per prescription remained high. In collaboration with the DPS, MTaPS has provided technical support during DTC and staff meetings to sensitize prescribers on the rational use of medicines. Notably, the treatment regimens used as antibiotic prophylaxis during caesarian delivery has declined from 7—during the previous review conducted in November 2023—to 3 in the most recent review conducted in February 2024.

The CQI review at Heal Africa Hospital showed that the number of medications per prescription was reduced. The average number of medicines per prescription have remained stable (close to the WHO recommended norm of 2.5) since the beginning of 2023; the percentage of prescriptions with antibiotics below 30% and the percentage of prescriptions with at least one injectable is below 10%. However, the number of medicines prescribed in their generic form is still low (less than 70%) and requires continuous efforts from DTC and HF management.

Ituri Province

For CME Bunia, the latest CQI review conducted in March showed a low number of medicines per prescription (close to the WHO recommended norm of 2.5), and fewer than 10% of prescriptions included injectables (in alignment with WHO recommendations) since Q3 PY5. However, the DTCs need to continue to sensitize prescribers on prescribing medicines in generic form and to prescribe medicines included in the NEML.

At HGR Bunia, multiple indicators align with WHO recommendations. Since Q1 PY5, the average number of medicines per prescription is 2.5 or less, and more than 90% of prescriptions are written for the generic names of medications. Lastly, fewer than 10% of prescriptions contain injectables, and almost all prescribed medicines are on the NEML.

Kinshasa Province

In the province of Kinshasa, MTaPS supported DTCs of *Centre Hospitalier Initiative Plus* (CHIP) and Saint Joseph to review data and develop their 2024 work plans based on findings from the 2023 assessments. Recommended next steps for the DTCs following the CQI data collection include:

- CHIP: organize meetings with all HF staff and health department leads and develop treatment protocols for post-caesarian antibiotic prophylaxis
- Saint Joseph: Sensitize staff to improve prescribing behaviors, particularly for the rational use of antibiotics

From March 18 to 20, 2024, in collaboration with WHO, MTaPS supported ACOREP to organize a DTC review workshop. A total of 10 DTC representatives attended, including nine from DTCs supported by MTaPS (Kyeshero, Heal Africa, CHIP, Monkole, Saint Joseph, CUK, *Cliniques Universitaires de Lubumbashi*, Kenya Hospital, and Mwangeji) and one supported by WHO (Saint Luc). MTaPS-supported DTCs in Ituri did not participate due to schedule conflicts. The goal of the workshop was to share experiences, including challenges, lessons learned, and best practices related to DTCs and CQI activities as part of AMS for decision-making.

The meeting allowed DTC members to develop action plans to ensure the functionality and sustainability of their respective DTCs and permitted DPS management staff from North Kivu, Haut Katanga, and Lualaba to develop extension plans to establish DTCs in their provinces.

BEST PRACTICES/LESSONS LEARNED

- Regular assessments of HFs' IPC practices are crucial for maintaining and enhancing performance levels. Extending these assessments to a larger number of facilities can strengthen service quality and ensure optimal health care delivery throughout the country. This proactive approach allows for the continuous identification of improvement opportunities in IPC.
- As part of the review of IPC activities with the One Health coordination, MTaPS showed that the training of health care providers and community relays (76 in Tshopo) on IPC significantly improved case reporting numbers. For instance, in the Yakusu HZ alone, the number of reported monkeypox cases increased from 57 to 127 immediately after the training. However, one critical gap was identified: the awareness-raising materials used were not translated into local languages. Hence, expanding the training to a larger number of community relays, and providing them with communication materials in local languages, would greatly improve the fight against infections, including monkeypox.
- The establishment of DTCs, as well as their routine support in the CQI cycle and supervision, are a motivating factor in improving their performance. During the latest DTC review, the best performing DTCs were the ones regularly supported by MTaPS staff.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Provide support to the NC-AMR and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities	April–June 2024

Activity and Description	Date
Activity 1.2.1: Support NC-AMR in conducting joint MSC field support supervision visits in the human, animal, and environmental sectors, and use the supervision findings to conduct the annual Tripartite AMR Country Self-Assessment Surveys (TrACSS)	April–June 2024
Activity 1.2.2: Develop and disseminate information, education, and communication materials related to AMR containment through the establishment of an e-Learning platform to continuously train and update NC-AMR members and professionals	April–June 2024
Activity 2.1.1: Support the NC-AMR to institutionalize the regular assessment of IPC practices, including implementing guidelines and regulations in both the animal and human health sectors	April–June 2024
Activity 3.5.1: Strengthen and institutionalize DTCs to oversee the implementation of AMS interventions and conduct stewardship practices at their respective facilities	April–June 2024
Activity 3.5.2: Disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics	April–June 2024

Table 8. Quarter 2, FY24, Activity Progress, DRC—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Provide support to the NC-AMR and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities	N/A	1.1	MTaPS worked with ACOREP, in collaboration with other technical and financial partners, including FAO and WHO, to support the NC-AMR and its subcommittees to organize meetings and implement recommendations or actions from previous meetings.
Activity 1.2.1: Support NC-AMR in conducting joint MSC field support supervision visits in the human, animal, and environmental sectors, and use the supervision findings to conduct the annual TrACSS	N/A	1.2	Not started
Activity 1.2.2: Develop and disseminate information, education, and communication materials related to AMR containment through the establishment of an e-Learning platform to continuously train and update NC-AMR members and professionals	N/A	1.2	During quarter 2, MTaPS held meetings with various stakeholders including i+academy and *Centre de Connaissances* to discuss the possibility of uploading AMR modules into their existing Web platforms. MTaPS is currently evaluating the proposals from potential partners.
Activity 2.1.1: Support the NC-AMR to institutionalize the regular assessment of IPC practices, including implementing guidelines and regulations in both the animal and human health sectors	N/A	2.1	MTaPS supported the DHSP and DPSs to conduct IPC assessments at the facility level and the central level. Following the assessments, MTaPS supported the facilities to develop remedial action plans to improve IPC practices.
Activity 3.5.1: Strengthen and institutionalize DTCs to oversee the implementation of AMS interventions and conduct stewardship practices at their respective facilities	N/A	3.5	MTaPS continued to support established DTCs to conduct CQI data collection and analysis to improve AMS. MTaPS collaborated with WHO to support ACOREP to organize a three-day review workshop for all DTCs.
Activity 3.5.2: Disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics	N/A	3.5	Not started

MNCH, FP, RH, AND TB ACTIVITIES

OVERVIEW

MTaPS' MNCH/FP/RH goal in DRC is to strengthen the country's pharmaceutical system to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines, medical products, and medicine-related pharmaceutical services. Activities for PY5 were built on the work that MTaPS achieved in previous years, as well as achievements from the USAID-funded SIAPS Program, which ended in 2018. These activities include coordination among the various country programs and partners that are providing pharmaceutical system or supply chain support, the implementation of policies and practices that optimize the use of CDRs, strengthening of technical and managerial capacities in pharmaceutical management in coordination with other partners (Global Health Supply Chain [GHSC]-TA, Integrated Health Program, and the new MIHR and MSSFPO projects in Eastern DRC), and strengthening of civil society engagement by enhancing the involvement of formal groups that have community representation in medical product management.

CUMULATIVE PERFORMANCE TO DATE

During previous years, MTaPS supported the medicines TWGs in North Kivu and Ituri in strengthening their stewardship roles and establishing a subgroup focused on MNCH products, thereby improving the use of the national supply chain system to distribute medicines and collaboration with donors and implementing partners (e.g., USAID, *Santé Rurale* [SANRU], and ASRAMES). The provincial medicines TWGs are now fully functional and have taken leadership to ensure the effective redistribution of an estimated $179,740 in commodities at risk of expiry at CDR ASRAMES in North Kivu. They also took leadership to avoid wasting around 95 months' supply of oral rehydration salts; MTaPS and other partners recommended redeploying the stock in all 34 HZs in North Kivu instead of keeping it only in the 6 UNICEF (iCCM program) supported HZs.

In FY23, MTaPS provided ongoing support to 350 community members in monitoring and overseeing medicine management (including MNCH and FP/RH commodities), focusing on stock management, accountability between the HFs and the community, logistics data collection, storage conditions, transportation and distribution, and other issues. This has increased collaboration between health center managers and community health workers, improved transparency on health commodities and finances, and improved accountability through community participation in inventory management in North Kivu. In addition, MTaPS supported the National Essential Medicines Supply Program (*Programme National d'Approvisionnement en Médicaments Essentiels* [PNAM]) and the Ituri DPS in establishing technical and logistics management units (*Unités Techniques de Gestion Logistique* [UTGL]) to improve LMIS data reporting rates, completeness, and quality. Thanks to the efforts of these units, the LMIS data reporting rate in Ituri has improved.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

Activity 1.1.2: Support PNAM and DPS in strengthening the functionality of medicines TWGs at the central and provincial levels

MTaPS continued to support the DPSs of Ituri and North Kivu in holding their medicines TWG meetings to improve sustained availability of medicines.

Nord Kivu Province

With MTaPS support, DPS North Kivu held its medicines TWG meeting on January 30, 2024. Sixteen participants (2 female and 14 male) from various organizations, including the DPS; *Bureau Information Sanitaire, Recherche, et Communication*, *Programme National de Santé Mentale*; *Bureau Inspection et Contrôle*; *Bureau Appui Technique*; technical and financial partners (PPSSP, Medair, SANRU, *Médecins Sans Frontières* [MSF] Holland, MSF France, and Cordaid); HFs (Heal Africa and Kyeshero hospitals); and CDR ASRAMES.

Topics included:

- Distribution of health commodities during Q1 FY24: CDR ASRAMES received validated distribution plans for HIV products (29 HZs), essential medicines (34 HZs), insecticide-treated bed nets (32 HZs), and TB products (34 HZs) on December 4, 2023. As of January 30, 2024, 30–34 HZs received the supplies. Due to insecurity and poor road conditions, the HZs of Katoyi, Kibua, Masisi, and Pinga did not receive the health commodities. CDR ASRAMES is collaborating with UNICEF and Handicap International to support deliveries using humanitarian corridors and UN Humanitarian Air Service flights.
- Establishment of DTCs and lessons learned from Kyeshero and Heal Africa hospitals: MTaPS shared progress on the installation of DTCs, including the requirements, steps, and objectives. MTaPS presented key achievements, such as the drug formulary developed by Heal Africa DTC and CQI activities to reinforce the importance of DTCs at HFs. Moreover, MTaPS advocated before the DPS to support the implementation of a ministerial circular note with instructions on establishing DTCs in all general hospitals.
- Presentation of the analysis of LMIS data during Q1 FY24: the Technical Logistics Management Unit (TLMU) presented the LMIS indicators for all 34 HZs for the last quarter of 2023. From the results, only 8 HZs met the criteria of both 80% reporting rate and 80% data completeness: Alimbongo, Bambo, Birambizo, Kalunguta, Kibirizi, Nyiragongo, Rutshuru, and Rwanguba. The analysis indicated that only 3 HZs (Birambizo, Kalunguta, and Nyiragongo), of the 8 registered stockouts were within the limits set by the government (≤20%) with respect to oxytocin, as shown in figure 5.

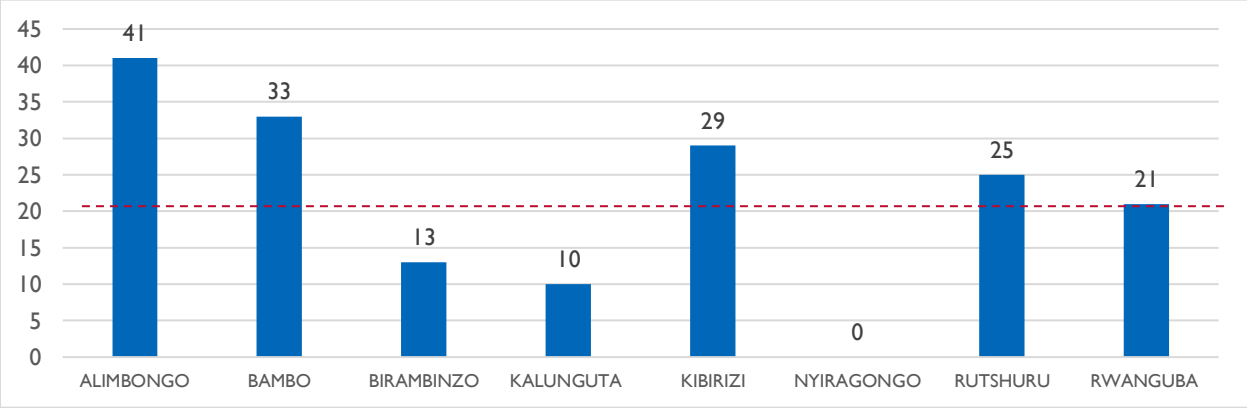


Figure 5. Percentage of HFs with registered stockouts of oxytocin during Q1 FY24

The TLMU shared other challenges, including the low ownership of HZ management teams in publishing LMIS data, discrepancies of reporting rates between InfoMED and DHIS2 that made it difficult to visualize data, low completeness of published data in InfoMED not allowing analysis for informed decisions, and lack of logistical support to help TLMU organize field visits to supervise the HZs.

With MTaPS support, the medicines TWG of North Kivu held its meeting February 20, 2024. A total of 13 participants (13 male) from multiple organizations (DPS, *Inspection Provinciale de la Santé*, PPSSP, Cordaid, UNFPA, SANRU, CDR ASRAMES, Association des Gestionnaires de la Chaîne d'Approvisionnement et Logisticiens [AGCAL], and the Pharmacy Council) attended the meeting. The meeting consisted of validating the distribution plans for malaria, tuberculosis, HIV/AIDS, and COVID-19. Although all HZs will receive replenishment, the medicines TWG recommended to CDR ASRAMES that it continue collaborating with MSF France, the International Committee of the Red Cross, and UNICEF to use the humanitarian corridor to distribute medicines in the HZs of Bambo, Binza, Kibirizi, Rutshuru, and Rwanguba. After validation of the 4 distribution plans, the medicines TWG also validated the schedule of distribution by the CDR: from February 26 to March 30, 2024.

Ituri Province

With MTaPS support, the medicines TWG in Ituri held its meeting February 16, 2024. Eighteen participants (6 female and 12 male) from multiple organizations (DPS, the Alliance for International Medical Action, Memisa, Caritas, SANRU, and Cordaid) attended the meeting.

The following topics were covered during the meeting:

- Validation of vaccine needs for the first quarter of 2024. The quantification was based on demographic data (target population).
- Discussions about the high prices of transfusion commodities, which resulted in significant rates of loss of blood bags. Therefore, a subcommittee was appointed to look further into the issue and to revise price calculations to make the blood transfusion commodities affordable.
- Validation of the authorization to conduct malaria tests using rapid diagnostics tests in private pharmacies. Given the fact that most of the population uses the private sector for medical consultation, the TWG validated the approach of conducting malaria diagnostics in private pharmacies that are owned or supervised by authorized health care professionals registered in their council.
- Availability of FP/RH commodities: UNFPA and Federation des Centrales d'Achat des Medicaments Essentiels (FEDECAME) supplied FP/RH products to five HZs (Nyankunde, Mongbwalu, Boga, Komanda, and Tchomia) and four HZs (Bunia, Nizi, Aru, and Mahagi), respectively. However, the analysis of stock status indicated overstocks in beneficiary HZs, because the distribution did not consider the availability of family planning commodities in those HZs. To address this, the members of the TWG recommended that the supplies be redeployed to HZs or health areas in stockouts or insufficient stocks. Moreover, the participants recommended approaching the UNFPA and FEDECAME to discuss a pull distribution system instead of a push system.
- Presentation of LMIS reporting rate: the UTGL presented the 2023 annual LMIS reporting rate, which was 98% in DHIS2 and 88% in InfoMED. This discrepancy between the two platforms was due to the lack of migration of data for some health areas and the incorrect configuration of some HZs, such as Lolwa and Bambu.

On March 5, 2024, DPS Ituri held another medicines TWG meeting, with MTaPS support. A total of 30 participants (4 female and 26 male) from various organizations (UNFPA, Caritas, SANRU, and Cordaid) and DPSs (offices and programs) attended the meeting.

The meeting agenda consisted of:

- Validating the price of blood bags
- Disseminating the circular note No. 0114/ACRP/DG/D16/P/2024 of February 19, 2024, on the decision to stop the circulation and use of some pharmaceutical products; around 20 pharmaceutical products listed in the letter of the Secretary General of the MOH are to be withdrawn from the market
- Presenting the LMIS indicators of the province; 20 HZs had a good reporting rate (≥80%) in January in both InfoMED and DHIS2
- Advocating the use of residual long-lasting insecticide nets from campaigns in the routine distribution to mitigate its risk of expiries in the sites where they are stored

OBJECTIVE 5: PHARMACEUTICAL SERVICES, INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE TO ACHIEVE DESIRED HEALTH OUTCOMES, IMPROVED

Activity 5.1.1: Work with PNAM, the DPS, and other stakeholders to improve the availability of MNCH and FP/RH products through quantification and forecasting exercises at the provincial and national levels

On February 22, 2024, MTaPS technically assisted the TWG on Supply Chain Management of Contraceptives and Other Maternal Health Medicines (*Groupe Technique de Travail 5*). Twenty-two participants (11 female and 11 male) from various organizations attended the meeting, including the GHSC-TA, UNFPA, and the Clinton Health Access Initiative, as well as MTaPS and MOH representatives. The meeting consisted of the briefing of the members of the *Groupe Technique de Travail 5* on the use of the Quantification Analytics Tool and the presentation of the reproductive, maternal, newborn, and child illness tool updated by MTaPS in 2022. In addition, MTaPS used the meeting as an opportunity to present the tools for forecasting contraceptive needs from the reduced package of contraceptives to be introduced at the community site level.

In March 2024, MTaPS carried out two tasks as part of the preparation for the quantification exercise of medicines and other health products:

- Development of TOR for the quantification exercise with a focus on MNCH commodities and contraceptives for North Kivu and Ituri provinces
- Meeting with PNAM and other stakeholders involved in quantification, including the GHSC-TA Francophone Task Order (FTO) and USAID Integrated Health Project. The objective is to have a participatory and integrated quantification process. A roadmap and timeline for the quantification (from provincial level to central consolidation) were developed.

BEST PRACTICES/LESSONS LEARNED

Initially, TWGs met on a quarterly basis. The DPS decided to increase the frequency of these meetings, transforming them into monthly sessions, which allows for greater discussion on the breadth of topics.

DPS Ituri now holds regular medicines TWG meetings, regardless of the availability of logistic or financial support from MTaPS. This success demonstrates the DPS's adaptability and commitment to improving health service delivery. By fostering collaboration, transferring leadership skills, and ensuring ownership and regular communication, the DPS has made significant strides in optimizing medicine supply chains.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Support ACOREP in developing its 2024–2028 Strategic Plan and in updating the Directory of Registered Medicines in DRC	April–June 2024
Activity 1.1.2: Support PNAM and DPS in strengthening the functionality of medicines TWGs at the central and provincial levels	April–June 2024
Activity 3.2.1: Support the UTGLs in strengthening their data collection system to improve the availability, quality, visibility, and use of logistics data for decision making	April–June 2024
Activity 5.1.1: Work with PNAM, the DPS, and other stakeholders to improve the availability of MNCH and FP/RH products through quantification and forecasting exercises at the provincial and national levels	April–June 2024
Activity 5.1.2: Work with the FTO, MIHR, and MSSFPO to support CDR ASRAMES and Centrale d'Achat et d'Approvisionnement en Médicaments Essentiels du Nord Ituri et Haut-Uélé (CAAMENIHU) in managing and distributing essential medicines, including MNCH and FP/RH commodities	April–June 2024
Activity 5.2.1: Collaborate with the MSSFPO and MIHR projects to support HZs in ensuring the availability of the reduced package of FP products at the community level in North Kivu and Ituri provinces	April–June 2024

Table 9. Quarter 2, FY24, Activity Progress, DRC—MNCH

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
Activity 1.1.1: Support ACOREP to develop its 2024–2028 Strategic Plan and to update the Directory of Registered Medicines in DRC	1.1	N/A	MTaPS held meetings with ACOREP management and other technical and financial partners to discuss and prepare the development of integrated roadmap for the next 5 years.
Activity 1.1.2: Support PNAM and DPS to strengthen the functionality of medicines TWGs at the central and provincial levels	1.1	N/A	This is an ongoing activity. MTaPS continued to support the DPSs of Ituri and North Kivu to organize their medicines TWG meetings and to increase their leadership in the coordination.
Activity 3.2.1: Support the UTGLs to strengthen their data collection system to improve the availability, quality, visibility, and use of logistics data for decision making	3.2	N/A	MTaPS continued to support UTGLs to analyze LMIS data and indicators and to present them to medicines TWGs for decisions and proposed actions. In addition, MTaPS worked with DPSs to develop TOR for LMIS data review.
Activity 5.1.1: Work with PNAM, the DPS, and other stakeholders to improve the availability of MNCH and FP/RH products through quantification and forecasting exercises at the provincial and national levels	5.1	N/A	MTaPS worked with PNAM in collaboration with the GHSC-TA FTO and IHP USAID to prepare the 2024 quantification exercise.
Activity 5.1.2: Work with the FTO, MIHR, and MSSFPO to support CDR ASRAMES and CAAMENIHU to manage and distribute essential medicines, including MNCH and FP/RH commodities	5.1	N/A	MTaPS collaborated with DPSs to develop TORs to carry out inventory management assessment at CDRs Centrale d'Approvisionnement et de Distribution des Médicaments Essentiels de Bunia (CADIMEBU) and ASRAMES.
Activity 5.2.1: Collaborate with the MSSFPO and MIHR projects to support HZs in ensuring the availability of the reduced package of FP products at the community level in North Kivu and Ituri provinces	5.2	N/A	Not started

SUPPLY CHAIN ACTIVITIES

OVERVIEW

MTaPS' supply chain work aims to support DRC in building a stronger pharmaceutical system in the country and ensuring the achievement of USAID-supported health goals, which include supporting private-sector and civil society engagement to strengthen the pharmaceutical supply chain system, expanding access to essential medical products, and progressing toward UHC.

MTaPS' TA aims to build the capacity of the CSOs, including AGCAL, to implement interventions to contribute to good supply chain governance and support resource mobilization. In PY5, MTaPS implemented activities in line with the USAID DRC Health Office Commodity and Supply Chain Roadmap and its result framework, ensuring that quality health products are available at service delivery points. The project focused on building the leadership and technical capacities of local institutions, such as AGCAL, through the implementation of approaches that strengthen the supply chain system.

CUMULATIVE PERFORMANCE TO DATE

In December 2022, MTaPS supported the Ministry of the Economy through the Health Economics Technical Committee, in collaboration with other financial and technical partners, in rationalizing the cost structure for health services and products. The aim of this exercise was to reduce the cost of health commodities and services to support the DRC's UHC program. In collaboration with WHO and SANRU, the office of the President of DRC, members from the Prime Minister's office, the MOH, the Ministry of the Economy, the pharmacist professional board, the physician professional board, ACOREP, and civil society members, MTaPS successfully advocated to the government to grant health products "social product status" instead of "business product status." This will reduce or eliminate tariffs and taxes on health products and services de facto, resulting in a significant cost and price reduction. MTaPS is continuing to support stakeholders and ministries to enact and promulgate the developed draft ministerial decrees to enforce the application of this status change.

In addition, MTaPS collaborated with UNFPA to support AGCAL in recruiting three key staff members, including an executive manager, a provincial representative for Ituri, and a provincial representative for North Kivu. MTaPS organized training sessions to develop leadership and management competencies of AGCAL key staff, which resulted in the development of an AGCAL semiannual action plan and its M&E framework. In addition, MTaPS continued supporting AGCAL in obtaining the legal documents required for its establishment as a recognized NGO in DRC. To this end, MTaPS assisted AGCAL with the obtention of the MOH registration certificate, the membership certificate for NGOs operating in the health sector, and the Ministry of Justice's F-92 identifier. By the end of 2023, AGCAL had enrolled more than 200 members, mainly pharmacy and medicine students.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL SUPPLY CHAIN AND SERVICES INCREASED

Activity 2.3.1: Continue to facilitate the establishment of AGCAL and its integration into the existing supply chain structures at the national and provincial levels

During this quarter, MTaPS supported AGCAL to obtain its *personnalité juridique* (legal personality), granting it full legal existence to operate in the DRC.

On March 12 and March 26, 2024, MTaPS held a working session with the AGCAL team, which focused on the evaluation of AGCAL's semiannual action plan, the review of PY6 activities as approved in the work plan, and the development of the timetable for the implementation of activities.

The evaluation of the semiannual action plan showed that there were some activities not completed. These activities were not conducted as the MTaPS project work plan remained under development and was not approved until February 2024.

MTaPS and AGCAL agreed on priority activities, including providing AGCAL with a National Office, filling all vacancies on the Executive Management and Board of Directors, and providing AGCAL with normative documents (strategic plan, operational plan, and administrative and financial SOPs).

Following the meeting, MTaPS sent an official letter to PNAM and two reminder letters to ASRAMES and CADIMEBU to request an office space for AGCAL. Given AGCAL's mission and objectives, working in proximity with supply chain organizations and institutions such as PNAM, FEDECAME, CDRs, and pharmacy corporation bodies remains the preferred strategy. MTaPS will consider other alternatives depending on the feedback from PNAM, ASRAMES, and CADIMEBU.

In collaboration with AGCAL staff, MTaPS has already developed TOR and a budget to carry out the establishment of AGCAL in the cities of Kinshasa, Goma, Bukavu, and Bunia during the next quarter and to continue supporting the enrollment of new AGCAL members through sensitization meetings in targeted areas, including universities and professional bodies.

Furthermore, to accelerate the implementation of activities, MTaPS is completing the consultancy contracts for the three key AGCAL staff, including the Executive Director based in Kinshasa and two provincial representatives for the provinces of North Kivu and Ituri.

Activity 2.3.2: Support AGCAL and other CSOs' financial, operational, and administrative management competencies by developing SOPs

MTaPS, in collaboration with AGCAL, has developed a TOR for the recruitment of a consultant to develop administrative and financial SOPs. The process will continue and be finalized during the next quarter.

Activity 2.3.3: Provide technical and financial support for capacity strengthening of supply chain managers through coaching and mentoring on sustainable programs

During Q2, MTaPS held two meetings with the GHSC-TA FTO to review their previously developed coaching and mentoring programs in order to select and prioritize programs to implement. During these meetings, MTaPS learned that the GHSC-TA FTO and Cordaid have not yet developed the modules for the coaching and mentoring programs. MTaPS and the GHSC-TA FTO plan to hold a meeting with the USAID/DRC mission in April 2024 to create a new plan for this activity.

BEST PRACTICES/LESSONS LEARNED

- Project success requires engaging with multiple stakeholders. For the implementation of private sector activities, MTaPS regularly collaborates with AGCAL, CDRs, PNAM, USAID IPs and others using multiple strategies, including meetings, reporting, etc. MTaPS approaches every stakeholder differently based on experience, expectations, power, and influence to reach its objectives.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 2.3.1: Continue to facilitate the establishment of AGCAL and its integration into the existing supply chain structures at the national and provincial levels	April–June 2024
Activity 2.3.2: Support AGCAL and other CSOs' financial, operational, and administrative management competencies by developing SOPs	April–June 2024
Activity 2.3.3: Provide technical and financial support for capacity strengthening of supply chain managers through coaching and mentoring on sustainable programs	April–June 2024
Activity 5.1.1: Support the DRC government's UHC program, specifically its program to provide free care for pregnant women and newborns, through citizen watch and monitoring, with a focus on medicine availability and patient satisfaction	April–June 2024

Table 10. Quarter 2, FY24, Activity Progress, DRC—SUPPLY CHAIN

Activity	MTaPS Objective(s)	Activity Progress
Activity 2.3.1: Continue to facilitate the establishment of AGCAL and its integration into the existing supply chain structures at the national and provincial levels	2.3	With MTaPS support, AGCAL is fully established and authorized to operate in DRC as a registered entity with legal personality.
Activity 2.3.2: Support AGCAL and other CSOs' financial, operational, and administrative management competencies by developing SOPs	2.3	MTaPS conducts regular meetings with AGCAL. MTaPS developed a TOR to recruit a consultant to help AGCAL develop administrative and financial SOPs. The activity will be completed next quarter.
Activity 2.3.3: Provide technical and financial support for capacity strengthening of supply chain managers through coaching and mentoring on sustainable programs	2.3	MTaPS collaborated with the GHSC-TA FTO to review the progress of coaching and mentoring modules related to supply chain. However, given the status of modules not yet developed, the two partners will hold a meeting with USAID local mission to explore new ways of implementing the activity.
Activity 5.1.1: Support the DRC government's UHC program, specifically its program to provide free care for pregnant women and newborns, through citizen watch and monitoring with a focus on medicine availability and patient satisfaction	5.1	Not started

F. INDONESIA

FIELD SUPPORT ACTIVITIES

OVERVIEW

Promoting transparency and accountability is a prerequisite for improving access to essential medicines and strengthening health systems to achieve UHC. MTaPS supports Indonesia's pharmaceutical systems by strengthening their ability to institutionalize transparent and evidence-based decision making and their capacity to use robust information to define and cost pharmaceutical coverage, promote pharmaceutical expenditure (PE) tracking to improve purchasing value, and strengthen pharmaceutical-sector governance.

CUMULATIVE PERFORMANCE TO DATE

HEALTH TECHNOLOGY ASSESSMENT

- The 9th HTAsiaLink Conference 2021 Digest: MTaPS contributed to the HTA discourse at the 9th HTAsiaLink Conference, showcasing commitment to HTA advancement.
- HTA Topic Selection Manual: MTaPS co-developed the manual by infusing MCDA and enhancing transparency in the HTA topic selection process.
- HTA Appraisal Manual outline: MTaPS condensed Indonesia's HTA appraisal from three full-day meetings into one half-day meeting using MCDA principles.
- Real-world evidence calibration: MTaPS introduced RWE calibration for a trastuzumab study on early breast cancer patients, elevating HTA quality in the face of data limitations.
- HTAsiaLink recognitions: MTaPS was awarded best oral presentation at the 10th and 11th HTAsiaLink Conferences, showcasing MCDA and stakeholder engagement.
- Global learning agenda: MTaPS submitted manuscripts to scientific journals from the HTAsiaLink conference presentations for publication.
- HTA Topic Selection Manual developed in collaboration with Pusjak PDK and InaHTAC and rolled out for the 2024 call for HTA topics, contributing to increased transparency, wider stakeholder engagement, and a streamlined selection process.
- HTA selection process timeline reduced from 6–8 months to 4 months, allowing more time to conduct the HTA studies.
- HTA topic submissions from stakeholders increased from 19 in 2021 to 41 in 2022 and to 141 in 2023, allowing for more diverse and policy-relevant topics.
- Transparency in HTA decision making improved through an inclusive stakeholder engagement process embedded in the co-developed HTA technical manual.
- HTA agents' (7 MOH staff and 3 university researchers) capacity on RWE calibration strengthened through participation in an economic evaluation of trastuzumab for early breast cancer patients. The use of RWE improves HTA quality and will be incorporated as one of Indonesia's standards for the expedited HTA process.

PHARMACEUTICAL EXPENDITURE

- Data source landscape: MTaPS mapped health care planning data sources for PE tracking.
- PE tracking initiatives: MTaPS pioneered Indonesia's PE tracking through hands-on learning.
- PE report in National Health Accounts (NHA): MTaPS ushered the publication of Indonesia's first PE report into the NHA.
- PE tracking guidance: MTaPS developed draft PE tracking guidelines.
- PE global learning agenda: MTaPS presented its PE work during the International Health Economics Association 2023 conference.
- Draft of PE tracking guidance was submitted to the MOH and USAID.
- PE tracking was conducted, and on December 19, 2023, the Ministry of Technology held a 2022 NHA dissemination meeting. This report also includes pharmaceutical spending figures.

MTaPS closed in Indonesia on January 31, 2024.

MTAPS CLOSEOUT EVENT IN INDONESIA

DATE: December 6, 2023

Description: The USAID MTaPS Program had been supporting the Ministry of Health in Indonesia, along with several other partners, to build and strengthen resilient pharmaceutical systems for better health outcomes. After two and a half years of successful collaboration, MTaPS hosted a closeout event on December 6, 2023, to mark the end of its work in Indonesia. The event was well-attended by partners representing USAID, the Government of Indonesia, and other stakeholders, including Center for Health Financing and Decentralization Policy (Pusjak PDK), Indonesia Food and Drug Administration (BPOM), Indonesian Health Economics Association (InaHEA) committee, and others.

The event was graced by Syarifah Liza Munira, the Head of Health Development Policy Agency, and Enilda Martin, Director Health Office USAID Indonesia, who highlighted the significance of MTaPS achievements in a relatively short project period. During the event, MTaPS Technical Advisor, Rozar Prawiranegara facilitated a panel discussion to showcase the successes and learnings that came from MTaPS' HTA and PE work in Indonesia.

Arry Putra, Country Coordinator, giving his remarks during the MTaPS closeout event in Indonesia. Photo credit: Jonas Wightman

Rozar Prawiranegara, Technical Advisor, MTaPS, facilitating a panel discussion during the MTaPS closeout event in Indonesia. Photo credit: Jonas Wightman

G. JORDAN

FIELD SUPPORT ACTIVITIES

OVERVIEW

In Jordan, MTaPS' overall goals are to improve pharmaceutical-sector governance, institutional capacity for pharmaceutical management and services and patient safety, and to contain AMR. To address the needs of the pharmaceutical sector in Jordan, MTaPS adopted the USAID PSS approach.

CUMULATIVE PERFORMANCE TO DATE

MTaPS played a pivotal role in driving significant procurement reforms in Jordan in collaboration with the GPD. Five crucial regulatory actions were advanced, including legislative changes and institutional policy development for the JFDA and the MOH. Efforts included developing guidelines for FA implementation and procurement negotiation to enhance supplier market entry, competitiveness, and health product availability. A comprehensive assessment of the pharmaceutical supply chain led to the formulation of the PSD Operational Plan 2023–2025 and the establishment of 6 priority supply chain management policies approved by the MOH Secretary General. MTaPS supported integrating the FA SOPs into the Jordan Online E-Procurement System (JONEPS) and creating standard bidding documents (SBDs) for the FAs, thus ensuring fairness and reducing risks. Furthermore, MTaPS supported the drafting of a policy for supplier performance evaluation. MTaPS aided the MOH and RMS in strengthening their capacity to improve antibiotic use in clinical settings. Protocols were developed and disseminated for antibiotic prophylaxis and treatment for surgical procedures and infections, respectively. The RMS AMR Central Committee developed empirical treatment protocols for ICU common infections, monitored by MTaPS through a CQI approach, resulting in improved adherence to protocols at hospitals. Furthermore, MTaPS collaborated with the national HCAC to develop a training curriculum on priority IPC needs identified by the MOH National ACIPC and trained over 200 IPC focal points across MOH and RMS hospitals and MOH PHC units. Additionally, MTaPS extended its support to dental clinics, finalizing the planning and preparation to conduct a comprehensive IPC assessment in a sample of 600 public and private dental clinics and centers. MTaPS also initiated AMR awareness programs—which were all incorporated by the SHD and HCAD into the NAP-AMR 2023–2025—and developed digital health messages disseminated through social media platforms, targeting 2,700 high school students.

These interventions contributed to the public sector strengthening in Jordan across governance, human resources, pharmaceutical service delivery, information management, and financing, ensuring sustainable improvements in health care delivery and management.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: STRENGTHEN PHARMACEUTICAL-SECTOR GOVERNANCE

Activity 1.1.1: Assist the GPD in institutionalizing the FA by automating priority implementation procedures into its electronic system

The Automation Advisory Committee approved the FA procedure workflows, which were developed collaboratively by relevant stakeholders with MTaPS support. After this approval, MTaPS supported a series of biweekly meetings with the GPD information technology staff and other stakeholders to identify the user interface data elements required for the FA workflow automation, including the roles and responsibilities within the system and the authentication lists for the main users of the system (i.e., the GPD, government entities, and suppliers). Throughout this quarter, the Automation Advisory Committee and the IT unit at the GPD, with MTaPS support, led the initiation and oversight of development work for the FA automated procedures. Automating the FA procedures will help institutionalize and sustain the implementation of the FA SOPs by the GPD, thereby enhancing efficiency, data accessibility, transparency, and governance in procurement activities within Jordan.

Activity 1.1.2: Provide technical assistance to the GPD in developing SBDs for the FAs

The GPD finalized an advanced draft of the FA SBD with MTaPS support. This comprehensive document underwent scrutiny and refinement to ensure its compliance with regulatory standards and alignment with the FA SOPs and procurement best practices. The collaborative efforts involved extensive consultations with key stakeholders at the GPD to incorporate diverse perspectives and address various concerns. Before submission to the National Procurement Policies Committee for final endorsement and dissemination, the draft will undergo further discussions and reviews by relevant stakeholders. This inclusive approach aims to foster transparency, accountability, and efficiency in procurement processes that will contribute to selecting the most qualified and competitive bidder engaged in the FAs.

Activity 1.1.3: Provide technical assistance to the GPD in developing a policy for evaluating performance of suppliers

The GPD expressed a need to expand the scope of its policy and include the evaluation of suppliers' performance for all common supplies—not limited to pharmaceuticals—procured by the GPD on behalf of government entities. This strategic decision aims to enhance the impact of public procurement in Jordan by ensuring a comprehensive performance assessment across various sectors. In response to this request, a collaborative workshop was organized by the GPD with representatives from 10 ministries. The objectives of this workshop were to explore the expectations of government entities regarding supplier performance evaluation, to propose a set of standardized procedures for this process, and to discuss criteria for evaluation and key performance indicators (KPIs). Through fruitful discussions and information exchange during the workshop, valuable insights were gathered, laying the foundation for the subsequent steps in policy development. Leveraging the outcomes of the workshop, MTaPS started drafting the policy, incorporating the input and feedback received from diverse stakeholders. This inclusive and consultative approach underscores the commitment of both MTaPS and the GPD to foster transparency, accountability, and efficiency in public procurement practices, thereby advancing the broader goals of good governance and sustainable development in Jordan.

OBJECTIVE 4: IMPROVE PHARMACEUTICAL SERVICES, INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE, TO ACHIEVE DESIRED HEALTH OUTCOMES

Activity 4.1.1: Assist the MOH in implementing the clinical protocols previously developed with MTaPS support and approved by the Minister

The MOH PCPD and the Institutional Development and Quality Control Directorate (IDQCD) worked with MTaPS to implement the CQI approach at both Salt and Mafraq piloting hospitals for auditing the adherence to antibiotic prophylaxis and treatment protocols using the previously developed compliance checklist and KPIs. MTaPS, in close collaboration with MOH representatives, made onsite visits to both hospitals and provided hands-on technical support for the baseline data collection process to ensure the quality and accuracy of data collection, analysis, and reporting. The subsequent audit rounds, conducted after the protocol's orientation sessions, were fully led by the two hospitals' AMS teams, in which clinical pharmacists in coordination with the quality department collaborated to report on the adherence results. Both hospitals completed a baseline and three rounds of auditing, including data collection and analysis, with minimal support from MTaPS. The protocol adherence results were presented during the monthly meetings of the AMS teams. In addition to presenting the data, the AMS team members engaged in discussions concerning challenges, areas for improvement, and mitigation strategies. Both hospitals' indicators were reported to the MOH digital platform for tracking all quality indicators, which will enable decision makers and hospital leadership to institutionalize the protocols, emphasizing the importance of adherence and therefore contributing to rationalizing antimicrobial use at MOH hospitals in Jordan. Adherence to protocols at Salt and Mafraq hospitals demonstrated a gradual increase (figure 6).

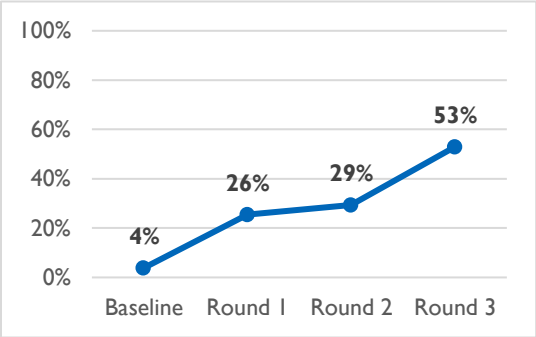


Figure 6. Adherence per audit round from Al Salt and Al Mafraq Hospitals

Activity 4.1.2: Assist the RMS in institutionalizing the implementation of RUA protocols in RMS hospitals

Similar to the approach used for the MOH (activity 4.1.1), the RMS AMS Committee worked with MTaPS to implement CQI at three ICUs within the Al-Hussein Hospital. This involved piloting the auditing tools for adherence to the 27 empirical treatment protocols for ICU infections using the previously developed compliance checklist and KPIs.

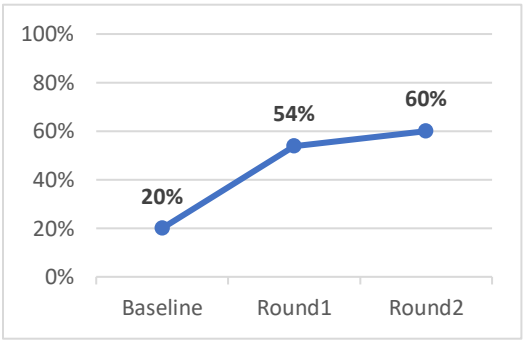


Figure 7. Adherence per audit round from the RMS Al-Hussein Hospital

The subsequent audit rounds were fully led by the RMS AMS Committee, in which clinical pharmacists in coordination with the quality department collaborated to report on the adherence results. Al-Hussein Hospital completed a baseline and two rounds of auditing, including data collection and analysis. Figure 7 shows a positive gradual increase in adherence by round 2 compared to baseline results. As part of the CQI

approach, the committee will present the data and engage in discussions about challenges, areas for improvement, and strategies for mitigation.

Moreover, MTaPS provided support to the RMS AMS Committee in expanding the orientation workshops on the developed ICU infection treatment protocols to 10 peripheral RMS hospitals. These workshops targeted 100 (50 female) service providers from various specialties. Furthermore, RMS trainers conducted the training. At the facility level, adherence to protocols will play a crucial role in contributing to the achievement of Jordan's AMR-NAP objective 4, which aims to optimize the use of antimicrobial medicines.

Activity 4.2.1: Collaborate with the MOH to support IPC training for MOH hospitals' Neonatal Intensive Care Unit (NICU) nursing staff, utilizing the Health Care Infection Preventionist Course (HCIP)-trained IPC focal points as lead trainers

This activity will commence next quarter.

Activity 4.2.2: Collaborate with the MOH, HADs, and the HCAC to support the locally led HCIP training program for hospitals' IPC focal points

A total of 28 IPC focal points (17 female), representing all IPC focal points from every MOH hospital across Jordan, are actively enrolled in the locally led HCIP training program. Upon successful completion of the training, each participant will present a graduation project, showcasing the application of acquired skills and knowledge. Furthermore, they must pass a final examination to attain certification as an infection preventionist. The training will bolster the capabilities of these IPC focal points tasked with developing and supervising IPC policies and programs within their respective hospitals, contributing to preventing the spread of diseases, reducing the length of hospital stays, and avoiding deaths among vulnerable populations.

Activity 4.3.1: Collaborate with the MOH, HADs, and the HCAC to support the locally led health care certified safety and infection control preventionist (HCSIP) training program for PHC providers

A total of 50 IPC focal points (37 female) from the HADs and selected MOH PHC centers have completed the didactic and practical sessions of the HCSIP course, which consisted of 300 training hours. They are currently preparing for the final written exam to conclude 5 months of training. By completing the course requirements, the enrolled IPC focal points will be qualified to plan and implement IPC programs, monitor and strengthen the implementation of IPC interventions, and prepare their facilities to meet national accreditation IPC standards, thus contributing to the improvement of patient health outcomes.

Activity 4.3.2: Support the MOH in conducting a national IPC assessment, including both MOH and private-sector dental settings

MTaPS developed the IPC assessment protocol, which was approved by the MOH IRB. This protocol laid the foundation for the assessment methodology, including the sample of 600 dental clinics and centers encompassing all districts of the country in both private and public sectors. MTaPS has subcontracted the Jordan Experts for Training (JET), the assessment company responsible for conducting the data collection for the dental assessment. Subsequently, MTaPS, in collaboration with JET, conducted two virtual comprehensive orientation sessions covering important topics such as IPC in

primary health care and dental settings, introduced the National IPC Assessment in Dental Settings and related assessment tools, and discussed communication and ethics aspects. A total of 23 participants (10 female) attended these orientations, including assessors, supervisors, and the MOH IPCD team. Effective preparations and orientation sessions are crucial for ensuring the quality and credibility of the forthcoming assessment activities, laying a solid foundation for the assessment process. Furthermore, KoboToolbox will be used as the data collection software to streamline the assessment process and facilitate real-time submission of assessment findings to the MOH and MTaPS. MTaPS will conduct a pilot in a randomized sample of clinics, in collaboration with a team from the IPCD, the dentistry directorate, the Health Professions and Institutions Licensing Directorate, and JET. This pilot aims to identify challenges and estimate the average assessment time, thereby enhancing preparedness for the comprehensive assessment scheduled to start next quarter.

Activity 4.4.1: Support the MOH to widely disseminate the finalized AMR awareness health messages for the general population

MTaPS supported the HCAD in formatting the developed AMR health messages into engaging social media posts and reviewed them with the PCPD and IPCD (figure 8). The HCAD and MTaPS ensured that the messages were appropriate for dissemination to the public by considering the local cultural and gender representation. These social media posts target various audiences, including health service providers and individuals with diverse educational backgrounds in both urban and rural communities. The health messages aim to improve the community's understanding of IPC and AMR principles and encourage them to avoid the unnecessary use of antibiotics, thus reducing AMR and its associated harmful effects on the population.

Figure 8. A sample of the AMR health messages as a social media post

Activity 4.4.2: Support the MOH in raising AMR awareness in additional public schools across the country

MTaPS continued to support the SHD in leading the expansion of the AMR CASS activities to 100 schools encompassing all governorates of Jordan. Two training workshops were conducted to ensure the effectiveness and quality of the sessions on AMR delivered to the school students. The first workshop was a TOT targeting 14 SHD department heads (6 female) and 10 health promoters (7 female). This workshop aimed to equip the trainers with the knowledge and methodologies to deliver effective and high-quality training sessions for school health services providers from their assigned health directorates. Consequently, 4 SHD department heads were assigned to conduct the second training workshop, which consisted of two training sessions targeting 40 health service providers (30 female) from 14 HADs in all governorates in Jordan. Furthermore, MTaPS disseminated materials with AMR messages (1,600 posters and 10,000 pamphlets) to support the SHD in expanding CASS activities to additional schools. Expansion of CASS activities aim to change antimicrobial perceptions in school-aged youth, intervening before inappropriate attitudes become entrenched. Students will then disseminate appropriate messages and influence the adults in their households.

BEST PRACTICES/LESSONS LEARNED

- Involving representatives from multiple ministries and soliciting diverse perspectives during workshops has proven invaluable. This inclusive approach directly informed the development of the supplier's performance evaluation policy, ensuring alignment with the needs and expectations of all stakeholders. Moreover, it enhances transparency, accountability, and efficiency in public procurement practices. This underscores the importance of engaging relevant parties in decision-making processes to foster more effective and sustainable outcomes.
- Regular audit rounds to assess adherence to antibiotic protocols improved coordination between central directorates and hospital AMS committees, thus enhancing collaboration among health care providers and identifying and addressing implementation challenges promptly.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Continue supporting the GPD in automating the FA procedures, finalize the Business Process Modeling Notation document, which describes the automation process and procedures required.	April–June 2024
Activity 1.1.2: Review and complete the final draft of the FA SBD and then submit it to the National Procurement Policies Committee for approval and subsequent dissemination.	April–June 2024
Activity 1.1.3: Develop the final draft of the policy, followed by a thorough review with relevant counterparts, and then submit it to the National Procurement Policies Committee for approval and subsequent dissemination.	April–June 2024
Activity 4.1.1: Salt and Mafraq hospitals will continue leading the CQI cycles. MTaPS will conduct the lessons learned workshop, which will involve representatives from leadership across all MOH hospitals and disseminate related IEC materials.	April–June 2024
Activity 4.1.2: Al-Hussein Hospital AMS Committee will lead the implementation of the CQI approach and conduct regular meetings for the AMS committees. MTaPS will disseminate related IEC materials for 11 RMS hospitals.	April–June 2024
Activity 4.2.1: Support the IPCD in training senior nursing staff from 25 MOH hospitals' NICUs, aiming to enhance IPC practices and reduce infections among neonates	April–June 2024
Activity 4.2.2: Conduct the graduation ceremony for HCIP participants upon completion of all certification requirements	April–June 2024
Activity 4.3.1: Conduct the graduation ceremony for HCSIP participants upon completion of all certification requirements	April–June 2024
Activity 4.3.2: Support the MOH IPCD in the ongoing implementation of the national IPC dental assessment. This includes piloting selected dental clinics and centers; conducting data collection; cleaning and finalizing the assessment dataset; and drafting, finalizing, and launching the assessment report.	April–June 2024
Activity 4.4.1: Digitally disseminate the AMR health messages targeting different sets of community audiences through the MOH social media platforms	April–June 2024
Activity 4.4.2: The MOH SHD will lead the implementation of CASS activities in 100 schools	April–June 2024

Table 11. Quarter 2, FY24, Activity Progress, Jordan—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Assist the GPD in institutionalizing FAs by automating priority implementation procedures into its electronic system **Activity description:** Support the GPD counterparts in integrating the FA SOPs into JONEPS	1	The Automation Advisory Committee approved the FA procedure workflows developed collaboratively with MTaPS. Biweekly meetings within the GPD facilitated the automation process in JONEPS, identifying user interface elements and authentication lists. The initiation and oversight of development work for the FA automated procedures were led by the Automation Advisory Committee and the IT unit at the GPD with MTaPS support.
Activity 1.1.2: Provide technical assistance to the GPD in developing SBDs for FAs **Activity description:** Support the GPD in developing SBDs that will guide bidders when preparing their bids	1	The GPD, with MTaPS support, finalized an advanced draft of the FA SBD, ensuring compliance with national and international standards. Stakeholder consultations ensured that diverse perspectives were considered. Further reviews will precede submission.
Activity 1.1.3: Provide technical assistance to the GPD in developing a policy for evaluating performance of suppliers **Activity description:** Support the GPD to develop a policy that ensures that suppliers' performance is thoroughly evaluated for optimizing costs by identifying providers that offer an optimal balance of cost and quality, leading to improved contracts and reduced procurement expenses	1	A workshop involving 10 ministries was held to explore supplier performance expectations and propose evaluation criteria and procedures. Insights from the workshop informed the policy development process, which was initiated accordingly.
Activity 4.1.1: Assist the MOH in implementing the antibiotic prophylaxis/treatment protocols previously developed with MTaPS' support and approved by the Minister **Activity description:** Support conducting of orientation workshops for physicians (including medical residents), nurses, and pharmacists in Mafraq and Salt hospitals	4	The MOH PCPD and IDQCD worked, with MTaPS support, to implement the CQI approach at both Salt and Mafraq piloting hospitals for auditing the adherence to the key antibiotic prophylaxis and treatment protocols using the previously developed compliance checklist and KPIs. Both hospitals had completed a baseline and three rounds of auditing, including data collection and analysis, with minimal support from MTaPS. The protocol adherence results were presented during the monthly meetings of the AMS committees. In addition to presenting the data, the committee engaged in discussions concerning challenges, areas for improvement, and mitigation strategies.
Activity 4.1.2: Assist the RMS in institutionalizing the implementation of RUA protocols in RMS hospitals **Activity description:** Support the RMS Central AMR Committee in conducting an orientation workshop for service providers from all RMS hospitals	4	The RMS AMS Committee worked, with MTaPS support, to implement CQI at three ICUs within the Al-Hussein Hospital. This involved piloting the auditing of 27 empirical treatments for the ICU infection protocol adherence using the previously developed compliance checklist and KPIs. The subsequent audit rounds were fully led by the RMS AMS Committee, in which clinical pharmacists in coordination with the quality department collaborated to assess and report on the adherence results. The Al-Hussein Hospital completed a baseline and two rounds of auditing, including data collection and analysis. Results showed a positive gradual increase in adherence by round 2 compared to baseline results. MTaPS provided support to the RMS AMS Committee in expanding the orientation workshops on the developed ICU infection treatment protocols to 10 peripheral RMS hospitals. These workshops targeted 100 (50 female) service providers from various specialties. Furthermore, the training was conducted by RMS trainers.

Activity 4.2.1: Collaborate with the MOH to support IPC training for MOH hospitals' NICU nursing staff, utilizing the HCIP-trained IPC focal points as lead trainers **Activity description:** Support the training of selected senior nursing staff from the NICUs of select MOH hospitals	4	This activity will commence next quarter.
Activity 4.2.2: Collaborate with the MOH, HADs, and HCAC to support the locally led HCIP training program for hospitals' IPC focal points **Activity description:** Collaborate with the HCAC to provide additional support to the MOH IPCD to capacitate the focal points and create an enabling environment for the implementation of IPC interventions	4	With MTaPS support, 28 IPC focal points (17 female), representing various MOH hospitals across Jordan, are actively enrolled in the locally led HCIP training program. Each participant is expected to present a graduation project, showcasing the application of acquired skills and knowledge. Furthermore, they must pass a final examination to attain certification as an infection preventionist. The program focuses on building capacities for developing and managing IPC policies, training health care providers on best practices, and monitoring HCAIs.
Activity 4.3.1: Collaborate with the MOH, HADs, and HCAC to support the locally led HCSIP training program for PHC providers **Activity description:** Collaborate with the HCAC to provide the certified HCSIP course to IPC focal points from HADs and select MOH PHC centers	4	With MTaPS support, 50 IPC focal points (37 female) from the HADs and selected MOH PHC centers have completed the didactic and practical sessions of the HCSIP course, which encompassed 300 training hours. They are currently preparing for the final written exam to conclude 5 months of training.
Activity 4.3.2: Support the MOH in conducting a national IPC assessment including both MOH and private-sector dental settings **Activity description:** Provide comprehensive technical and logistical support in conducting an IPC assessment in dental clinics and centers across the country	4	MTaPS has developed the assessment protocol, which was revised and approved by the IRB Committee at the MOH. Additionally, MTaPS, in collaboration with JET, the assessment company, and the MOH IPCD, conducted two virtual comprehensive orientation sessions spanning two days, which covered the assessment methodologies, assessment tools, and assessment ethics. Furthermore, MTaPS Jordan has secured approval from the mission to procure the services of KoboToolbox, a data collection software, to streamline the assessment process and facilitate real-time submission of assessments for each clinic.
Activity 4.4.1: Support the MOH to widely disseminate the finalized AMR awareness health messages for the general population **Activity description:** Support the MOH HCAD to continue the dissemination of health messages digitally targeting different sets of community audiences through the MOH social media platforms	4	MTaPS supported the HCAD in formatting the previously developed health messages into engaging social media posts and reviewed them with the PCPD and IPCD for contextualization and accuracy. HCAD and MTaPS ensured that the messages were appropriate for dissemination to the public by considering the local cultural and gender representation. These social media posts target various audiences, including health service providers and individuals with diverse educational backgrounds in both urban and rural communities.
Activity 4.4.2: Support the MOH in raising AMR awareness in additional public schools across the country **Activity description:** Collaborate with the MOH and SHD to support raising AMR awareness among additional school students	4	MTaPS continued its support of the SHD in leading the expansion of the AMR CASS activities to an additional 100 schools encompassing all governorates of Jordan. Two training workshops were conducted, aimed at ensuring the effectiveness and quality of the sessions on AMR to be delivered to the school students. The first was a TOT workshop targeting 14 SHD department heads and 10 health promoters aimed at equipping the trainers with the knowledge and methodologies to deliver effective and high-quality training sessions for school health services providers from their assigned health directorates. The second workshop consisted of two training sessions on AMR that targeted 40 health service providers from all governorates in Jordan. Furthermore, MTaPS disseminated material with AMR messages (1,600 posters and 10,000 pamphlets) to support the SHD in expanding CASS activities to additional schools.

H. KENYA

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

In Kenya, MTaPS is supporting three result areas in the AMR action package: strengthening MSC on AMR through the NASIC and CASICs; strengthening IPC and AMS on governance and human resources capacity at the national, county, and HF levels; and supporting county- and facility-level IPC, AMS, OSH, and WASH activities for sustainable capacity. These efforts support AMR containment at the national, county, and HF levels by strengthening core governance structures and applying a structured CQI approach to promote control of HAIs, contain AMR, and improve patient safety.

CUMULATIVE PERFORMANCE TO DATE

Through the PY1 to PY5 work plans, MTaPS helped Kenya counterparts improve Kenya's JEE scores by supporting 58% (36/62) of the benchmark actions. In MSC, MTaPS supported the completion of 50% (2/4) of capacity level 2 actions, 50% (2/4) of capacity level 3 actions, 100% (4/4) of capacity level 4 actions, and 60% (3/5) of capacity level 5 actions by December 2023. MTaPS supported MSC activities at the national level and in four focus counties; however, MTaPS transitioned out of two counties in November and December 2023. Key MTaPS activities have included strengthening the MSC structures at the national (NASIC) and county (CASIC) levels; developing and disseminating standardized AMR communique, a CASIC orientation package, and bulletins to OH stakeholders; and developing and reviewing the NAP-AMR, its M&E framework, and CASIC work plans in MTaPS-supported counties.

As of December 2023, MTaPS supported the completion of 80% (4/5) of capacity level 2 actions, 83% (5/6) of capacity level 3 actions, 80% (4/5) of capacity level 4 actions, and 40% (2/5) of capacity level 5 actions for IPC. MTaPS activities focused on strengthening IPC governance structures at the national and county levels, developing and reviewing the national IPC guidelines, developing the national HAI surveillance guideline, applying IPC assessment tools, training HCWs, developing the Kisumu County HCWM Plan, revising the HCWM guideline, developing a relicensure-linked IPC CPD course, and monitoring the implementation of IPC and WASH activities using a CQI approach in focus counties and HFs.

For AMS JEE scores, MTaPS supported the completion of 75% (3/4) of capacity level 2 actions, 83% (5/6) of capacity level 3 actions, 29% (2/7) of capacity level 4 actions, and 0% (0/7) of capacity level 5 actions as of December 2023. MTaPS interventions focus on strengthening AMS governance structures at the national level and in the focus counties and HFs; developing the KNMF; reviewing the Kenya Essential Medicines List with incorporation of the AWaRe categorization of antibiotics; and developing and disseminating the national AMS guidelines, regulatory guidance on optimal use of antimicrobials to HCWs and the public, and AMS curricula at the pre-service and in-service levels. Lastly, MTaPS supports training HCWs on AMS and monitoring the implementation of AMS activities using a CQI approach in the focus counties and HFs.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

MTaPS provided TA to the CASIC for Kilifi and Murang'a counties to conduct the end-term work plan reviews and develop their next iteration of the CASIC 2024–2026 work plans February 13–15, 2024. Additionally, MTaPS continued to provide TA to the NASIC to plan for activities. MTaPS held entry meetings in Nairobi and Kiambu counties to initiate support to AMR and IPC activities in the two new counties.

In collaboration with the MOH Division of Patient and Health Worker Safety (DPHWS), MTaPS held a meeting to review the progress made in developing a mobile application that will support the dissemination of critical AMR and IPC documents, including guidelines, policies, SOPs, and training materials. Additionally, MTaPS provided TA to the Murang'a and Kilifi CIPCAC teams to conduct the validation of their new iteration of work plans and to hold a CIPCAC quarterly meeting. The MTaPS team also supported the Kilifi and Murang'a County teams in conducting IPC supportive supervision in the four MTaPS-supported HFs (two facilities in each county) using MTaPS' supportive supervision guide and reporting template.

In collaboration with the Kenya Medical Research Institute (KEMRI), MTaPS held a one-day symposium to explore the use of bacteriophages for AMR containment. In addition, MTaPS, in collaboration with the PPB, held a virtual meeting to sensitize pilot sites (comprising manufacturers, distributors, hospitals, and retail pharmacies) on the AMC tool. The piloting of the tool is ongoing to inform its finalization. Consequently, the team provided TA to Kilifi County to hold its first County Medicines and Therapeutic Committee (CMTC) meeting. Additionally, the team disseminated IEC materials, SOPs, and AMS-AWaRe guides to 23 AMS teams at MTaPS-supported HFs. The team also provided TA to Kilifi and Murang'a counties to conduct county-led AMS supportive supervision in five MTaPS-supported facilities (three in Kilifi and two in Murang'a).

RESULTS AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Institutionalize NASIC and CASIC for coordination, policy direction, review, and M&E of the national AMR plan and help to move toward sustainable capacity

MTaPS conducted a mentorship and technical advisory session with the AMR focal persons (human health, environment, and agriculture) from Kilifi and Murang'a counties on February 6, 2024, to outline the process of the CASIC work plan progress review, develop the next iteration of CASIC work plans, and share lessons learned and experiences from the Nyeri County CASIC work plan review. In addition, on February 13–15, 2024, MTaPS provided TA to the CASICs for Kilifi and Murang'a counties to conduct the CASIC work plan end-term reviews and develop the next iteration of the work plans for 2024–2026. In attendance were 31 participants (11 female) for Kilifi and 16 participants (7 female) for Murang'a, drawn from the human health, agriculture, and environment sectors. The work plans are awaiting validation.

MTaPS also provided TA to the NASIC in the planning for the appointment of more NASIC members and the reactivation of the various TWGs. Consequently, MTaPS disseminated the approved NAP-AMR (2023–2027) and its associated M&E framework to the MTaPS focus counties.

Additionally, MTaPS, in collaboration with the county governments of Nairobi and Kiambu, held entry meetings on March 11 and 21, 2024, respectively, with an aim of providing support to target AMR and IPC activities, including a review of the CIPCAC and the CASIC work plans in the counties. The meetings also provided an overview of the program support to be provided and a roadmap for activity implementation. In attendance were 22 participants (13 female) for Nairobi and 19 (9 female) for Kiambu. A CIPCAC orientation meeting was held for the Nairobi CIPCAC members; 12 members (8 female) were in attendance.

RESULTS AREA 2: IPC

Activity 2.1.1: Institutionalize IPC governance at the national, county, and facility levels

MTaPS continued to provide technical and financial support in the development of a mobile app that will play a critical role in disseminating various AMR/IPC documents. A joint meeting with MTaPS, the MOH, and the consultant was held on January 23, 2024, to review the progress toward completion and the server in which it would be anchored. Eleven participants (5 female) were in attendance.

Additionally, MTaPS provided TA during the Murang'a CIPCAC work plan validation meeting on January 19, 2024. The work plan was finalized and is awaiting a launch event. A quarterly CIPCAC progress review meeting was held in Murang'a County on February 2, 2024, with 15 participants (7 female) in attendance. From the Murang'a CIPCAC work plan review, 12.2%, 68.3%, and 19.5% of the 41 planned activities were fully implemented, ongoing, and not yet initiated, respectively. The team also provided TA during the Kilifi County CIPCAC work plan review and planning meeting on February 22–23, 2024, where a draft plan was developed; 15 participants (7 female) were in attendance.

Activity 2.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for IPC through pre-service, in-service, and continued professional development trainings

MTaPS, in collaboration with the National Nurses Association of Kenya (NNAK), held a virtual webinar on February 28, 2024. The topic of discussion was patient safety. A total of 283 (190 female) participants were in attendance.

Activity 2.5.1: Institutionalize county-, subcounty-, and facility-level IPC, OSH, and WASH activities for sustainable capacity

MTaPS held a virtual meeting January 18, 2024, with the IPC focal persons from Kisumu, Kilifi, Murang'a, and Nyeri to disseminate the MTaPS-designed supportive supervision guide. This was aimed at strengthening the capacity and confidence of the county teams to continue implementing IPC activities and tracking compliance with IPC practices at the facility level even beyond MTaPS' support. Murang'a and Kilifi counties have used the guides to carry out IPC supportive supervision and mentorship sessions. TA to the county and facility IPC focal persons has been provided remotely during the implementation of planned activities.

RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels

MTaPS, in collaboration with KEMRI, held a high-level one-day symposium on February 7, 2024, to explore the use of bacteriophages for AMR containment; the symposium drew 34 participants (17 female). Additionally, MTaPS, in collaboration with the PPB, held a virtual stakeholder orientation training on February 8, 2024, that engaged 26 participants (15 female) to sensitize pilot sites on the purpose and functionality of an AMC tool and the expectations of the pilot. The pilot for the AMC tool is ongoing with preliminary feedback on the functionality and useability of the tool being collected. The MTaPS/PPB team will use this feedback to finalize the tool.

Additionally, MTaPS supported Kilifi County in conducting its first CMTC meeting on March 16, 2024, with 23 participants (13 female). The meeting provided participants with an overview of the structure, organization, and function of the MTC.

Activity 3.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for AMS through pre- and in-service trainings

The team has continued to provide TA in the review of the AMS in-service course in collaboration with the University of Nairobi.

Activity 3.5.1: Support institutionalization of county-, subcounty-, and facility-level AMS activities for sustainable capacity

MTaPS supported the dissemination of IEC materials, SOPs, and an AMS-AWaRe guide to 23 AMS teams at MTaPS-supported facilities. Consequently, MTaPS provided TA to Kilifi and Murang'a counties to conduct county-led AMS supportive supervision in five MTaPS-supported facilities (three in Kilifi and two in Murang'a) using the MTaPS-developed supportive supervision guide and reporting template.

BEST PRACTICES/LESSONS LEARNED

- Provision of the supportive supervision guide and reporting template to the county team has made it easy for the county team to lead and conduct supportive supervision on their own, thus ensuring sustainability even beyond MTaPS' support.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Institutionalize NASIC and CASIC for coordination, policy direction, review, and M&E of the national AMR plan and help to move toward sustainable capacity ▪ Continue to provide TA to the NASIC and the CASICs in Murang'a and Kilifi counties ▪ Provide TA in the development of CASIC work plan for Nairobi and Kiambu	April–June 2024
Activity 2.1.1: Institutionalize IPC governance at the national, county, and facility levels ▪ Finalize, launch, and disseminate the AMR mobile app ▪ Disseminate IPC and HAI surveillance guidelines, assessment tools, SOPs, orientation packages, etc. ▪ Provide TA for NIPCAC and CIPCAC work plan review meetings in Murang'a, Kilifi, Kiambu, and Nairobi ▪ Launch Murang'a and finalize Kilifi CIPCAC work plans	April–June 2024
Activity 2.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for IPC through pre-service, in-service, and continued professional development trainings ▪ Conduct NNAK IPC quarterly webinars	April–June 2024
Activity 2.5.1: Institutionalize county-, subcounty-, and facility-level IPC, OSH, and WASH activities for sustainable capacity ▪ Provide TA to the Murang'a, Kilifi, Kiambu, and Nairobi CHMTs to monitor/supervise implementation of IPC CQI work plans in respective target facilities	April–June 2024

▪ Conduct IPC baseline assessments in Nairobi and Kiambu counties ▪ Conduct IPC CQI training for HCWs from Nairobi and Kiambu counties	
Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels ▪ Finalization and launch the AMC tool ▪ Conduct MTC orientation for Nairobi and Kiambu counties	April–June 2024
Activity 3.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for AMS through pre- and in-service trainings ▪ Provide TA to University of Nairobi for review of the pre-service AMS training materials ▪ Support data review engagements with Kilifi and Murang'a counties to support AMU surveillance	April–June 2024
Activity 3.5.1: Support institutionalization of county-, subcounty-, and facility-level AMS activities for sustainable capacity ▪ Provide TA to the Murang'a, Kiambu, Kilifi, and Nairobi CHMTs to conduct supportive supervision ▪ Conduct AMS baseline assessment in Kiambu and Nairobi counties	April–June 2024

Table 12. Quarter 2, FY24, Activity Progress, Kenya—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Institutionalize NASIC and CASIC for coordination, policy direction, review, and M&E of the NAP-AMR plan and help to move toward sustainable capacity **Activity description:** Support NASIC in conducting AMR partner mapping and dissemination and implementation of the NAP-AMR 2023–2027 with its consequent M&E framework. Additionally, support institutionalization and strengthening of the Kilifi and Murang'a CASICs	5.4	1.1	▪ Provided TA to Kilifi and Murang'a CASICs to review and develop the next iteration of their work plan ▪ Provided TA to NASIC to plan for appointment of more NASIC members ▪ Disseminated NAP-AMR 2023–2027 and its M&E framework to MTaPS focus counties ▪ Held entry meeting in Kiambu and Nairobi counties
Activity 2.1.1: Institutionalize IPC governance at the national, county, and facility levels **Activity description:** Support MOH in implementation of the national IPC M&E framework, development/review of SOPs, meetings with the national IPC TWG and NIPCAC, CIPCAC meetings, and monitoring of implementation of HF action and IPC CQI plans	5.4	2.1	▪ Held a meeting with the MOH-DPHWS to review progress in the development of the mobile app and to outline recommendations on how to make the app user-friendly ▪ Provided TA to Murang'a County to conduct validation for its CIPCAC work plan and to hold a quarterly CIPCAC meeting ▪ Provided TA to Kilifi CIPCAC to conduct progress review of the CIPCAC work plan and develop the next iteration of their work plan
Activity 2.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for IPC through pre-service, in-service, and continued professional development trainings **Activity description:** Support routinization, strengthening, and scale-up of the IPC CPD course in collaboration with health professional associations; collaborate with national MOH IPC team and stakeholders to introduce IPC agenda/courses for in-service training	5.4	2.2	▪ Conducted a virtual webinar in collaboration with NNAK on patient safety on February 28, 2024, for 283 participants (190 female; 93 male)
Activity 2.5.1: Institutionalize county-, subcounty-, and facility-level IPC, OSH, and WASH activities for sustainable capacity **Activity description:** Support institutionalization of county and HF IPC champions to implement and review IPC CQI action plans; report on key IPC indicators through the KHIS; disseminate and implement existing and newly prioritized IPC guidelines, SOPs, and job aids; and document and share best practices and lessons learned	5.4	2.5	▪ Provided TA to Kilifi and Murang'a counties to conduct county-led IPC supportive supervision and mentorship sessions in four (two from each county) MTaPS-supported facilities using the MTaPS-developed supportive supervision guide and reporting template
Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels **Activity description:** Support the PPB in utilization of the AMS surveillance tool, provide TA to county AMS focal person in two MTaPS focus counties, and support development/review and use of national outpatient prescription and inpatient treatment review sheets	5.4	3.1	▪ Held a one-day bacteriophage symposium on February 7, 2024. drawing participants from the MOH, Kenya Institute of Primate Research, PPB, clinicians, infectious disease specialists, engineering and manufacturing experts, research specialists, and implementing partners ▪ Provided TA to Kilifi County to hold its first CMTC meeting ▪ Trained pilot sites in the utilization of the AMC tool; pilot exercise is ongoing

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 3.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for AMS through pre- and in-service trainings. **Activity description:** In collaboration with the PPB, support routinization, strengthening, scale-up, and incorporation of AMR and AMS course in core preservice curricula for pharmacy training programs. Ongoing provision of AMS CPD curriculum in collaboration with professional bodies. Support dissemination of a PPS training package and scale up patient-focused AMS interventions.	5.4	3.2	▪ Continued to provide TA in the review of the AMS in-service course in collaboration with the University of Nairobi
Activity 3.5.1: Support institutionalization of county-, subcounty-, and facility-level AMS activities for sustainable capacity **Activity description:** Support implementation for patient-focused AMS interventions in the MTaPS focus AMS sites; updating of facility AMS CQI action plans; development/revision and dissemination of prioritized AMR/AMS IEC materials; training of HCWs in new priority AMS areas; supportive supervision; and documentation of best practices and lessons learned to support knowledge management and sharing	5.4	3.5	▪ Disseminated AMR- and AMS-prioritized SOPs, IEC materials, and AMS-AWaRe guides in 23 AMS teams at MTaPS-supported facilities ▪ Provided TA to Murang'a and Kilifi counties to conduct county-led AMS supportive supervision using the MTaPS-developed supportive supervision guide and reporting template in five MTaPS-supported facilities (three in Kilifi and two in Murang'a)

I. MALI

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The MTaPS GHSA program implementation in Mali is guided by the WHO benchmarks for IHR capacities and relies on other published best practices to collaborate with partners at the global, regional, and country levels; to combine planning and implementation with an embedded monitoring and knowledge-sharing element to capture, document, and disseminate experience and results; and to address sex and gender impacts on AMR. MTaPS advocates for a systematic and comprehensive approach to support IPC and AMS activities for AMR containment with the support and oversight of the MSC body on AMR and its IPC and AMS TWGs. In Mali, this MSC body is called the GCMN-RAM. AMR activities in Mali span the national, facility, and community levels.

CUMULATIVE PERFORMANCE TO DATE

During FY19 to FY23, MTaPS worked with the GCMN-RAM to develop TOR for the GCMN-RAM, IPC, and AMS TWGs. With MTaPS' support, the GCMN-RAM has been able to organize 10 coordination meetings of the 12 initially planned to monitor progress in implementing the NAP-AMR. The eighth meeting was an opportunity to pause and reflect, as well as develop a sustainability plan for MTaPS-supported activities. Additionally, MTaPS supported the IPC TWGs in organizing eight meetings to monitor and evaluate IPC practices in Mali. The IPCAT2 tool has been used annually since 2020 to evaluate IPC core components at the national level. In 2023, IPCAT2 results indicated that two components (including the IPC program and surveillance of HAIs) have improved since 2022; Mali also scored at least 50% on four of the six IPC components assessed at the national level. The average score increased from 50% in 2022 to 54% in 2023. The AMS TWG also held four regular meetings to monitor and evaluate AMS practices in supported HFs. The WHO tool has been used to monitor AMS program implementation at the national level during the last meeting in August 2023. The evaluation showed a national score of 60% for AMS program implementation and 85% for monitoring/surveillance and evaluation. The lowest score was 31%, for education awareness and training.

MTaPS supported the DGSHP and DPM in establishing DTCs and IPC committees in 16 HFs. Following their establishment, the committees developed CQI plans for IPC and AMS practices. MTaPS assisted the GCMN-RAM and the DGSHP in organizing four virtual meetings to monitor the implementation of IPC activities described in the 16 facility action plans. MTaPS also supported a total of five HF supervision visits from the inception of the project until December 2023. MTaPS supported the DPM and the National Agency for the Accreditation and Evaluation of Health Facilities (ANAES) in organizing 5 virtual meetings and conducting 3 DTC supervision visits to each of the 16 HFs. Additionally, MTaPS supported the National Institute of Public Health, DGSHP, and DPM in developing the 2023–2027 NAP-AMR, 2021–2025 AMS action plan, 2023–2027 IPC strategic plan, IPC training toolkit, AMS training toolkit, infectious disease treatment guidelines, and IEC materials. MTaPS supported the GCMN-RAM in conducting a rapid assessment of policy, regulations, and supply chain management of antimicrobials in the human health and animal sectors and used the results to inform the development of an integrated 2021–2025 NAP for AMS (human and animal health sectors). MTaPS supported the development of IPC

guidelines for the human and animal sectors and an IPC action plan for the animal health sector which have been adopted and implemented since 2020. MTaPS assisted the DGSHP in printing and disseminating 500 copies of the national IPC strategic plan to the MOH, Ministry of Environment, Ministry of Animal Resources, Ministry of Agriculture, finance and technical partners, and medical professional associations. Further, MTaPS supported the development and implementation of eLearning platforms that are now installed and operational at both the DGSHP and the Faculty of Medicine and Odontostomatology. MTaPS supported the DPM in printing and disseminating 1,520 AMS training toolkits, including the facilitator guide, participant manual, and infectious disease treatment guidelines, to HCWs.

MTaPS supported the GCMN-RAM in participating in national and international events to share achievements and lessons learned and sensitize people to rational use of antimicrobials, as well as promote IPC practices. During these events, a total of 1,125 IEC materials were disseminated to raise awareness of AMR and inform health workers and the general population of the dangers of AMR and irrational use of antibiotics, leading to improved prescription practices by providers and more rational use of antibiotics by patients.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Provide technical and operational support to the GCMN-RAM and its subcommittees

MTaPS supported the GCMN-RAM in preparing and organizing an AMR coordination group meeting which was held on January 24–25, 2024. The objectives of this meeting were to (1) share the results of the WHO 2023 IHR JEE and make recommendations, (2) update the MTaPS transition and sustainability plan, and (3) update the GCMN-RAM and AMS TWG TOR. Twenty-five people, including seven females, from the four key sectors (human health, animal health, environment, and agriculture) attended the meeting.

The suggested recommendations for the GCMN-RAM based on the WHO 2023 IHR JEE were (1) to establish an ad hoc group to advocate for a political endorsement of the NAP-AMR, (2) to develop a road map for implementation of the recommendations of the 2023 JEE, (3) to introduce priority AMR activities into the National Action Plan for Health Security to facilitate mobilization funds, and (4) that the Faculty of Medicine and Odontostomatology formalize a request for the introduction of the IPC eLearning certificate in the student internship process.

A team consisting of MTaPS and GCMN-RAM focal points participated in national events and international conferences to share MTaPS achievements and lessons learned from the Mali experience in February and March 2024.

A representative of the National Institute of Public Health reports on the action plan during the AMR coordination group meeting in Bamako (January 24, 2024). Photo credit: Famory Samassa, STA, USAID/MTaPS Mali.

RESULT AREA 2: IPC

Activity 2.1.1: Support the IPC-WASH group in developing an IPC operational plan for the human health sector

MTaPS supported the DGSHP in preparing and organizing the development of an IPC operational plan for the human health sector workshop held from January 30 to February 2, 2024. The objectives of this workshop were to (1) present the 2023–2027 IPC strategic plan, (2) identify IPC priority activities to be implemented during 2024, (3) plan the priority activities selected by quarter for 2024, and (4) determine the costs of the selected priority activities. Twenty-nine people, including five females, from the IPC-WASH group and health regional directorates attended this workshop. The 2024 IPC operational plan for the human health sector was drafted as an outcome of the workshop. Identified next steps included (1) developing a road map to implement JEE IPC recommendations, (2) finalizing the operational plan, and (3) organizing a roundtable with partners for mobilization of resources to finance implementation of the IPC operational plan.

A representative of the DGSHP comments on the IPC operational plan during the development workshop in Koulikoro (February 2, 2024). Photo credit: Bréhima Simpara, MERL Specialist, USAID/MTaPS Mali.

Activity 2.5.1: Support the IPC-WASH group and DGSHP in monitoring implementation of IPC practices at HFs

In March 2024, MTaPS supported the DGSHP in organizing IPC supervision visits to the 16 supported HFs. This supervision resulted in improvements in IPC practices, with 94% of facilities showing improved performance in core IPC components. These improvements can be attributed to functional IPC committees in all supported facilities. As demonstrated by the IPCAF results, 100% of the HFs have improved IPC practices since the baseline assessment. Regarding core IPC components, seven HFs reached the intermediate level and nine are at the advanced level. Data also show that supported facilities scored at least 75% on the WHO COVID-19 scorecard. Further, standardized tools to better monitor IPC were utilized and CQI plans were implemented in all 16 supported facilities. The average rate for implementation of CQI plans increased from 49% in 2023 to 56% in 2024.

Activity 2.5.2: Support the IPC-WASH group and DGSHP in strengthening HH practices and monitoring compliance with waste management SOPs in HFs

MTaPS supported the IPC-WASH group and the DGSHP in monitoring HH compliance in the 16 supported HFs using WHO's HHSAF tool. During this monitoring, MTaPS supported the IPC-WASH group and the DGSHP in assessing compliance with the developed waste management and decontamination SOPs, including sterilization of reusable medical equipment. Keneya Sinsi Wale, a USAID health strengthening project, was involved in the supervision of the Sikasso and Segou regions. During this field visit, MTaPS and the DGSHP assisted Keneya Sinsi Wale in using IPC assessment tools in these regions to help them scale up and improve IPC practices in their supported facilities.

As a result, the following were noted: (1) 15 of the 16 MTaPS-supported facilities improved HH compliance, and (2) waste management and decontamination SOPs were available in all 16 MTaPS-supported facilities. These improvements can be attributed to functional IPC committees in all supported facilities. One highlighted weakness was that only 4 of the 16 MTaPS-supported facilities are compliant with waste management SOPs. Waste sorting was especially noted as not compliant. To resolve this issue, supervision teams were asked to reinforce the staff's sensitization.

RESULT AREA 3: OPTIMIZE USE OF ANTIMICROBIAL MEDICINES IN HUMAN AND ANIMAL HEALTH AND AGRICULTURE

Activity 3.5.1: Support the DPM in disseminating IEC materials on AMS

MTaPS supported the AMS TWG in printing and disseminating AMS IEC materials, including posters and flyers. These materials were disseminated to regional health directorates, hospitals, HFs, pharmacists, and key stakeholders during conferences and field visits. In total, 2,016 posters and 504 flyers on AMS were disseminated during conferences and supervision field visits this quarter.

Activity 3.5.2: Support the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices at HFs

In January 2024, MTaPS supported the GCMN-RAM and DPM in organizing a virtual meeting to monitor the implementation of AMS practices at supported HFs. Forty-one people, including six women, were in attendance. Data presented in the meeting showcased the following improvements: (1) 16 of the 16 supported facilities implemented CQI to improve AMS in the reporting period, (2) the average rate of CQI plan implementation was 53% across the supported facilities, and (3) the average number of

antibiotics per patient and per prescription was 1.6. A 1.6 average number of antibiotics per patient and per prescription is acceptable, as it falls under the WHO norm of 2 antibiotics per patient and per prescription.

In addition to this monitoring exercise, in March 2024, MTaPS supported the GCMN-RAM, ANAES, and DPM in assessing AMS practices in the 16 supported facilities. Four tools were utilized to conduct these assessments, including (1) the WHO policy guidance on integrated AMS activities, (2) the antibiotic use monitoring tool, (3) the CQI implementation plan, and (4) a DTC supervision tool. The objectives of this exercise were to assess the implementation of DTCs' action plans, evaluating antibiotic prescription indicators within the supported HFs; assess the availability of infectious disease treatment guidelines in the supported HFs; and assess AMS practices. All 16 supported HFs were implementing their own CQI plans tailored specifically for their own facility needs. Further, all supported facilities had infectious disease treatment guidelines on hand. The assessment also highlighted that 67% of surveyed patients can correctly repeat instructions and dosage of their antimicrobial prescriptions, and 12 out of the 16 MTaPS-supported facilities are compliant with the AWaRe categorization.

QUARTER 2 BEST PRACTICES/LESSONS LEARNED

- MTaPS Mali found that organizing joint committee meetings involving various committees at Centre de Sante de Reference (CSRef) Yelimane improved facility performance in AMS. CSRef Yelimane has DTC, IPC, and service quality committees, and the same health workers are engaged in these committees. To better accommodate attendance of these meetings, CSRef Yelimane organized joint committee meetings involving the DTC, IPC, and service quality committees within the facility. During these joint meetings, members proceed with the review of each committee action plan and discuss how to mitigate identified challenges. After the meeting, a separate report is issued for each committee to ensure that committee members are aware of other committee actions. Taking the approach of including all three committees in one meeting has improved and synergized member's involvement and thus the facility's performance in AMS practices.
- To improve IPC practices, the IPC committee at Kati Hospital has introduced a mandatory IPC orientation system for all new interns at the hospital. The training of interns is important because it leads to a culture of proper IPC practices, including improvements in hospital waste management, at the beginning of their medical practice.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Provide technical and operational support to the GCMN-RAM and its subcommittees	April–June 2024
Activity 3.5.1: Support the DPM in disseminating IEC materials on AMS	April–June 2024
Activity 2.5.2: Support the IPC-WASH group and DGSHP to strengthen HH practices and monitor compliance with waste management SOPs in HFs	April–June 2024

Table 13. Quarter 2, FY24, Activity Progress, Mali—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Provide technical and operational support to the GCMN-RAM and its subcommittees	5	5.4	Lessons learned and best practices were shared during national and international events. AMR coordination group meetings were held on January 24 and 25, 2024.
Activity 3.5.1: Support the DPM in disseminating IEC materials on AMS	5	5.4	A total of 2,016 posters and 504 flyers on AMS were disseminated during conferences and supervision field visits.
Activity 3.5.2: Support the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices in HFs	5	5.4	MTaPS supported the GCMN-RAM and the DPM in organizing one virtual meeting and one supervision meeting. AMS practices were monitored for all 16 supported HFs.
Activity 2.1.1: Support the IPC-WASH group in developing an IPC operational plan for the human health sector	5	5.4	MTaPS supported the DGSHP in developing the IPC operational plan.
Activity 2.5.2: Support the IPC-WASH group and DGSHP to strengthen HH practices and monitor compliance with waste management SOPs in HFs	5.4	5.4	MTaPS supported the DGSHP in organizing IPC supervision visits to the 16 supported HFs.

MATERNAL, NEWBORN, AND CHILD HEALTH ACTIVITIES

OVERVIEW

MTaPS' MNCH goal in Mali includes strengthening pharmaceutical regulatory systems, focusing on registration or marketing authorization for all products generally and specifically for MNCH products. This is done by building the capacity of in-country stakeholders and supporting the implementation of the procedure manual for the registration of medicines for human use. To achieve this goal, MTaPS Mali supports two result areas: improvement in the transparency and accountability of the country's pharmaceutical systems and effective implementation of pharmaceutical management systems that are interoperable and link patients and products. These areas are directly aligned with MTaPS' global objectives 1 and 3.

CUMULATIVE PERFORMANCE TO DATE

From December 2021 to April 2022, MTaPS supported the DPM in conducting a three-day training session focused on building data entry teams' capacity to use the DPM's electronic platform, PRO-EMED, for medicine registration. A total of 5,518 medicine registration dossiers were recorded in the tool, representing a completion rate of 110% of the previously noted backlog of an estimated 5,000 unrecorded medicine registration dossiers. Of these, 1,162 were for registration renewals.

MTaPS supported two meetings of the CNAMM in FY22. In May and September 2022, MTaPS helped the DPM organize 2 sessions of the CNAMM in Mali, during which 786 dossiers (including 103 for MNCH products) were examined. After the update of the May 2022 edition of the Directory of Registered Medicines and Medical Products in Mali, 3,606 medicines, listed by form, dosage, and presentation, had valid registrations in Mali. From October to December 2022, MTaPS supported the DPM in setting up and operationalizing an official website. MTaPS supported the DPM in launching the website in June 2023. The Secretary General of the MOH chaired the launch ceremony; the USAID Mali Health Office Director was in attendance and highlighted the importance of this site for the safe use of pharmaceutical products and for improving the quality of health services in facilities.

In February 2023, MTaPS supported the DPM in evaluating the use of medicines in the NEML in 68 HFs, including 4 warehouses of the central medical store, 2 university hospital centers, 2 regional hospitals, 3 regional health offices, 20 district hospitals, and 37 community-level health centers. Highlighted results include 49% of HFs having the latest edition of the NEML and 50% of drug managers using the latest edition. Only 6% (21/380) of prescribers have the latest edition; however, of those who have the latest edition, 52% use it to prescribe drugs.

In September 2023, MTaPS, in collaboration with the Global Fund project Unité de mise en Œuvre de Renforcement du Système de Santé, supported the DPM in developing training tools on rational prescription and in organizing a workshop to train 25 trainers (22 males and 3 females) on rational prescription of antimicrobials.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

There were no achievements this quarter.

QUARTER 2 BEST PRACTICES/LESSONS LEARNED

No lessons learned

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 5.4.6: Support the DPM in building the capacity of health practitioners on infectious disease treatment guidelines and appropriate prescribing	April–June 2024
Activity 1.1.2: Support the DPM in conducting a mid-term evaluation of the 2022–2026 National Pharmaceutical Master Plan	April–June 2024
Subactivity 3.1.6.2: Support the DPM in improving the functionality and operationalization of the website	April–June 2024

Table 14. Quarter 2, FY24, Activity Progress, Mali—MNCH

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
Activity 5.4.6: Support the DPM in building the capacity of health practitioners on infectious disease treatment guidelines and appropriate prescribing	5	5.4	MTaPS supported the DPM in organizing working sessions to prepare the capacity building of health practitioners on infectious disease treatment guidelines and appropriate prescribing.

J. MOZAMBIQUE

FIELD SUPPORT ACTIVITIES

OVERVIEW

MTaPS' goal in Mozambique is to help the country strengthen its pharmaceutical regulatory system to ensure equitable, sustainable access to safe, effective, quality-assured, and affordable essential medicines and pharmaceutical services. This includes establishing an effective medical product vigilance system at ANARME, IP, that supports the detection, assessment, understanding, and prevention of AEs and other medical product-related safety problems to ensure that intended health outcomes are achieved while minimizing medication harm.

Establishing an effective and sustainable regulatory system under the leadership of ANARME, IP, is a high priority for Mozambique's pharmaceutical sector. MTaPS has worked with ANARME, IP and other stakeholders to strengthen the regulatory system to provide safe and effective antiretroviral and other medicines, promote the appropriate use of antimicrobials, and increase accountability and transparency. This includes strengthening the active surveillance system for monitoring AEs and updating the PV management information system by implementing the electronic PViMS tool. MTaPS is supporting ANARME, IP, the national HIV program, and the national tuberculosis program (NTP) to implement ongoing active safety surveillance for patients on TPT and enable systematic monitoring of AEs for TPT regimens.

CUMULATIVE PERFORMANCE TO DATE

In PY2, the National Bioethics Committee on Health approved the protocol for implementation of active safety monitoring of the TLD antiretroviral therapy regimen. After protocol approval by the National Bioethics Committee on Health, 292 HCWs (204 male, 88 female) were trained by ANARME, IP and the national HIV program, with support from MTaPS, along with 18 participants from the central level, on the protocol, SOPs, and proper data collection. In PY3, further support included patient enrollment and follow-up and quarterly onsite and virtual supervision by ANARME, IP and the HIV program at 9 study sites. The PViMS web application was configured for data collection and analysis. By the end of the study on February 28, 2022, the targeted sample size of 3,000 people living with HIV (PLHIV) had successfully been enrolled. MTaPS played a key role in enhancing the capacity of ANARME, IP, by providing support for causality assessment and data analysis. The efforts culminated in the development of a final study report, sent to ANARME, IP, showing the project's outcomes and findings.

ANARME, IP and the HIV national program developed and validated the final report on TLD active safety monitoring in August 2023. Analysis of the study data showed that 3.17% (105/3,317) of participants had at least one AE recorded since their initiation on the TLD regimen. A total of 149 AEs were reported by 105 participants, with the most recorded AEs being headache, insomnia, nausea, and skin rash. The 60 pregnant women on TLD enrolled in the study all had live births, and no suspected congenital anomalies were reported at birth. ANARME, IP achieved the study objectives, including characterizing the AE profile among participants using TLD and estimating the incidence of AEs such as adverse pregnancy outcomes. These results are useful in guiding the MOH and other stakeholders in

regulatory and clinical decision making or actions. Patient education and clinician awareness on the recognition of signs and symptoms of AEs are crucial to prevent and promptly manage drug toxicities.

In PY3, MTaPS built upon its ongoing support to ANARME, IP and the HIV program for active TLD safety surveillance to establish a similar safety surveillance system to actively monitor patients using INH and 3HP for TPT. A key study objective was to determine the incidence of AEs related to TPT among eligible PLHIV at the selected sentinel sites. ANARME, IP and the national HIV and TB programs, with support from MTaPS, developed a protocol for TPT active surveillance, data collection forms, SOPs, and training materials that was approved by the National Bioethics Committee on Health, with further approval from the CDC in PY4 Quarter 2 (March 2022). ANARME, IP and the national HIV program, with support from MTaPS, trained national team members and HCWs from the provinces to cascade the trainings to other HCWs as focal persons for the implementation at the site level.

Five HFs (four health centers and one hospital) in two provinces (Gaza and Maputo City) were selected as study sites. MTaPS periodically engaged with stakeholders, including ANARME, IP, the NTP, USAID Mission, the CDC and its implementing partners *Centro de Colaboração em Saúde* (CCS) and the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), and the Aurum Institute, to plan for implementation. MTaPS procured tablets and configured them for facility-level data collection and management using PViMS, according to the study data needs. PViMS is a free and open source (FOSS) PV management information system that is available on openrims.org as OpenRIMS-PV. The focal health workers at the five sites were trained on its use.

During PY5, four rounds of supervisory site visits were completed. Visits to the implementing sites were conducted by ANARME, IP, MTaPS, and CCS in Maputo City (1 de Junho HF, Albasine HF, and Xipamanine HF) and EGPAF in Gaza Province (Xilembene and Mandlakazi), working with the provincial focal persons from Maputo City and Gaza provincial health services. The site visits identified gaps in TPT active surveillance implementation and made recommendations to address them. In PY5 Quarter 3, MTaPS guided ANARME, IP to revise the protocol to drop the INH arm of the active monitoring program to a cohort event monitoring (CEM) study, to accommodate new treatment guidelines provided by the MOH and to request to extend the study for more time to complete patient follow-up through September 2023 and analyze study data. The bioethics body approved the protocol deviation and an extension on the protocol implementation through July 2024.

In PY6 Quarter 1, ANARME, IP, in coordination with MTaPS, organized and conducted the last round of site visits to the five study sites to close out the study, complete data collection and data quality checks to verify completeness of information on the data collection forms, and collect the study materials from the implementing sites. MTaPS provided guidance to the team composed of ANARME, IP and the national HIV program to manage the data on PViMS, including data cleaning, periodic review, and analysis of the collected data, as well as undertaking a causality assessment process using the PViMS tool for any reported AEs.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

The study results showed that there was successful enrollment of an eligible 463 PLHIV, with 57.7% being female and 96.3% below the age of 55. Of the 463 PLHIV recruited into the study, 319 (69%) had at least one follow-up visit by the end of the study in November 2023. A total of 8.8% (28/319) of

participants had at least one AE recorded since initiation of the 3HP regimen, with 39 AEs reported among these 28 participants. This study achieved its objective of enabling ANARME, IP and the National Sexually Transmitted Infections (STI)/HIV/AIDS and TB programs to implement an active surveillance system and determine the incidence of AEs related to TPT among eligible PLHIV at selected sentinel sites. The incidence of AEs associated with 3HP among those who had at least one follow-up visit was 4 AEs per 100 persons (13/319).

OBJECTIVE 3: STRENGTHEN SYSTEMS FOR PROVIDING PATIENT-CENTERED PHARMACEUTICAL CARE AND SERVICES

Activity 3.1.1: Continue to provide technical assistance to implement an active PV program for safety monitoring of TPT scale-up in Mozambique (activity continuing from fiscal year 2023 [FY23])

During Quarter 2, TPT study data cleaning was completed by MTaPS, who then shared the clean dataset with its expert partner, University of Washington (UW), for analysis. This final data analysis provided information for MTaPS to compile the preliminary report, which was then shared with ANARME, IP and the national HIV and TB programs focal persons for review. The preliminary report was also shared for review with USAID and CDC representatives, who provided comments and requests for clarification.

MTaPS supported ANARME, IP's PV technical team to undertake the Authority's and TB program's focal person review process of the TPT report from March 5 to 12, 2024, and March 13, 2024, respectively, and subsequent addressing of the comments by the UW and MTaPS experts.

From the analysis conducted, baseline characteristics are that the 463 study participants were mostly female (57.7%) with a median age of 36 years of age. Approximately 13% of participants had 3 or more follow-up visits, and the classes or types of medications were recorded at baseline, indicating that the most common types of medicines other than ARVs (and 3HP), were pyridoxine (35.5%) and cotrimoxazole (14.8%).

The 319 participants who had at least 1 follow-up visit were included in the final analysis of incidence of AEs. The study results also showed that overall, 8.8% (28/319) of participants had at least 1 AE recorded since initiation of the 3HP regimen, with an overall 39 AEs reported among the 28. Dark urine was the most commonly recorded AE, with most of the dark urine AEs occurring among persons under the age of 35 years. Males were slightly more likely than females to have AEs, at 8.1% (11/136) and 9.3% (17/183), respectively. Of participants with reported severity in the dataset, 89% (25/28) experienced mild AEs, while 3 AEs were determined to be of moderate severity. At multivariate analyses, variables were examined for possible association with any AE, and neither age nor sex were found to be significantly associated with an AE.

BEST PRACTICES/LESSONS LEARNED

- Future active surveillance protocols and their implementation should include best practice procedures, including stakeholder consultation, risk assessment, and quality assurance procedures.
- Use of integrated technology and tools is required for data collection and analysis. To enhance the efficiency of CEM and reduce the load on the participating HCWs, future efforts should explore the use of electronic health records and mobile phone applications that facilitate direct data capture.

- Periodic review and monitoring of study procedures, regular field monitoring and evaluation, and in-service training of staff involved in the study at frequent intervals are all required for successful active surveillance implementation.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

No further activities are planned for MTaPS in Mozambique. MTaPS closed its activities in Mozambique on March 31, 2024.

Table 15. Quarter 2, FY24, Activity Progress, Mozambique—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Y4 Activity 3.1.2/Y5 Activity 3.1.1/Y6 Activity 3.1.1: Continue to provide technical assistance to implement an active PV program for safety monitoring of TPT scale-up in Mozambique. **Activity description:** Working with ANARME, IP; the TB program: implementing partners; and MTaPS global expert University of Washington, continue to support activities to ensure successful implementation and completion of TPT active safety monitoring. Assist in analysis and interpretation of data, conduct periodic supportive supervision, and generate a final study report with lessons learned and recommendations.	5.3	Data analysis completed. The draft report was developed and shared with ANARME, IP, and the national HIV and TB programs for their review and feedback. In addition, comments were obtained from USAID and CDC. MTaPS worked to respond to the requested clarifications, refine the report, and complete translation into Portuguese. After handover of the final report to ANARME, IP, the Authority will share the report and close the study with the National Bioethics Committee.

K. NEPAL

FIELD SUPPORT ACTIVITIES

OVERVIEW

In Nepal, MTaPS collaborated with the MOHP, the DOHS, and the DDA to strengthen pharmaceutical systems. Over the life of the project, MTaPS provided TA to revise the policy and legal framework, implement pharmaceutical best practices, and engage stakeholders from the public and private sectors to enhance the regulatory system and overall effectiveness of the pharmaceutical sector at the national and local levels. The program's evidence-based strategies targeted priority gaps and used WHO tools, guidelines, best practices, and multipronged interventions to address interconnected challenges and make sustainable improvements in Nepal's pharmaceutical sector.

CUMULATIVE PERFORMANCE TO DATE

Since the inception of the MTaPS program in Nepal, the DDA has undertaken comprehensive initiatives to enhance pharmaceutical-sector regulatory capacities and governance and to strengthen systems at all levels. Beginning with an analysis of organizational structures and pharmaceutical legislation in 2019, the DDA implemented the indicator-based regulatory maturity assessment applying the WHO GBT. In 2021 and 2022, MTaPS provided support to the DDA, including staff competency mapping, specialized training courses to strengthen product registration and regulation, a GBT MALAP, and a proposal for institutional reorganization.

Steps were taken to establish and implement the DDA ISO 9001:2015 QMS, which passed the first internal audit. The DDA also decided to implement the new and open-source Drug Administration Management System 2 (DAMS-2), which was customized for and adapted to the needs of the DDA, starting with pharmacy and wholesale data migration and data transition and upload into DAMS-2 for better registration, renewal, and modification application handling than with DAMS.

In collaboration with MTaPS, the DDA conducted baseline studies on adherence to the developed GPP and GSDP guidelines, and the indicator-based GPP and GSDP inspection tools were transitioned to the DDA and integrated into DDA inspection and reporting practices aimed at strengthening pharmacy and wholesale services. In 2023, a pilot study of the SPARS was completed and the improvement in medicines management was assessed in 352 public-sector HFs situated in 12 districts in 3 provinces. Following SPARS implementation and three supervisory visits, all domains dispensing increased from baseline in all facilities by 123%, or 41 percentage points. Based on the initial encouraging results of the SPARS pilot study, the Curative Service Division, local government, and municipalities requested that the pilot be extended and expanded to ensure national coverage. MTaPS finalized reports on SPARS interrater reliability, SPARS impact assessment, and SPARS cost-effectiveness studies.

MTaPS also supported the MOHP in analyzing the national AMR situation and target media in a campaign to raise public awareness of this critical issue. MTaPS conducted a series of sensitization workshops with over 470 media representatives in all 7 provinces, which resulted in the dissemination of over 200 media reports/pieces on AMR-related issues.

MTaPS collaborated with key stakeholders—including the Nepal Law Commission; MOHP; Ministry of Law, Justice and Parliamentary Affairs; and USAID Nepal—to advance the process of presenting the new and updated Drug Act to parliament for approval. Once that is approved, the DDA will have completed all the indicators to reach the regulatory target of ML 2 as well as two-thirds of the indicators for ML 3.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

The focus of this quarter was on the closing of the program, with the finalization of all deliverables, implementation of the closeout plan and the closeout event, and finalization of the end-of-program report. Apart from implementation of the closeout event, MTaPS progressed well on the customization and adaptation of the new DAMS-2 software program to replace the previous DAMS at the DDA. In collaboration with MTaPS and with support from the local information technology vendor, the DDA had decided to go live with DAMS-2.

ACTIVITY 3.1.1: IMPLEMENT PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEM, PHARMADEX, FOR REGISTRATION, INSPECTION, IMPORTATION AND EXPORTATION, AND PV

DAMS-2 (OpenRIMS) made notable strides during this quarter. The DDA, with support from MTaPS, outlined a phased approach of the pharmacy and wholesale modules, with the initial phase focusing on public notification and data migration from existing systems into DAMS-2. Following this, subsequent phases will implement renewal, registration, and modification processes for both the pharmacy and wholesale modules, as well as the registration of products and manufacturer modules. Moreover, to ensure the continued development and support of the system, USAID has tasked FHI 360 (EPIC PSM) with overseeing the handover process and continuing the software development life cycle for a minimum of nine months, ensuring the project's stability and success in the long term. Additionally, server installation at the National Information Technology Center and networking tasks at the DDA have been completed.

MTAPS NEPAL CLOSEOUT EVENT

On Monday, January 22, 2024, MTaPS Nepal, jointly with the DDA, implemented the end-of-project event and Dr. Birna Trap, MTaPS Country Program Director, presented "Reflections on Pharmaceutical Systems Strengthening: Achievements and the Way Forward (2019–2024)." The event was conducted via Zoom, allowing for remote participation, and was attended by 55 partners (43 males and 12 females), including USAID and government counterparts that gathered to recognize the joint achievement in strengthening the Nepal pharmaceutical system, instituting global best practices in the private and public sectors, and containing AMR. Speakers included Additional Secretary of the Ministry of Health and Population Dr. Tanka Prasa Barakoti and USAID Deputy Director, Health Office, Dr. Kimberly Waller, and other representatives from the DDA, Curative Service Division, Quality Standard and Regulation Division, and Division of Health Services. The speakers acknowledged MTaPS system-strengthening initiatives and highlighted results achieved in a very short period of time and during COVID-19, including legislative and drug law updates that were seen as a game changer, regulatory ML being strengthened (including GPP and GSDP), the QMS being implemented at the DDA toward ISO 9001:2015 certification, medicines management capacity being strengthened through SPARS implementation, AMR containment and awareness, and updating of the national medicines policy. The MOHP expected that support provided by MTaPS should remain in the years to come and stressed the need for continued

USAID support for health and pharmaceutical system strengthening in Nepal. Dr. Niranjan Konduri, Deputy Technical Director of MTaPS, thanked all partners who had been instrumental in ensuring the successful implementation of the MTaPS program.

During the event, MTaPS Nepal showcased 11 spotlight stories, 4 short videos on pharmacy practices, and e-learning videos on GPP and GSDP on 3 screens with QR codes. Additionally, 10 posters on PV and GPP were displayed.

Dr. Kimberly Waller from USAID Nepal giving remarks during the end-of-project presentation on January 22, 2024. Photo credit: MTaPS Nepal

BEST PRACTICES/LESSONS LEARNED

- None this quarter

ACTIVITIES AND EVENTS FOR NEXT QUARTER

- No further activities planned by MTaPS in Nepal

L. NIGERIA

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

MTaPS' goal in Nigeria is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. MTaPS supports three result areas—effective MSC on AMR, IPC programs, and use of antimicrobial medicines optimized—that align with the 2015 WHO global action plan on AMR and Nigeria's NAP-AMR, which include IPC and AMS as two key strategic objectives and MSC as a key approach.

CUMULATIVE PERFORMANCE TO DATE

MTaPS' GHSA work in Nigeria is guided by the WHO IHR benchmark tool (2019). MTaPS' interventions support the country in moving to higher JEE capacity levels across the 3 result areas. As of March 2024, MTaPS has supported the achievement of 29 (47%) of the 62 WHO benchmark actions—7 contributing to MSC/AMR, 13 to IPC, and 9 to AMS.

In MSC, the country completed all 4 benchmark actions in capacity level 2 (by other partners). MTaPS supported the achievement of 3 of the 4 actions in capacity levels 3 and 4 and 1 of the 5 actions in capacity level 5. With MTaPS' support, the country is on track to complete 100% of level 4 and 80% of level 5 benchmark actions by the end of FY24 (PY6). Following the review of the performance of the 2017–2022 NAP-AMR, MTaPS is working with the AMR Coordinating Committee and other partners, including WHO, FAO, the WOAH, and the United Nations Environment Programme (UNEP), to coordinate the development of the new 2023–2028 NAP-AMR for the country. In addition to supporting the prioritization of NAP-AMR 2.0 activities, MTaPS supported the training of M&E officers of the quadripartite ministries in the use of the developed and adopted M&E tools. At the subnational level, MTaPS supports the state-level AMR TWGs in Kebbi and Enugu States and the corresponding facility programs in 7 facilities.

In IPC, MTaPS' support contributes to the country moving toward JEE (version 2.0) level 3, with MTaPS contributing to 3 of the 5 benchmark actions (60%) in level 2, all (100%) of the 6 actions in level 3, and 4 of the 5 benchmark actions (80%) in level 5. MTaPS supported the AMR TWG secretariat to develop the national IPC strategic plan in FY22 (capacity level 3 benchmark action). This was followed by the IPC for viral hemorrhagic fever (VHF) manual in FY23, the systematic review and meta-analysis of HCAI in Nigeria, and the development of the national protocol for bloodstream infection (BSI) surveillance to support HCAI surveillance in the country.

MTaPS' key achievements at the facility level include the establishment of IPC programs in 7 supported private and public facilities in Enugu and Kebbi States. Key outcomes include the movement of facilities from "inadequate" during the FY22 baseline assessments, conducted using the WHO IPCAF, to "intermediate" after the reassessment in FY23. Through an in-person, competency-based training approach, the capacity of 59 members (21 male, 38 female) of the seven facility teams improved in key technical, managerial, and leadership components for effective coordination and management of the IPC

program across the state, including the use of WHO assessment tools to self-assess and develop improvement plans. As a result, step-down trainings were conducted by the facility teams for 1,967 staff (836 male, 1131 female). MTaPS provides ongoing monitoring of these programs remotely and through mentorship visits to the facilities.

In AMS, MTaPS supported the country's AMR TWG secretariat to implement 4 benchmark actions in capacity level 2, 3 in capacity level 3, and 2 in capacity level 4, with the goal of moving the country's AMS program baseline JEE score to level 4. With MTaPS' support, the country is on track to achieve 100% completion of level 4 benchmark actions by the end of FY24 and to position itself for JEE level 5 AMS capacity.

At the state level, AMS programs were established across 3 facilities in Enugu State and 4 facilities in Kebbi State. After the AMS programs were established in the supported facilities, AMS/IPC hybrid committees were established in Enugu and Kebbi States to enhance the functionality of the facility AMS and IPC teams. The laboratories at the facilities in Enugu State and Federal Medical Center Birnin-Kebbi have begun developing hospital antibiograms to help streamline antibiotics prescription and guide empirical antibiotics prescription at the facility level. MTaPS supported the Antimicrobial Use–Point Prevalence Survey (AMU-PPS) in 6 supported facilities. All facilities surveyed reported access groups of antibiotics in the range of 18%–53%, which is below the WHO-recommended minimum of 60%. MTaPS provided feedback on the AMU-PPS outcome to facility AMS teams during monitoring and supportive supervisory visits for updating their facility AMS plans. This feedback guided facility AMS teams to support the monitoring of antibiotics prescribing and more effective engagement with prescribers and other health care practitioners across supported facilities. Follow-up PPS was conducted in FY23, and 4 out of the 6 facilities surveyed recorded improvements in the proportion of access groups of antibiotics, with 1 facility, Mother of Christ Specialist Hospital (MCSH), Enugu, exceeding the WHO minimum of 60%.

MTaPS supported the country's AMR TWG to develop a national OH AMS policy and strategy. This document will provide strategic direction for AMS activity design and implementation across health care levels in both the human and animal health sectors in Nigeria. A critical step in strengthening the AMS program in a country is the development of the WHO AWaRe categorization of antibiotics used in the country to help control the misuse of lifesaving antibiotics. MTaPS supported a meta-analysis of published data on resistance and sensitivity patterns of common microbes to commonly used antibiotics in Nigeria. The AWaRe TWG, a subcommittee of the NEML committee, then used the outcome of the meta-analysis for input during the categorization of antibiotics based on WHO AWaRe groupings in April 2023. MTaPS is collaborating with the Federal Ministry of Health (FMOH) and NEML committee to ensure that the AWaRe list is incorporated into the NEML during its ongoing review.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

The 2023–2028 NAP, including the monitoring framework, is nearing conclusion. Once finalized, this NAP-AMR will guide the implementation of AMR programs in the country for the next five years. In addition to MTaPS' support for the prioritization of NAP-AMR 2.0 activities, MTaPS supported the training of M&E officers of the quadripartite ministries in the use of the developed and adopted M&E tools. MTaPS strengthened the capacity of AMS mentors on the development of Hospital Antibiotics

Formulary (HAF) and Antimicrobial Consumption Survey (AMCS), and this was stepped down to facility AMS teams in Kebbi and Enugu States.

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Support the national AMR secretariat to develop the 2023–2028 NAP-AMR with costed implementation plan.

MTaPS, in collaboration with the AMR Coordinating Committee (AMR CC) Chair, is supporting the national AMR TWG secretariat with editorial review and formatting of the zero draft of the new NAP-AMR 2023–2028.

Activity 1.2.1: Continue to build managerial capacity within the AMR TWG and its subcommittees.

Following the engagement of the consultant that would lead the capacity strengthening of M&E officers from the quadripartite ministries, MTaPS, in collaboration with the national AMR TWG secretariat, supported a workshop that prioritized the new NAP-AMR activities. The workshop was held from March 20 to 22, 2024, and included a cross-section of OH stakeholders, including M&E officers and focal persons from the quadripartite ministries, as well as representatives from WHO, FAO, NCDC, and MTaPS. The workshop reviewed, updated, and adopted the AMR CC–developed M&E indicators and the new M&E tools for the NAP-AMR. This workshop completes the deliverable for this activity. In addition, the capacity of the M&E officers from the quadripartite ministries was built on the monitoring of the new NAP using the prioritized indicators. Next steps include expanding the network of M&E officers across each pillar to facilitate effective knowledge sharing and conducting regular refresher training to reinforce the understanding of data collection tools and methodologies.

RESULT AREA 2: IPC

Activity 2.1.1: Support IPC governance at the national and state levels.

During the February 20–22, 2024 NAP-AMR M&E workshop, MTaPS supported the country with the prioritization of activities and development of indicators and tools for data collection of IPC, biosecurity, WASH, and vaccination activities for inclusion in the NAP-AMR 2.0. The documents are part of the finalized NAP-AMR 2.0 for implementation by the country and stakeholders.

Activity 2.1.2: Support for institutionalization of capacity strengthening on the developed national IPC for VHF guidelines for safety of health workers in health facilities.

MTaPS has engaged and deployed a consultant from the NCDC's pool of state IPC practitioners to support the provision of on-the-ground support, mentoring, and training on the developed IPC for VHF manual. This consultant worked alongside the state IPC focal persons and the facility IPC teams, reinforcing the process of adoption and implementation of the IPC for VHF manual to MTaPS-supported HFs in the NCDC network.

Activity 2.1.3: Strengthen HCAI surveillance in human health sector.

In Quarter 2, FY24, MTaPS met with the NCDC's IPC team and onboarded the consultant for the development of a manuscript from the completed HCAI systematic review, meta-analysis, and rapid

assessment of six tertiary HFs' capacity for HCAI surveillance in the country. The manuscript development is prioritized by MTaPS and the NCDC for completion in Quarter 3 of FY24.

Activity 2.2.1: Strengthen capacity of HCF IPC teams' leadership to sustainably implement IPC guidelines using multimodal strategies.

In Quarter 2, FY24, MTaPS, in collaboration with the national AMR TWG secretariat, deployed local IPC experts to provide support to Enugu and Kebbi States. The IPC experts provided support to the IPC focal persons and the HF leadership, encouraging facility-driven interventions to address gaps in the IPC programs, education and training, and monitoring in MTaPS-supported facilities in Enugu and Kebbi States.

Activity 2.5.1: Strengthening IPC core components and the functionality of IPC committees in supported hospitals.

In Quarter 2, FY24, MTaPS, in collaboration with the national AMR TWG secretariat, deployed local IPC experts to serve as mentors to the IPC teams across the seven MTaPS-supported facilities in Enugu and Kebbi States. The mentors conducted hand hygiene observation training for IPC teams and reviewed work plans in line with the most recent IPCAF assessment scores. The mentors also provided on-the-job support on environmental sanitation, hand hygiene, and training of new facility IPC team members.

RESULT AREA 3: OPTIMIZE USE OF ANTIMICROBIAL MEDICINE IN HUMAN AND ANIMAL HEALTH AND AGRICULTURE

Activity 3.1.1: Strengthen institutional and HR capacity to manage AMS programs.

MTaPS is working with the FMOH and the NEML Committee to finalize the NEML. The third and final workshop for the validation of the reviewed list is expected in Quarter 3. Once validated and released, the final list will be disseminated across MTaPS-supported facilities.

Activity 3.5.1: Strengthen the implementation of AMS programs in all MTaPS-supported facilities.

Following the engagement of the AMS consultants, who will provide support for facility AMS programs in Enugu and Kebbi states, MTaPS supported the capacity building of the consultants on AMCS and the development of HAF using a predeveloped template. Through the AMS consultants, the capacity of the facility AMS team members was strengthened with ongoing support to consolidate interventions tailored toward improving facility AMS core elements and PPS results. MTaPS, in conjunction with the NCDC, conducted joint monitoring, supportive and supervisory visits (MSSV) across the three supported facilities in Enugu state.

BEST PRACTICES/LESSONS LEARNED

- The adoption of a bottom-up approach for the implementation of AMR and IPC activities would have allowed for better engagement with the subnational stakeholders, more relevant feedback, and the adoption of a more facility-oriented approach to addressing gaps in AMR and IPC.
- The involvement of the State IPC focal persons in facility mentoring has strengthened the institutionalization of State MOH's role in supporting IPC activities at the facility level and will allow

it to scale similar interventions to government-owned facilities and reinforce actions at the MTaPS-supported facilities, for sustainability beyond the MTaPS program.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Validation/Ministerial Presentation of NAP 2.0	April 2024
Launch of NAP 2.0	May 2024
Validation workshop for AMS modules and mentorship toolkit	June 2024
Joint supervisory visit to supported facilities by USAID mission	April 2024
Knowledge Exchange Workshop in Enugu	April 2024
Knowledge Exchange Workshop in Kebbi	May 2024

Table 16. Quarter 2, FY24, Activity Progress, Nigeria—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1: Emergency supply of IPC commodities **Activity description:** Identify and map COVID-19 treatment centers as last-mile distribution points.	1.1, 2.3, 4.1, 5.3	2.2, 3.2	MTaPS developed an emergency supply chain preparedness and response strategy, identifying strategic objectives, key interventions, and expected results considering the WHO pillar 8 for COVID-19 rapid preparedness and response guidelines. The strategic plan has been submitted and is being used by the FMOH to develop and implement activities.
Activity 1: Development of the new 2023–2028 NAP-AMR, including monitoring framework and cost of new plan **Activity description:** MTaPS is working with the AMR coordinating committee and other bilateral and multilateral partners to coordinate the process.	5.4	1.1	MTaPS is supporting the finalization of the 2023–2028 NAP strategic plan and operational plan with editorial review and formatting services, in preparation for validation and sign-off by the Minister.
Activity 2: Capacity strengthening for M&E officers in the AMR TWG **Activity description:** The capacity of M&E officers in the quadripartite sectors will be built for effective monitoring of work plan activities in their various sectors.	5.4	1.2	MTaPS supported the prioritization of work plan activities and training of the M&E officers of the quadripartite ministries based on the prioritized indicators.
Activity 3: Development of AWaRe categorization of antibiotics **Activity description:** Following the completion of categorization of essential antibiotics in Nigeria into the AWaRe categories based on local evidence of the sensitivity and resistance profile of the antibiotics, the categories list is expected to be integrated into the NEML.	5.4	3.1	The final validation workshop for the integration of WHO AWaRe classification into the NEML is anticipated.
Activity 4: AMS mentors and resource persons **Activity description:** Mentoring and supportive supervision in Enugu and Kebbi States for facility AMS teams	5.4	3.5	MTaPS supported facility AMS programs in Enugu and Kebbi States through the consultants' continued capacity strengthening of new and old members on HAF and AMCS, sensitization of prescribers, and identification of quality indicators that will be used to monitor the program.
Activity 5: Support the development of national IPC for VHF guidelines for safety of health workers.	5.4	2.1	Engaged MTaPS mentor will support capacity strengthening on disseminated IPC for VHF manual.
Activity 6: Strengthen HCAI surveillance in human health.	5.4	2.1	Update of the HCAI surveillance systematic review commenced and manuscript development ongoing.
Activity 7: Strengthening IPC core components and functioning of committees	5.4	2.5	Engaged MTaPS mentor to provide support to IPC committees and co-facilitate Knowledge Exchange Workshops for each of the supported States of Kebbi and Enugu.

M. PHILIPPINES

FIELD SUPPORT (TB AND FP) ACTIVITIES

OVERVIEW

In the Philippines, MTaPS provides TA and capacity-building support to the DOH to institutionalize integrated and effective procurement and supply chain systems for HIV, TB, FP, and other health program commodities; establish fully functional PV and product registration systems; and improve pharmaceutical services to ensure patient safety and improve health outcomes.

CUMULATIVE PERFORMANCE TO DATE

MTaPS supported the DOH in developing two long-term supply chain strategies, facilitated the inclusion of articles into UHC regulation to ensure policy support for supply chain reforms, developed a supply chain road map for UHC law implementation, and designed inventory strategy for all levels. MTaPS created a supply chain workforce development plan, which is currently used by the DOH to select and hire skilled staff. MTaPS developed and uploaded nine eLearning courses on PSCM, PV, and gender and development (GAD) in PSS into the DOH Academy in partnership with the DOH and FDA. MTaPS supported the DOH in introducing and rolling out an end-to-end eLMIS to enhance supply chain visibility and efficiency, including for COVID-19 vaccines. By the end of February 2024, a total of 224 warehouses in central warehouses (7), regional warehouses (28), LGU warehouses (64), and SDPs (125) had functioning eLMIS. MTaPS is continuously collaborating with other agencies, such as the Philippine Business for Social Progress (PBSP), the Global Fund's principal recipient, and WHO, to leverage resources for eLMIS implementation. In total, MTaPS has leveraged about USD 1.9 million from non-USAID sources in support of eLMIS implementation.

MTaPS also enhanced the patient safety monitoring system PViMS, including interoperability with VigiFlow using the E2B file exchange standard, and supported the DOH and FDA in rolling it out at targeted TB facilities. Since the start of the PViMS rollout in PY3 (FY21), MTaPS has been able to reach 100% (199) of the TB facilities. As of end of February 2024, 597 AEs had been reported through PViMS. Additionally, MTaPS supported the DOH in analyzing stock information for key tracer TB, FP, and HIV commodities, starting in PY3 (FY21). MTaPS also supported the FDA in updating the national PV policy and guidelines to ensure that PV is supported by a comprehensive set of policy provisions with the necessary mandate for implementation. MTaPS facilitated the registration of novel HIV and TB medicines to make them available for use.

MTaPS provided TA to the DOH and the Commission on Population and Development in updating and finalizing a warehouse operation manual (WOM) and training of staff from different levels to roll out its use. MTaPS supported the long-term estimations of quantity and budget requirements for TB, HIV, and FP commodities procurement of the DOH. MTaPS also provided TA in the development of quantification guidelines and conducted a series of quantification training sessions for the DOH. MTaPS worked with the Department of Science and Technology Health Technology Assessment Division to develop the Philippine HTA Methods Guide for Clinical Equipment and Devices, the first specialized methods guide in the country. Further, because of the capacity-building activities conducted and tools

provided for stock analysis by MTaPS, the DOH has since been independent in processing stock data and orienting selected regions on stock data analysis. MTaPS also introduced supply chain system design principles and designed the recommended inventory control policies with key stakeholders.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

Activity 1.1.1: Support the DOH in establishing a working PSCM governance mechanism and develop the five-year (2024–2028) supply chain strategy

MTaPS supported the DOH in developing the governance structure and TOR to establish an effective stewardship and oversight mechanism for PSCM. MTaPS endorsed the establishment of the National PSCM Stewardship and Oversight Council, along with the eLMIS Governance Committee and the National Demand Planning and Allocation Committee, to the DOH. Once officially established, these governance bodies will be crucial for coordinating and overseeing PSCM activities effectively. While MTaPS supported these initiatives, certain aspects, such as the reorganization of bureaus with supply chain functions, are still underway. As a result, final discussions on the TOR for governance structures are pending. The DOH has decided that the finalization of the TOR will occur at the executive committee level, ensuring high-level oversight and alignment with relevant offices.

MTaPS supported the development of the NSP for Integrated Supply Chain (2024–2028) and shared the draft with the DOH SCMS. It was developed and validated through a participatory process involving the private and public sectors. The NSP was presented to the DOH Executive Committee led by the Secretary of Health and approved on March 22, 2024. This strategy will guide decision makers and implementers to harmonize efforts aimed at strengthening the national PSCM over the next five years.

OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES INCREASED, INCLUDING REGULATION OF MEDICAL PRODUCTS

Activity 1.2.1: Support the DOH in supplementing the WOM, considering recent system design

MTaPS supported the DOH in developing an addendum to enhance the existing WOM by incorporating recent system design considerations. MTaPS shared the WOM addendum document with the DOH after finalizing it through consultations with supply officers and health program managers. The addendum complements the existing WOM by including parameters related to the recent inventory control system (ICS) design. These ICS parameters will provide guidance for warehouse operation, inventory management, and allocation decisions across all levels of the supply chain. In addition to the ICS parameters, MTaPS incorporated guidelines and considerations for sites with insufficient storage capacity into the WOM addendum. This comprehensive document aims to improve the efficiency and effectiveness of warehouse operations, ensuring proper inventory management and allocation to meet the needs of health programs.

Activity 1.2.2: Facilitate capacity development at the central and CHD levels on the updated WOM

MTaPS facilitated a consultative workshop and capacity development initiative focused on the updated WOM for DOH central and CHD staff. MTaPS facilitated the workshop from February 6 to 8, 2024; the

workshop involved a total of 52 participants (16 male, 36 female). During the workshop, the WOM addendum provisions, including roles and responsibilities of DOH central and regional bureaus, were discussed and clarified, ensuring a comprehensive understanding among participants. Key outcomes of the activity included agreement on processes and timeline for the stock assessment, which were incorporated into the WOM addendum document for endorsement by the DOH. Following the workshop, MTaPS handed over the updated WOM addendum document to the DOH for dissemination and implementation to CHD, LGUs, and SDPs.

Activity 1.2.3: Facilitate the engagement of LTAPs in supporting supply chain initiatives

MTaPS facilitated an information exchange session on February 2, 2024, for potential LTAPs supporting eLMIS implementation, with three representatives from Mybusybee Inc. attending. Another orientation on March 2, 2024, focused on LTAPs involved in tracks A and C, aiming to bolster adherence to supply chain standards. Attended by 18 participants from the DOH and the private sector, the session aimed to present relevant PSCM learning materials and develop action plans. This activity allowed LTAPs to understand their future engagement and enabled the DOH to plan effectively. Additionally, MTaPS, with SCMS, the PD, and the FDA, is finalizing and uploading eLearning courses to the DOH Academy, enhancing pharmaceutical systems' capacity nationwide. These courses will be accessible free of charge to all health workers.

OBJECTIVE 3: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION FOR DECISION MAKING INCREASED AND GLOBAL LEARNING AGENDA ADVANCED

Activity 1.3.1: Support the rollout of eLMIS at selected LGUs and SDPs

MTaPS has been actively supporting the DOH in eLMIS rollout at selected LGUs and SDPs, with 10 new sites added. A TOT session for public health pharmacists was held from February 27 to March 1, 2024, attended by 68 participants (20 male, 48 female) from 17 regions. The session aimed to create master trainers for continuous eLMIS training sessions in rural health units (RHUs) nationwide. A rollout plan for phase 4 aims to deploy eLMIS to all RHUs by December 2024, with SCMS, the CHD, and the PD identifying RHUs ready for implementation. Currently, eLMIS is deployed across 224 sites, aiding stock assessment and PSCM decisions, with the high-level eLMIS dashboard deployed for the DOH.

MTaPS handed over essential eLMIS documents to SCMS for review and updating, including the rollout plan, deployment master file, support service monitoring matrices, change request tracker, and manuals. Assistance was provided in finalizing the contract provision for 2024 eLMIS services, addressing budget constraints. MTaPS reviewed technical documentation and ensured that system adjustments were addressed before the handover of the source code. Additionally, MTaPS facilitated the review of a source code agreement to safeguard the government's interests. Training on the use of an interim data analysis tool was provided to SCMS, the PD, and the DPCB to use until the dashboard for data analysis is developed in eLMIS, with SCMS taking on the main stock data analysis responsibility, mentored by the PD during the initial transition phase.

OBJECTIVE 4: PHARMACEUTICAL-SECTOR FINANCING, INCLUDING RESOURCE ALLOCATION AND USE, OPTIMIZED

Activity 1.4.1: Support the DOH to identify factors that affect health commodity procurement (bid) failures (Asia Bureau)

MTaPS conducted an analysis of procurement delays and bid failures for HIV, TB, and FP commodities, focusing on identifying the root causes of the delays and failures using data from DOH-PS and additional information from the DOH website. Engaging with suppliers via the Pharmaceutical and Healthcare Association of the Philippines, MTaPS formulated specific questions for both suppliers and DOH end users to gain insights into bid failures. MTaPS has also obtained access to the procurement project management plan to compare the bid failure list and uncover authentic reasons behind the setbacks. Despite challenges like incomplete documentation, MTaPS is committed to refining its analysis and offering recommendations to improve DOH procurement through the Asisa Bureau portfolio. The result of the analysis will generate evidence to inform interventions and advocacy for procurement performance improvement.

OBJECTIVE 5: PHARMACEUTICAL SERVICES, INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE TO ACHIEVE DESIRED HEALTH OUTCOMES, IMPROVED

CROSSCUTTING ACTIVITIES

Activity 3.1: Collaborate with other USAID IPs and government stakeholders to sustain key initiatives

MTaPS and ReachHealth joined forces to pilot the PIES in Batangas and Laguna, integrating 12 primary care provider network sites via the MyCure system. TEAM OPS Inc. was engaged for MyCure, with documentation transitioned to ReachHealth, since MTaPS Philippines concludes in April 2024. A close-out meeting endorsed the transition plan, with Batangas City alone using MyCure; full cycle implementation awaits. ReachHealth continues to work with Team OPS for the MyCure proof of concept. MTaPS and ReachHealth crafted a local health board resolution template for eLMIS buy-in. MTaPS expanded eLMIS with the DOH, PBSP, and ICTech. LTAPs were identified and engaged in PSCM enhancement.

Activity 3.2: Support gender equality and women's empowerment in PSS

MTaPS worked with the Health Policy Development and Planning Bureau (HPDPB) and successfully uploaded the GAD eLearning course to the DOH Academy on January 4, 2024. The HPDPB released communication to all DOH networks to disseminate the availability of the GAD eLearning course in the DOH Academy. For a wider reach, the availability of the course was also disseminated to MTaPS' network worldwide. As of February 2024, two months after it was uploaded on the website, 266 (189 female, 77 male) learners completed the course. To further support the HPDPB in strengthening the capacity of the GAD focal points, MTaPS shared a video recording to further discuss and reiterate the key points and summary of the modules that will be used in the quarterly GAD focal points meeting. MTaPS also shared with the HPDPB guidance on how to ensure that the focal points understood the importance of mainstreaming gender in health planning. The materials include lessons on adult learning, exercises, and surveys. Building the workforce's capacity is critical in advancing outcomes around gender equity in PSCM and PV and ensuring that GAD is integrated into health planning.

Activity 3.3: Support health facilities to improve practices on IPC and HCWM for climate risk management (CRM)

MTaPS finalized the WOM addendum, detailing inventory control SOPs for informed allocation decisions, aiming to minimize rejection and overstock at lower supply chain levels. This initiative targets

reducing the supply chain carbon footprint and enhancing CRM. The ongoing expansion of eLMIS, backed by MTaPS, streamlines supply chain operations and leverages data for waste reduction, thus further lowering the carbon footprint and reducing manual paperwork, lessening environmental risks. Additionally, eLMIS integrates IPC and HCWM supplies, ensuring that facilities stock adequate resources to uphold standard practices in IPC and HCWM.

BEST PRACTICES/LESSONS LEARNED

- Effective leadership, political will, and resource mobilization are crucial for expediting the implementation of initiatives like expanding eLMIS with financial support from the Global Fund.
- Gathering insights from multiple stakeholders has proven to be effective in developing comprehensive and inclusive technical documents.
- An end-to-end system to facilitate patient enrollment and reimbursement is a critical enabler for LGUs to embrace a digital tool for their primary care provider network.
- Being a crosscutting PSS project of the USAID, MTaPS had the opportunity to successfully steward the design and implementation of several PSS strategies in partnership with government entities and other donor projects.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

- No further activities planned by MTaPS in the Philippines

MTAPS CLOSE-OUT EVENT

On January 31, 2024, MTaPS Philippines culminated a 5.5-year journey supporting the Philippines Department of Health with a close-out event that included eight USAID IPs.

Guest speakers and stakeholders celebrated the key achievements of MTaPS and symbolically handed over knowledge management products and tools to local stakeholders who will continue the important PSS work in the Philippines.

Some of the notable accomplishments by MTaPS that contributed to building resilient pharmaceutical systems for better health include:

- Development of 12 supply chain policy and strategic planning documents
- Digitization of the supply chain through $3.2M+ of mobilized funds
- Building sustainable local and private-sector supply chain capacity
- Facilitation of country-wide knowledge advancement through the creation of 9 supply chain eLearning courses and training for over 27,000 HCWs
- Improved patient safety through PV information systems in 198 integrated directly observed treatment, short course (i-DOTS), facilities and introduction of evidence-based decision making using HTA guides
- Efficient response to the COVID-19 pandemic and development of IPC best practices

USAID Philippines and IPs with the DOH's Secretary of Health, Dr. Teodoro Herbosa, and USAID Assistant Administrator for Global Health Dr. Atul Gawande at the close-out event (Photo credit: Kenny Gallos, MTaPS Philippines)

MTaPS Philippines staff with USAID Philippines MTaPS Activity Manager Helen Hipolito at the close-out event (Photo credit: Kenny Gallos, MTaPS Philippines)

Table 17. Quarter 2, FY24, Activity Progress, Philippines—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Support the DOH in establishing a working PSCM governance and coordination mechanism	Objective 1	PSCM Governance and Oversight Committee TOR were developed. MTaPS engaged the Procurement and Supply Institute of Asia to support the development of the strategic plan for PSCM. The NSP was shared with the DOH and approved by the Executive Committee on March 22, 2024.
Activity 1.2.1: Support the DOH in supplementing the WOM, considering recent system design	Objective 2	MTaPS completed the development of a WOM addendum which incorporates the feedback of the health officers of the DOH. The final draft of the WOM addendum was shared with the DOH.
Activity 1.2.2: Facilitate capacity development at the central and CHD levels on the updated WOM (using DOH resources)	Objective 2	A capacity building workshop for the WOM addendum was held, with participants from central and all regional offices.
Activity 1.2.3: Facilitate the engagement of LTAPs in supporting supply chain initiatives	Objective 2	MTaPS and the DOH conducted information sessions and an action planning workshop with potential LTAPs who can assist the DOH, regions, and LGUs as third-party service contractors of SCM services.
Activity 1.3.1: Support the rollout of eLMIS at selected LGUs and SDPs	Objective 3	MTaPS conducted rollout of eLMIS to 224 more sites and completed handover of activities covered by MTaPS for the rollout to the DOH. An eLMIS sustainability plan was drafted and disseminated.
Activity 1.4.1: Support the DOH to identify factors that affect health commodity procurement (bid) failures	Objective 4	Data collection and key informant interviews have been completed. Technical advisory report has been drafted.
Activity 3.1: Collaborate with other USAID IPs and government stakeholders to sustain key initiatives	Crosscutting	MTaPS completed the collaborating activities with the DOH, PBSP, and other USAID IPs to implement PSCM and PV support activities.
Activity 3.2: Support gender equality and women's empowerment in PSS	Crosscutting	The GAD modules are now uploaded to the DOH Academy as of January 2024, and 266 learners have completed the course.
Activity 3.3: Support HFs to improve practices on IPC and HCWM for CRM	Crosscutting	MTaPS' work, such as development of an addendum for the WOM, expansion of eLMIS, and management of IPC and HCWM commodities through eLMIS, contributed to CRM through reduction of wastages and minimization of paperwork.

N. RWANDA

FIELD SUPPORT ACTIVITIES

OVERVIEW

The goal of MTaPS in Rwanda is to provide support in strengthening its pharmaceutical system to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medical products—including ARVs and MNCH products—along with related pharmaceutical services. As part of its support to Rwanda's MOH and FDA, MTaPS focuses its TA on improving regulatory systems at the Rwanda FDA, improving pharmaceutical-sector oversight and management by bolstering MTCs (previously known as DTCs) and ramping up PV systems, which in turn strengthens both the public and private pharmaceutical sectors. MTaPS' strategic approach to strengthening the Rwanda FDA is to strengthen its institutional capacity to address key areas of weakness and gaps identified in successive WHO GBT assessments.

CUMULATIVE PERFORMANCE TO DATE

Over the past 5 years, MTaPS has continued to provide PSS support to the MOH and its institutions, including the Rwanda FDA and the RBC (including its MCCH division).

With MTaPS' support, the Rwanda FDA developed a 4-year strategic plan (2021–2024), a costed 5-year business plan (2021–2026), 12 regulations, and other pharmaceutical-sector regulatory documents (e.g., guidelines, manuals, and SOPs) to shape the regulatory framework. Over PY4 and PY5, MTaPS supported 4 dossier assessment retreats, which reduced the backlog of pending medicine registration applications at the Rwanda FDA. As part of implementation of a QMS at the Rwanda FDA in accordance with ISO 9001:2015 requirements, MTaPS supported the development of a quality manual and corresponding SOPs, as well as an internal audit training of 27 Rwanda FDA staff (10 female). MTaPS has contributed to strengthening 5 pharmaceutical regulatory functions under the broader national regulatory system: product registration and marketing authorization, licensing establishments, regulatory inspections, vigilance, and clinical trial oversight.

To increase efficiency of the Rwanda FDA's regulatory functions, MTaPS provided technical support in implementation of the IRIMS, which was customized to the FDA's requirements and implemented with training of internal and external users. MTaPS worked with the Rwanda FDA and Rwanda Information Society Authority (RISA) to facilitate final hosting of IRIMS in the country's National Data Center, leveraging COVID-19 funds from USAID. IRIMS has since gone live, enhancing efficiency and accountability in regulatory service provision and access to information for decision making at the FDA. MTaPS supported the integration of IRIMS with the digital certificate platform through RISA and facilitated a service-level agreement (SLA) for maintenance of the system with the developer, SoftClans.

In addressing the human resources capacity gap, MTaPS supported training of health care providers in different areas of pharmaceutical management, including 850 Rwanda FDA regulatory personnel (548 male, 302 female) trained in medicines evaluation and registration, good manufacturing practices, good review practices, good reliance practices, PV, and QMS. As part of the long-term sustainability of

capacity building, MTaPS provided technical support to develop e-Learning courses in MER and PV, which are hosted on the Rwanda FDA servers. MTaPS supported the MOH and Rwanda FDA in disseminating information on pharmaceutical service accreditation standards and medicines safety to health workers in various forums. To improve pharmaceutical management in HFs via MTCs, MTaPS supported the development of an MTC operational manual, tools, and SOPs and oriented 313 health care providers (113 female) on these products. MTaPS provided technical support to the MOH to assign antibiotics into AWaRe categories, as per WHO recommendations, and include them in the NEML to help prescribers use antibiotics more effectively to contain AMR.

To improve quality of care for MNCH, MTaPS supported the development of guidelines on regulating medical gases to ensure the availability of quality medical oxygen for the management of hypoxic newborns and children, as well as for COVID-19 cases. MTaPS also supported the MOH in a rapid assessment of the use of medicines for postpartum hemorrhage and eclampsia, and the subsequent development of an implementation manual to guide health workers on procedures for correct cold storage and management of oxytocin.

To strengthen PV, MTaPS supported the development of a costed multiyear national PV plan to guide the implementation of medicine safety monitoring activities. MTaPS also supported the training of 19 participants from the National Pharmacovigilance Advisory Committee and Rwanda FDA on PV and provided recommendations and an implementation plan for the revision of the draft communication strategy for AE awareness and other regulatory functions. In strengthening the IMS for both active and spontaneous PV, MTaPS supported the Rwanda FDA to adapt the electronic PViMS for spontaneous reporting of AEs, to include AEFIs for Ebola and COVID-19 vaccines, and for active safety monitoring of DTG-based antiretroviral therapy (ART) regimens. From June 2021 to September 2023, 1,708 AEFIs (776 of which were serious AEs) were submitted by health care providers and reported to the Rwanda FDA, which subsequently reported them to WHO. The use of PViMS ensures that medicine safety monitoring reports are quickly received and analyzed by the FDA, which can then provide regulatory feedback to clients, patients, and HFs in a timely manner. Furthermore, MTaPS has supported the Rwanda FDA to ensure that PViMS is interoperable with the WHO's VigiFlow using the specialized E2B format.

To conduct active surveillance of DTG-based ART regimens to determine their safety, MTaPS—working with the MOH, the RBC, and Rwanda FDA—developed a study protocol that was approved by the Rwanda National Ethics Committee and implemented in 20 HFs with 1,440 enrolled patients. The 1-year patient follow-up period ended in May 2023. Over that period, each patient had up to 9 follow-up visits, 3 patients were lost to follow-up, and 9 mild AEs (such as skin rashes and dry cough) were identified and managed by the health service providers.

MTaPS supported the RBC in conducting a situational analysis of ARV MMD and pack size, which facilitated the rollout of six MMD using a recommended pack size of 90 units. Furthermore, MTaPS supported the RBC to conduct a feasibility study on shifting adherent breastfeeding mothers and new clients on ARVs from monthly dispensing to bimonthly dispensing. This study found that MMD is feasible and satisfies different categories of people living with HIV/AIDS. Implementing MMD is expected to reduce workloads at the HF level and improve the quality of HIV care.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

Through in-person training, MTaPS introduced the Rwanda FDA information and communications technology (ICT) team to IRIMS architecture, database management, system hosting, and end-user support to enhance their capacity to ensure the sustainability and maintenance of IRIMS. Further IRIMS enhancement, in line with Rwanda FDA needs and continuation of integration with other systems such as Rwanda FDA's laboratory IMS, will be facilitated through a subcontract with the software developer.

OBJECTIVE 1: GOVERNMENT AND HEALTH WORKER CAPACITY TO MANAGE PHARMACEUTICAL SYSTEMS STRENGTHENED

Activity 1.1.1: Strengthen the medical products regulatory framework capacity of Rwanda FDA in regulating pharmaceuticals including that for medicines used in HIV/AIDS, MNCH, and FP/RH programs (PY5).

During the quarter, to progress on a Year 3 activity, MTaPS worked with Rwanda FDA to evaluate bids for an accredited firm to conduct an external QMS audit for ISO 9001:2015 certification. The best firm, British Standards Institution Group (BSI) Middle East and Africa, was selected to conduct the external audit. Preliminary work with Rwanda FDA is ongoing to prepare for the external audit scheduled for Quarter 3 of PY6.

OBJECTIVE 2: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION FOR EVIDENCE-BASED DECISION-MAKING PROMOTED

Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation processes.

During Quarter 2, MTaPS continued to support Rwanda on the operationalization of IRIMS through introducing the Rwanda FDA information technology (IT) team to IRIMS architecture, database management, system hosting, and end-user support to enhance their capacity and ensure the sustainability and maintenance of the system. MTaPS has entered a subcontract with the developer, SoftClans, to facilitate the enhancement of the system in line with Rwanda FDA needs and to continue the integration with other systems, such as the National Product Catalogue and Rwanda FDA's laboratory IMS.

OBJECTIVE 3: SYSTEMS FOR PROVIDING PATIENT-CENTERED PHARMACEUTICAL CARE AND SERVICES STRENGTHENED

Activity 3.2.2: Continue to strengthen PV and safety monitoring for regulated medicines, including ARVs, through enhancing the existing spontaneous reporting system (PY5).

During Quarter 2 of PY6, to finalize PY5 activities, MTaPS continued to update PViMS. MTaPS configured the AE reporting forms to meet Rwanda FDA and WHO requirements. This enhances ease of data entry and makes PViMS more user-friendly. The PViMS database was adapted to MySQL as part of its approval as a Digital Public Good (DPG). This means the system (PViMS) is now a fully Free and Open-Source Software (FOSS) and its name has been revised to OpenRIMS-PV. The OpenRIMS-PV online dashboard was created and shared with Rwanda FDA, pending access to IRIMS data. In addition, MTaPS updated the system documentation, including its user manual and technical manual. The system enhancement will continue by integrating the datasets from OpenRIMS-PV with IRIMS based on the

common key data elements to report on the dashboard. MTaPS trained four Rwanda FDA staff, comprising one ICT and three PV personnel (one female and three males) on the updated OpenRIMS-PV's database to ensure the software's smooth running and sustainable operation.

BEST PRACTICES/LESSONS LEARNED

- Close monitoring of the software consultant's activities, in collaboration with Rwanda FDA, and consistent communication facilitated the identification of software areas for further improvement. This led to more effective discussions with stakeholders, resulting in the agreement upon customized solutions tailored to enhance IRIMS project outcomes.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
(PY3) Activity 1.1.1: Strengthen the medical products regulatory framework capacity of the Rwanda FDA in regulating pharmaceuticals, including medicines used in HIV/AIDS, MNCH, and FP/RH programs. ▪ (PY3) Support Rwanda FDA to conduct an external QMS audit toward ISO 9001:2015 certification, including additional implementation of CAPAs arising out of the assessment. ▪ (PY5) Support Rwanda FDA to continue clearing the medicines dossier backlog in alignment with the recent WHO GBT assessment recommendations via a 30-day workshop.	April–June 2024
(PY5) Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation processes. ▪ Continue fixing software concerns highlighted by Rwanda FDA and providing system user support. ▪ Test the system processes and identify and develop missing system documentation. ▪ Continue to undertake knowledge transfer to Rwanda ICT team. In May 2024, a second two-week training session for Rwanda FDA ICT team and other staff, will be conducted focusing on managing and supporting IRIMS. ▪ Adapt business process recommendations from the recent WHO GBT assessment into IRIMS.	April–June 2024
(PY5) Activity 3.2.2: Continue to strengthen PV and safety monitoring for regulated medicines, including ARVs and vaccines, through enhancing the existing spontaneous reporting system. ▪ Continue to support the PViMS (now OpenRIMS-PV) interoperability with VigiFlow by meeting the E2B (R3) standards. ▪ Update the OpenRIMS-PV user manual and other documentation in line with enhancements made to the system. ▪ Conduct further training of Rwanda FDA focal staff, including the additional three ICT team members on the updated OpenRIMS-PV.	April–June 2024

Table 18. Quarter 2, FY24, Activity Progress, Rwanda—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
(Y5) Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation processes. **Activity description:** Work with the Rwanda FDA and the software development consultant to support the implementation of IRIMS and train stakeholders and additional staff as users; undertake capacity strengthening of Rwanda FDA staff, including the ICT team, on effective application usage and implementation support of IRIMS; update system and operational manuals and procedures.	3.1	MTaPS worked with the software consultant to develop and share a technical training plan with Rwanda FDA. In an 11-day training in March 2024, the developer introduced the new Rwanda FDA IT team to IRIMS to ensure the sustainability and maintenance of the system and provided technical support to end-users.
(Y4) Activity 3.1.3: Improve access to and administration of oxygen to hypoxic newborns and children with pneumonia. **Activity description:** Work with RBC and stakeholders to review existing resources for oxygen management and support the development of guidelines and SOPs on oxygen therapy and oxygen equipment utilization for use at facility levels; given that the oxygen STGs had already been developed, consensus was to develop job aids (posters and desktop sheets) to support the application of the treatment guidelines by health care providers.	5.2	The job aids have been designed and validated and are being printed.
(Y2) Activity 3.1.4: Support the management of medicines at the community level. **Activity description:** Work with MCCH section of RBC to develop mini lessons for health center staff to give as refresher trainings to the community health workers in their regular monthly meetings at the health centers.	5.2	The mini lessons were reviewed by the community health TWG. Their final validation by the TWG is planned for the next quarter.
(Y5) Activity 3.2.2: Continue to strengthen PV and safety monitoring for medicines, including ARVs, through enhancing the existing spontaneous reporting system. **Activity description:** Work with the Rwanda FDA to enhance PViMS to address identified gaps in reporting of AEs, improve ease of data entry, update the user manual, and enhance user-friendliness. Develop an interface between PViMS and IRIMS with a dashboard; support Rwanda FDA in finalizing the FDA's draft Communication Strategy.	5.3	PViMS was further updated to support spontaneous and active safety reporting of AEs in alignment with Rwanda FDA requirements. Conducted initial training of four Rwanda FDA staff comprising one ICT and three PV personnel (one female and three males) on the updated OpenRIMS-PV (PViMS).

O. SENEGAL

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The GHSA-related goal of MTaPS in Senegal is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. MTaPS will achieve this goal by building the capacity of in-country stakeholders through a system-strengthening approach. In Senegal, MTaPS provides support to strengthen governance for MSC, improve IPC practices and services, and strengthen governance for AMS, including capacity building. In line with the GHSA AMR action package, the expectations of the USAID Mission in Senegal, and the MOH and its partners, MTaPS continues to focus on interventions to support progress on the path toward higher JEE scores for IPC and AMS.

The MTaPS technical approach is designed to achieve expected outcomes while addressing identified challenges by implementing country-specific TA based on a sound, evidence-based situational analysis of the strengths and weaknesses of activities at the eight targeted hospitals and of the national IPC and AMS programs. Since 2021, program implementation has focused on solving immediate problems and demonstrating results at an additional five hospitals.

CUMULATIVE PERFORMANCE TO DATE

During previous years, MTaPS supported the revitalization of the AMR TWG in the OH Platform and the TWG's functionality under the aegis of the OH secretariat. MTaPS supported the development of annual and quarterly action plans for the OH Platform, based on the National Health Security Plan and the evaluation of MSC activity implementation, through multisectoral workshops and meetings. MTaPS also supported the implementation of selected activities for WAAW and the development of Senegal's Multisectoral Health Security Action Plan, informed by an assessment using the e-SPAR Tool. Finally, MTaPS supported the evaluation and results analysis of the NAP-AMR of 2017–2022 and is currently supporting the finalization of the draft of the new NAP-AMR of 2024–2028.

MTaPS supported the DQSHH to review and update Senegal's national IPC supervision checklist. The revised national IPC supervision checklist now includes the WHO's multimodal strategy, as well as the WASH component in health care settings. The DQSHH then used the newly updated national IPC supervision checklist to measure the IPC capacity level of HFs. The supervision checklist also includes guidance to help supervisors standardize its use in the 14 health regions in Senegal. Additionally, MTaPS supported the DQSHH to conduct a first assessment of the national IPC program using the WHO IPCAT2 and to conduct the baseline assessment of the IPC program in 13 hospitals and 1 health center using the WHO IPCAF tool.

MTaPS also supported the revitalization of the 13 supported hospitals using the WHO multimodal strategic approach and the CQI approach. These approaches have been appropriated by the MOH through the update of the National IPC Policy document and the development of the 5-year IPC NSP; the development of both was supported by MTaPS. The IPC NSP was validated technically by the General Secretary of the MOH, and the NSP's current annual action plan is already being implemented.

To strengthen governance for AMS, MTaPS provided support to the NCAT to update Senegal's antibiotic policy and national STGs, which had been developed in 2010 but never implemented. MTaPS used this opportunity to provide technical orientation to NCAT's four TWGs (for antibiotic therapy policy, antibiotic therapy for community infections of adults and children, antibiotic therapy of health care–associated infections, and antibiotic prophylaxis) on WHO's AWaRe categorization of antibiotics. NCAT has since adopted AWaRe categorization. The national antibiotic STGs have been institutionally validated and MTaPS has supported the development of training modules on AMS based on the national antibiotic STGs. MTaPS also supported a TOT for a pool of national trainers in order to start the implementation of the guidelines.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

(PY5) Activity 1.1.1: Strengthen the functionality of the AMR TWG by supporting effective coordination through regular meetings.

From March 5 to 7, MTaPS provided technical support for the AMR multisectoral TWG to finalize the new NAP-AMR 2024–2028. The objectives and highlights of this strategic document for AMR containment in Senegal were presented and validated during an OH multisectoral technical committee meeting on March 20, 2024. The OH Steering Committee validated the NAP-AMR 2024–2028 on March 29, 2024.

(PY6) Activity 1.1.1: Support the installation of functional AMR TWGs in the region of Saint Louis.

Under the aegis of the OH Secretariat, MTaPS worked with FAO and Breakthrough Action to support the region of Saint Louis's OH regional health security committee in organizing a planning workshop from January 22 to 26, 2024. The workshop enabled participants to develop an annual integrated action plan for One Health health security for the Saint Louis region within the framework of the IHR. During the workshop, participants completed the following activities:

- Reviewed the general framework of the IHR and JEE 2023 results.
- Reviewed the strategic orientations of the National Global Health Security One Health Program.
- Identified the region's priorities as per the 2023 JEE recommendations.
- Selected the activities to be implemented in the different IHR technical areas.
- Reviewed work planning templates.

RESULT AREA 2: IPC

(PY6) Activity 2.5.1: Support local ownership by the regional health directorate and the routinization of IPC activities in selected facilities.

MTaPS supported the targeted level 3 hospitals in Dakar, *Hôpital Général Idrissa Pouye* (HOGIP) and Abass Ndao facilities, to start collecting data that will be published in scientific articles to document progress in IPC and communicate lessons learned. As part of the implementation of their HCAI surveillance program, HOGIP's ICC conducted a 3-month prospective study (December 1, 2023, to January 31, 2024) to implement an effective prevention policy. Data collection was carried out during

this specific period in the hospital's various surgical departments, and the records of more than 700 patients were studied based on the CDC criteria for surgical site infections. The data collection tool that was used for this study was developed by the ICC and underwent technical review by MTaPS before starting the collection.

During the period of February 1 to March 31, MTaPS also provided technical support for Abass Ndao ICC to collect data documenting waste management. As was done at HOGIP, the ICC of Abass Ndao developed its collection tool that was reviewed by MTaPS before starting the activity. The ICC referents, members of the hospital's Medical Committee, hygiene staff, and all hospital personnel were directly or indirectly involved in this study.

As part of the support to the Regional Health Directorates (RHD), MTaPS signed a subcontract with the RHD of Fatick to strengthen the routinization of IPC activities at Fatick level 2 regional hospital (RH). The Fatick RHD then supported the ICC of Fatick level 2 RH to organize a work planning workshop for IPC activities based on the results of the latest IPC self-assessment using the WHO IPCAF tool. The plan included 6 IPC training sessions implemented from January 22 to February 29, 2024. As a result, Fatick ICC trained 100 health personnel at the RH of Fatick (66 female and 34 male) on IPC topics. The ICC and RHD completed a post-training evaluation 2 weeks after the training with the updated national IPC checklist. The evaluation revealed a net improvement in IPC practices in the different hospital services, with an overall score of 76.5%. On March 13, 2024, the Director of the RHD of Fatick presided over the IPCAF re-evaluation workshop at the Fatick level 2 RH. The results of the evaluation have shown a score of 551/800, which is a great success and an improvement from the score of 491/800 that the hospital had in October 2023, right before the partnership began. These results highlight the importance of strategic partnerships in driving improvements in IPC within HFs.

Along with Fatick, as part of the support to the RHD of Kédougou, MTaPS supported the training of 113 health personnel (47 female and 66 male) on IPC practices from February 7 to February 23 at the level 2 RH of Kédougou. A total of 3 training sessions were organized during this period in close collaboration with the RHD as part of their capacity strengthening on IPC activity coordination and monitoring. The training of service providers in the hospital IPC practices in hospital settings led to the adoption of a resolution for "strong engagement of service providers both at the hospital and at the RHD to assimilate/take ownership good IPC practices to reduce HCAIs." From March 25 to 29, 2024, MTaPS also supported the RHD of Kédougou to conduct IPC supervision within the Kédougou RH, only 2 months after MTaPS began support for strengthening the routinization of IPC activities. This supervision of IPC practices revealed an overall score of 93.25%, meaning that almost all IPC guidelines are implemented in the hospital.

Finally, MTaPS supported the RH of Kaffrine to organize 3 sessions from March 4 to March 20, 2024, to train 58 health personnel (37 female and 21 male). The ICC coordinator and operational group coordinators carried out this training, strengthening the capacities of staff on IPC components to successfully implement their improvement action plans.

RESULT AREA 3: OPTIMIZE USE OF ANTIMICROBIAL MEDICINE IN HUMAN AND ANIMAL HEALTH AND AGRICULTURE

(PY5) Activity 3.1.1: Support the implementation of capacity-building interventions to increase compliance with antibiotic STGs.

From January 31 to February 2, 2024, MTaPS supported the training of 26 members (11 female and 15 male) of the hospital medical committee of the level 2 hospital in Fatick on the national antibiotic policy and guidelines. The training was facilitated by a trainer from the national pool of trainers and a member of Abass Ndao Hospital and HOGIP's medical committee, who were previously trained with MTaPS' support in 2023.

The objective of the training was to strengthen the capacity of prescribers at the regional hospital of Fatick to prescribe, manage, and monitor antibiotics. The participants were also oriented on the WHO AWaRe categorization of antibiotics. The training involved all prescribers and other health staff at the hospital, such as pharmacists, laboratories, and the hospital management teams.

(PY6) Activity 3.5.1: Support the National Antimicrobial Consumption and Use Survey.

On January 23, MTaPS participated in a training on the tools and processes of the national antimicrobial consumption and use survey organized by the National Agency for Pharmaceutical Regulation (NAPR) with the support from WHO's Geneva office. During the training, WHO representatives provided guidelines on integrated AMS and recommended the regular collection of information on antimicrobial use.

During the first week of March, the National Agency for Pharmaceutical Regulations sent a collection form for antibiotic distribution data from 2021 to 2023 to the three major private wholesalers selected (UbiPharm, Sodipharm, and Duopharm) for the survey and also to the national supply pharmacy. It was noted that the wholesalers did not have harmonized data storage and processing systems; in response, the NAPR shared a list of antibiotics to be collected, based on the antibiotics on the essential medicines list, as well as other antibiotics used by prescribers. Once the distribution data are collected, ARP, with technical support from MTaPS and financial and technical support from WHO, plans to organize field visits to hospital pharmacies in the seven selected regions and to other private pharmacies to implement a survey of antibiotic consumption.

BEST PRACTICES/LESSONS LEARNED

- Establishing a partnership and subcontract with RHDs to coordinate and monitor IPC activities at RHs can assist with improving ICC functionality, provide a sustainability mechanism, and create a platform for potential scale-up of activities to improve health care quality and patient safety.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Support the installation of functional AMR TWGs in two regions.	March–June 2024
Activity 2.5.1: Support local ownership by the RHD and the routinization of IPC activities in selected facilities.	March–June 2024
Activity 3.1.1: Support the implementation of the National Antimicrobial Consumption and Use Survey.	March–June 2024

Table 19. Quarter 2, FY24, Activity Progress, Senegal—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Support the installation of functional AMR TWGs in two regions.	5.4	1.1	MTaPS worked with FAO and Breakthrough ACTION to support the region of Saint Louis's OH regional health security committee to organize a planning workshop from January 22 to 26, 2024. The workshop enabled the development of an annual integrated action plan for One Health health security for the Saint Louis region within the framework of the IHR.
Activity 2.5.1: Support local ownership by the RHD and the routinization of IPC activities in selected facilities.	5.4	2.5	The Fatick RHD supported the ICC of Fatick level 2 RH to organize a work planning workshop for IPC activities, based on the results of the latest IPC self-assessment using the WHO IPCAF tool. The plan included 6 IPC training sessions implemented from January 22 to February 29, 2024. As a result, Fatick ICC trained 66 health personnel at the RH of Fatick (43 female and 23 male) on IPC topics. MTaPS supported the RHD of Kédougou to work with its level 2 RH's ICC to train 113 health personnel (47 female and 66 male) on IPC practices. The RHD oversaw an IPCAF re-evaluation workshop at the level 2 RH of Fatick. The results of this evaluation have shown a score of 551/800. This is an improvement from the previous evaluation, which yielded a score of 491/800.
Activity 3.1.1: Support the National Antimicrobial Consumption and Use Survey.	5.4	3.5	On January 23, MTaPS participated in a training on the tools and processes of the national antimicrobial consumption and use survey organized by the NAPR with support from WHO's Geneva office.

P. TANZANIA

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

MTaPS' GHSA goal in Tanzania is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. To achieve this, MTaPS is improving the quality of care for AMR containment in the country by building the capacity of in-country stakeholders through a systems-strengthening approach in three result areas: effective MSC on AMR, IPC, and optimization of antimicrobial medicine use through AMS. The PY6 implementation plan for GHSA builds on the work done in PY1–PY5. MTaPS continues to focus on strengthening the governance of the MOH and selected HFs, in collaboration with other USAID programs and partners working to implement a sustainable AMR program in Tanzania. Therefore, advocating for the use of data for CQI of both AMS and IPC interventions and supporting the development and implementation of surveillance methods for SSIs, which require antibiotics for treatment, is a key concern with respect to AMR. MTaPS is building the capacity of HCPs to implement the IPC-related reporting system (as part of the DHIS 2) to provide the MOH with data for decision making about IPC and for the active implementation of CQI methodologies and AMS interventions in supported HFs.

CUMULATIVE PERFORMANCE TO DATE

From PY1 through PY6 Quarter 1, MTaPS supported 43 of 62 (69%) WHO IHR benchmark actions: 10 contributing to MSC/AMR, 20 contributing to IPC, and 13 contributing to AMS. MTaPS helped the MOH improve Tanzania's JEE score for MSC by supporting 25% (1/4) of capacity level 2, 100% (4/4) of capacity level 3, 75% (3/4) of capacity level 4, and 40% (2/5) of capacity level 5 WHO benchmark actions, resulting in an overall achievement rate of 59% (10/17) of benchmark actions completed. In MSC, MTaPS supported the coordination of AMR activities under the AMR MCC, working under the OH approach; the MCC held meetings to oversee and give guidance on implementing the NAP-AMR 2017–2022 and the current NAP-AMR 2023–2028 across the human health, animal health, plant, livestock, and fishery sectors. MTaPS supported the setup and operation of TWGs, which helped improve the implementation of IPC, AMS, and M&E in Tanzania. MTaPS supported the development and operationalization of the Multisectoral AMR Communication Strategy: Moving from Awareness to Action 2020–2025, which helped improve OH communications, practices, and implementation among the MOH, Ministry of Agriculture, Ministry of Livestock and Fisheries, President's Office Regional Administration and Local Government (PO-RALG), and the 5 TWGs that feed into the MCC (AMR awareness, AMR surveillance, IPC, AMS, and M&E). MTaPS collaborates with the MCC, private facilities, and other stakeholders to commemorate the WAAW each year to increase community awareness and advocacy on AMR containment.

In IPC, MTaPS supported 80% (4/5) of capacity level 2, 100% (6/6) of capacity level 3, 100% (5/5) of capacity level 4, and 100% (5/5) of capacity level 5 WHO benchmark actions, resulting in an overall achievement rate of 95% (20/21) of benchmark actions completed. MTaPS supported the revision of the national IPC guidelines for health care services in Tanzania (2018 edition) and its distribution across mainland Tanzania. MTaPS also conducted IPC training for 519 (296 female) HCPs. MTaPS supported

the MOH to review the IPC training curriculum for HCPs and oriented 61 (41 female) tutors on its use. MTaPS supported the MOH to develop a national IPC M&E system. This included training RHMTs, facility IPC focal persons, and facility health MIS focal persons on the use of IPC M&E tools and reporting IPC indicators via DHIS2. MTaPS trained 23 (10 female) TOTs on the IPC M&E system and used the TOTs to train 61 (32 female) HCPs from the Dodoma region (seven district hospitals and two faith-based hospitals, and two council health management team (CHMT) representatives). The training cascaded the IPC M&E system to sustain IPC data reporting through DHIS2 and its management and use. To further improve IPC implementation and sustainability, MTaPS established and strengthened IPC committees in 10 MTaPS-supported hospitals and conducted clinical mentorship and CQI, which brought about improved WASH and handwashing practices and reduced SSIs and other nosocomial infections. MTaPS developed an IPC e-Learning course that equipped the Center for Distance Education in Morogoro to offer online IPC training to HCPs. MTaPS Tanzania also supported the MOH to develop a HAI surveillance system with reporting through DHIS2. All 10 MTaPS-supported facilities are now conducting HAI surveillance and reporting to the MOH, using the data for facility IPC improvement.

MTaPS' implementation of AMS activities has contributed to improving Tanzania's baseline JEE score by supporting 100% (4/4) of capacity level 2, 67% (4/6) of capacity level 3, 43% (3/7) of capacity level 4, and 29% (2/7) of capacity level 5 WHO benchmark actions, resulting in an overall achievement rate of 54% (13/24) benchmark actions completed. MTaPS supported the MOH, Ministry of Agriculture, and Ministry of Livestock and Fisheries in developing the AMS policy guidelines per the OH approach. MTaPS also supported the MOH in disseminating the MTC guidelines as well as in the development and dissemination of the STGs and the NEML for Tanzania, which included AWaRe classification of antibiotics. MTaPS trained 110 (43 female, 67 male) HCPs from 10 supported facilities on AMS—specifically, on ethical prescribing and dispensing of antimicrobials. MTaPS worked with the MOH to develop an in-service AMS curriculum and used it to train 116 (53 female) participants from 14 hospitals, including regional and district pharmacists and national public and private partnership focal persons from 7 regions. The training engaged members of the PO-RALG and the Association of Private Health Facilities in Tanzania to continue the rollout of AMS implementation to subnational and primary health care levels and the private sector. MTaPS, in collaboration with the MOH, supported HFs in implementing AMS interventions, including reviving MTCs to foster AMS implementation in hospitals. MTaPS also conducted a survey on national antimicrobial consumption in Tanzania for 2017–2022 and a PPS on AMU across 6 referral hospitals in 2020 and 2 hospitals in 2023. In addition, a national hospital formulary template was developed and provided to hospitals in Tanzania to be used in developing/revising their own hospital formularies. MTaPS supported the assessment of regulations, policies, and supply chain governance related to antimicrobials in both human and animal health, which informed the development of the new NAP-AMR 2023–2028. MTaPS launched the use of the Extension for Community Healthcare Outcomes (ECHO) in mentorship of HCPs, which reached approximately 2,035 (1,342 in IPC and 693 in AMS) HCPs countrywide and contributed to improved IPC and AMS practices.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

MTaPS supported the AMR MCC in conducting an AMS TWG meeting and facilitated securing preliminary approval from the MCC of the draft M&E framework for the NAP-AMR 2023–2028, with MCC comments to be addressed by the M&E TWG.

MTaPS also conducted onsite IPC mentorship at eight MTaPS-supported facilities to follow up on various facility-level IPC interventions, and it mentored the HCPs to address gaps in areas needing improvement.

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Help further institutionalization and full local leadership and ownership of AMR by the MSC.

MTaPS attended a virtual AMS TWG meeting on February 21, 2024, and presented updates on AMS implementation. The virtual meeting, organized and led by the MOH, portrayed its ownership and sustainability of the AMS program. MTaPS attended the 26th MCC meeting on February 26–27, 2024, in Dodoma, where MTaPS updates for the past quarter were presented, including support for IPC, AMS, and M&E TWGs. The draft M&E framework for the NAP-AMR 2023–2028, developed with MTaPS technical support, was presented to the MCC and discussed, and the MCC provided preliminary approval. The MCC recommended fast-tracking the framework's finalization, launch, and data collection for the first year of NAP-AMR 2023–2028 implementation.

RESULT AREA 2: IPC

Activity 2.2.1: Help further enhance capacity and local ownership of national and local government authorities and IPC implementing partners to monitor and evaluate the IPC program.

In collaboration with the MOH, MTaPS Tanzania conducted onsite IPC mentorship at eight MTaPS-supported facilities on February 4–16, 2024. The aim was to follow up on implementation of various IPC interventions at the HFs, and mentor HCWs on areas that needed improvement, including hand hygiene, equipment sterilization, appropriate infrastructure, checking availability of materials and equipment for IPC, and standards for reduction of overcrowding in wards. Furthermore, MTaPS, in collaboration with the MOH, conducted an IPC data quality assessment. The facilities were mentored on properly completing SSI surveillance forms, which helped to identify SSI cases and enhanced their reporting into DHIS2. During this mentorship visit, MTaPS conducted an assessment using the IPCAF, with the results showing improvement in IPCAF scores for eight supported hospitals compared with previous assessments.

Onsite IPC mentorship at Bugando Medical Center on IPC implementation and data management. Photo credit: Immaculata Marwa

BEST PRACTICES/LESSONS LEARNED

No lessons learned for Quarter 2.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Help further institutionalization and full local leadership and ownership of AMR by the MSC. ▪ Support the MOH and stakeholders in conducting AMS, IPC, and M&E TWG quarterly meetings.	April–June 2024
Activity 2.5.1: Support further institutionalization, local ownership, and routinization of IPC activities in the 10 MTaPS-supported facilities. ▪ Continue building the capacity of IPC/quality improvement teams in implementing various IPC measures and reporting IPC indicators through DHIS2.	April–June 2024
Activity 3.5.1: Help further institutionalization and ownership of AMS activities in the 10 MTaPS-supported facilities. ▪ Conduct AMS mentoring visits to HFs	April–June 2024

Table 20. Quarter 2, FY24, Activity Progress, Tanzania—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Help further institutionalization and full local leadership and ownership of AMR by the MSC. **Activity description:** Support regular MSC meetings to oversee implementation of NAP-AMR. Support the assessment of progress on JEE/WHO Benchmark actions across IPC, AMS, and MSC.	5.4	1.1	MTaPS worked with the MOH to organize an AMS TWG meeting. MCC provided preliminary approval of the draft M&E framework for the NAP-AMR 2023–2028 that was developed with MTaPS technical support.
Activity 2.2.1: Help further enhance capacity and local ownership of national and local government authorities and IPC IPs to monitor and evaluate the IPC program. **Activity description:** Mentor HCWs on implementation of IPC interventions, including data reporting and use.	5.4	2.2	Onsite mentorship conducted at eight MTaPS-supported facilities. Mentorship focused on identified gaps and emphasized the need for data quality and use of collected data. All eight hospitals showed improvement following a repeat IPCAF assessment. The activity is completed.

FIELD SUPPORT ACTIVITIES

OVERVIEW

The goal of MTaPS' FS activities in Tanzania is to strengthen the country's pharmaceutical system to ensure sustainable access to, and appropriate use of, safe, effective, quality-assured, and affordable medical products and pharmaceutical services. MTaPS worked with the Tanzania Medicines and Medical Devices Authority (TMDA) to strengthen institutional capacity and further increase the TMDA's capability to manage pharmaceutical regulatory systems by improving its MA and import processes for ARV drugs as well as enhancing its PV system using targeted interventions to enable evidence-based decision making for patient safety. This support will help maintain the TMDA's regulatory capacity at ML 3, according to the WHO's GBT, and will provide evidence to elevate the TMDA toward ML 4.

CUMULATIVE PERFORMANCE TO DATE

MTaPS Tanzania provided technical support to the TMDA, enhancing efficiency by strengthening the expertise and skills of professionals to ensure the quality, safety, and efficacy of medicines such as ARVs. MTaPS helped train 52 (17 female) TMDA medicine evaluators to conduct medicine dossier assessments, which will help reduce the processing time of applications for the registration of new medicines by increasing the number of qualified assessors at the TMDA. In addition, the assessors trained with support from MTaPS will continue to train new staff and ensure sustainable knowledge transfer within the TMDA and Tanzania at large. MTaPS supported the TMDA to organize product dossier review retreats, which evaluated 95 dossiers (16 for ARVs). The trained assessors applied knowledge and practical expertise to the evaluation of the medical products, helping reduce the backlog of pending dossiers for medicines used to manage HIV/AIDS and increasing expeditious authorization of ARVs and access to quality-assured ARVs and other medicines.

MTaPS helped strengthen the existing passive medicine safety surveillance system for pediatric medicines used in the national HIV program by facilitating the revision of the TOR for the national PV safety advisory committee, known as the Vigilance Technical Committee (VTC), which allowed incorporation of four pediatric experts into the committee. VTC members were trained in PV and can now assess pediatric ADRs and provide feedback to ADR reporters. MTaPS also supported the development of guidelines for monitoring the safety of medicines used in the pediatric population, which will help improve the monitoring of medicines, including those for chronic diseases such as HIV/AIDS, and monitoring of children's susceptibility to ADRs.

The TMDA, with support from MTaPS, trained 51 (16 female) TMDA staff, external assessors, and interns to assess PSURs and risk management plans (RMPs), thus increasing the number of competent assessors at the TMDA. The training included hands-on assessment of 76 PSURs and 18 RMPs to address their existing backlog. This support has helped the TMDA improve its monitoring, reviewing, and reporting of safety issues arising from medicines used by the public, including the pediatric population. In addition, MTaPS provided technical support to the TMDA to train 33 (16 female) qualified persons responsible for pharmacovigilance (QPPVs) on coordination of PV activities with regards to the approved medicines they are managing for their market authorization holders (MAHs), and on development and submission of PV documents, including PSURs and RMPs, among other topics. The training will help the QPPVs support their MAHs to set up a functioning internal PV system for follow-

up on safety of their medical products and to submit PSUR and RMP documents on time with the required content and format, as per the existing TMDA regulations.

MTaPS facilitated a process improvement mapping for the registration and importation of ARVs for the public sector, which aimed to identify barriers and bottlenecks in the supply chain of ARVs and mitigate them by engaging both the TMDA and medicines importers. MTaPS facilitated a stakeholder validation workshop that addressed the findings, challenges, and recommendations for improving the process for registration and importation of ARVs for the public sector. The activity helped create awareness of bottlenecks and appropriate steps to ensure product quality and safety in registering and importing medicines, increase opportunities to streamline the regulatory environment and guidelines for ARVs, improve efficiency during clearance of imported medicines, including ARVs, and eliminate wastage of products for managing HIV/AIDS and other diseases. The interventions ultimately will improve public access to quality-assured medicines required for treating HIV and improve treatment outcomes, enabling a better quality of life for people living with HIV and other diseases.

MTaPS provided technical support to the TMDA to train 26 clinical trial officers (16 female) on the evaluation of clinical trial applications (CTAs). Participants were trained on the review of pre-clinical, clinical, and manufacturing data and on developing scientific assessment reports following applicable regulations and guidelines, which contributed to improving the competency of TMDA assessors in analyzing and writing summary assessments based on clinical trial assessment data. MTaPS also supported the training of 25 (13 female) clinical trial officers on the inspection of clinical trial sites for good clinical practices (GCP) compliance. These trainees further gained practical experience by conducting inspections of three clinical sites located in the Dar es Salaam region: one at Mwananyamala Regional Referral Hospital and two at Muhimbili University of Health and Allied Sciences. The intervention contributed to efforts to strengthen clinical trials control in Tanzania and solidify TMDA's ML 3 rating for WHO GBT sub-indicator CT03.01: Enough competent staff (education, training, skills, and experience) are assigned to perform clinical trials oversight activities.

Activities under the US President's Emergency Plan for AIDS Relief (PEPFAR) funding ended successfully in September 2023, then in Quarter 2 of PY6, MTaPS started implementing activities under family planning/reproductive health (FP/RH) funding covering October 2023 to September 2024.

QUARTER 2/YEAR 6 ACHIEVEMENTS AND RESULTS

MTaPS trained 25 (9 female) assessors on the review, preparation, and publication of the Summary of Product Characteristics (SmPC) and the Public Assessment Report (PAR) using training materials and tools developed by MTaPS. The training helped to improve capacity of TMDA officers in publishing SmPCs and PARs for selected medicines that have been granted MA, to increase transparency in the medicine registration process. The SmPCs and PARs, once published, will be information sources for HCPs and patients to support correct use of the registered medicines and information for approving medicine registration applications.

OBJECTIVE 1: INSTITUTIONAL CAPACITY STRENGTHENED TO MANAGE PHARMACEUTICAL SYSTEMS

Activity 1.1.2: Build the capacity of TMDA medicine assessors in preparing, reviewing, and publishing SmPCs and PARs.

Actual implementation of FP/RH-funded activities began in March 2024. MTaPS collaborated with the TMDA to develop SOPs for the review of the SmPC and the PAR. The SmPC is a reference document guiding HCP on medicine use, while a PAR summarizes the evaluation and assessment for MA approval or renewal of a medicinal product. MTaPS also developed an assessment template and guidance for the review and publication of PARs, including a checklist as guidance for the preparation of SmPCs for publishing, and training modules on SmPCs and PARs.

Over March 4–8, 2024, the developed materials and tools were used to train 25 (9 female) assessors on the review, preparation, and publication of SmPCs and PARs, as part of the review of clinical information in the medicine registration process. This initiative was implemented to enhance the capacity of TMDA assessors to prepare SmPCs and PARs for publishing on TMDA's website, thereby increasing transparency in the medicine registration process, to enhance awareness of the TMDA's procedures among stakeholders and the public, and to provide assurance to HCPs, patients and the public by ensuring access to comprehensive information for the rational use of medicines, including for FP, MNCH, and other essential medical products.

Furthermore, the developed training materials and tools will be used by the TMDA to train future medicine assessors in the review, preparation, and publication of SmPCs and PARs, contributing to the sustainability of the TMDA, and to the country's regulatory workforce. Additionally, this initiative supports the TMDA in addressing the WHO GBT indicators MA05.01 (website or other official publication with SPC-like information is available and regularly updated) and MA05.03 (a summary technical evaluation report for approved registration MA applications is published and available to the public), and it also supports the TMDA in progressing toward achieving ML 4 as per the WHO GBT, which mandates that SmPCs and PARs be readily available to the public.

BEST PRACTICES/LESSONS LEARNED

No lessons learned for Quarter 2.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Create awareness among stakeholders on the processes of importation and registration of FP and MNCH products in Tanzania to ensure their quality, safety, and efficacy. ▪ Conduct an awareness creation meeting.	April 2024
Activity 1.1.3: Support the TMDA to develop guidelines for good storage and distribution practices (GSDP) of medicines. ▪ Development of draft GSDP guidelines ▪ Validation of draft GSDP guidelines	April–June 2024

Table 21. Quarter 2, FY24, Activity Progress, Tanzania—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Create awareness among stakeholders on the processes of importation and registration of FP and MNCH products in Tanzania to ensure their quality, safety, and efficacy. **Activity description:** Sensitization of various health commodity supply chain stakeholders in the Lake zone on existing regulations regarding import and registration of medical products including for FP and MNCH; discussion with stakeholders on key challenges faced and mitigative plan	2.4	No activity during the quarter. A stakeholder workshop is planned for next quarter.
Activity 1.1.2: Build the capacity of TMDA medicine assessors in preparing, reviewing, and publishing SmPCs and PARs. **Activity description:** Development of SmPC and the PAR training materials and tools and conducting training for medicine assessors	2.4	Developed SOPs, training presentations, and tools to guide medicine assessors in the review, preparation, and publication of SmPC and PARs. Used the materials and tools to train 25 (9 female) assessors.
Activity 1.1.3: Support the TMDA to develop guidelines for GSDP of medicines. **Activity description:** Development of GSDP guidelines for future dissemination by TMDA to key stakeholders, including pharmaceutical importers and retailers, Pharmacy Council, and MOHs	2.4	No activity during the quarter. Development of the GSDP guidelines will start in the next quarter.

5. PROGRESS BY REGIONAL BUREAUS

A. ASIA REGIONAL BUREAU

OVERVIEW

MTaPS set out to advance pharmaceutical management systems within the Asia region by strengthening the capacity to institutionalize transparent and evidence-based decision making and use robust information to define and cost pharmaceutical coverage, as well as by improving medicine regulatory capacity and pharmaceutical-sector governance.

CUMULATIVE PERFORMANCE TO DATE

Under objective 1, MTaPS played a pivotal role in advancing HTA in Asia. This included collaborative development of an extensive HTA roadmap, in-depth assessments of nine countries/territories, and introduction of the innovative HTA institutionalization canvas to comprehensively evaluate HTA systems. Supported by funding from the Asia Bureau, MTaPS provided hands-on support to countries, resulting in HTA institutionalization in Indonesia and guidance for medical device assessment in the Philippines. The evaluation of the need for an HTA hub led to a recommendation to strengthen HTAsiaLink's existing initiatives, aligned with the commitment to HTA best practices in Asia. MTaPS has worked continuously with key HTA stakeholders in Asia to support the priorities of the region, as enumerated by HTAsiaLink and MTaPS' prior assessment: regional capacity-building strategy, improved political economy and support for HTA in the region, and development of an HTA registry, which will be a global public good.

Under objective 2, MTaPS made significant progress in implementation of the OHT, conducting regional and in-person training sessions in several countries. This included the completion of the Bangladesh Social Health Protection benefits costing and development of dissemination materials for pharmaceutical expenditure (PE) tracking standardization in the Asia region. Notably, MTaPS completed PE tracking in Bangladesh for health commodity expenditure, producing a comprehensive report.

Under objective 3, in Y1 and Y2, MTaPS collaborated with various stakeholders to bolster capacity within the medical products regulatory systems of the ASEAN member states. In Y3 to Y4, MTaPS organized a regional training-of-trainers course focused on evaluation of biological products and vaccines, enhancing the knowledge and skills of regulatory assessors from ASEAN NRAs. A regional training course on good review practices for dossier evaluation processes in ASEAN member states further contributed to strengthening regulatory capacities. In Y4 to Y5, MTaPS worked closely with the WHO Southeast Asia Regional Office (SEARO) and the SEARN to develop a regional capacity-building strategy, endorsed by the SEARN Assembly of the Members, to structure capacity building in regulatory functions. In Y3 to Y4, MTaPS undertook competency mapping and developed capacity-building plans for the NRAs of Bangladesh, Nepal, and the Philippines, with the aim of addressing competency gaps and improving regulatory efficiency and effectiveness. In Y5, a regional webinar for the Asia region was organized to enhance pharmaceutical regulatory systems, identify existing needs and gaps, and discuss

strategies for improvement. In PY6 Q1, MTaPS provided support to draft the model for efficient regulations of medicines and vaccines for NRAs with limited resources in SEARN.

Under objective 4, MTaPS collaborated with the Philippines DOH to analyze and evaluate procurement laws, rules, and policies, with a focus on enhancing strategic procurement mechanisms and more focus on the PPM. MTaPS conducted an internal validation for the finalization of the legal analysis report. The DOH submitted a policy proposal for PPM implementation to the Government Procurement Policy Board in 2023, and the review is still ongoing, with no clear timeline for approval. Anticipating potential delays, additional activities were identified and initiated, including generating evidence for selecting priority medicines and facilities (DOH-retained hospitals and local government units (LGUs), assessing their capacity, and developing a generic implementation plan for PPM piloting once approved by the Government Procurement Policy Board. This multiphased approach included desk reviews, data collection, analysis, and interviews with selected LGUs and hospitals to establish criteria for selecting health products and facilities; to select potential products, LGUs, and DOH-retained hospitals; and to assess the capacity and readiness of selected LGUs and hospitals to engage in the PPM pilot.
The DOH has been encountering a series of bid failures which has led to stockout of some vital health commodities and affected program implementation. With the objective of alleviating this challenge, MTaPS started preliminary discussions with the DOH and private-sector representatives. Preliminary discussions with the public health services team and management services team of the DOH have resulted in obtaining a set of information that describes bid failures related to procurement of HIV, TB, and FP commodities by the DOH for the period 2021 to 2023. Rapid analysis of the data has provided good information, but it has not been adequate to establish the root causes of the bid failures. Accordingly, there is discussion on conducting a deeper analysis of the reasons for bid failures to guide recommendations and actions for improvement. In addition, getting schedules for key informant interviews was a challenge. A technical discussion with a representative of the Pharmaceutical and Healthcare Association of the Philippines, which is an association of the multinational pharmaceuticals, provided operational and legal factors contributing to bid failures, though some must be validated by stakeholders.

The Y3 activity on COI concluded with the launch of the eLearning course on OpenWHO for public access that was developed by MTaPS in collaboration with WHO. Engagement is being monitored, particularly in India, Pakistan, Bangladesh, China, and Malaysia, where the course will be a mandatory module for pharmaceutical inspectors. For the quarter January to March 2024, there were 401 COI course completions.

QUARTER 2/Y6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: STRENGTHEN CAPACITY TO CONDUCT AND USE HTAS TO SUPPORT INSTITUTIONALIZATION OF TRANSPARENT AND EVIDENCE-BASED DECISION MAKING IN ASIAN COUNTRIES

Activity 1.1.1: TA to HTAsiaLink in shaping the HTA ecosystem in the Asia region

MTaPS achieved technical alignment with partners, the Health Intervention and Technology Assessment Program (HITAP) and Health Intervention and Policy Evaluation Research—National University of Singapore (HIPER-NUS), in the support to improve the HTA ecosystem in Asia, including improving the

political economy and participation of diverse stakeholders. MTaPS supported participation of seven country representatives (Vietnam, Timor-Leste, Indonesia, India, Cambodia, Philippines, and Lao PDR) to the HIPER symposium, hosted by NUS. With the exception of India, this was the first time HIPER welcomed policy makers from these countries.

OBJECTIVE 2: STRENGTHEN CAPACITY TO DEFINE AND COST EVIDENCE-BASED PHARMACEUTICAL COVERAGE AND PROMOTE TRANSPARENCY IN PHARMACEUTICAL PRICING TO IMPROVE VALUE IN PURCHASING IN ASIAN REGIONAL COUNTRIES

Activity 2.1.1: Strengthen capacity for PE tracking in Bangladesh

MTaPS conducted a four-day training on PE tracking in Bangladesh to the improve capacity of the MOH resource tracking team to lead and implement PE tracking using the updated SHA 2011 framework as well as its use to inform policy planning and strengthen collaboration and coordination of organizations involved in resource tracking efforts. As part of this support, PE tracking materials were updated, and the PE tracking champions were identified and endorsed by the HEU. A detailed report was developed inclusive of a transition and institutionalization plan for the HEU.

OBJECTIVE 3: BUILD HARMONIZED, SUSTAINABLE, AND RESILIENT MEDICINE REGULATORY SYSTEMS IN ASIA

Activity 3.1.1: Advocate for adoption of global standards to support the development of regulatory IMSs (RIMSs) for electronic transmission of information across NRAs in Asia

MTaPS, jointly with the USAID PQM+ program and in collaboration with the ASEAN Pharmaceutical Product Working Group (PPWG), held a regional harmonization and reliance workshop from February 29 to March 1, 2024, in Bangkok, Thailand. The objective of this workshop was to provide a platform for participating NRAs to share their experiences (i.e., strategies, achievements, constraints, and challenges) regarding ongoing or past regulatory efforts and to review their existing RIMSs against the minimum common standards. A total of 17 (15 female, 2 male) participants attended from the ASEAN Secretariat, and 8 ASEAN member states (excluding Myanmar and Singapore) were represented. The participants developed a regional action plan aimed at supporting the adoption of a RIMS.

Activity 3.1.2: Implementation of priority capacity-strengthening activities of NRAs in Bangladesh and the Philippines

MTaPS Asia Bureau, through MTaPS country offices, engaged both the DGDA (Bangladesh) and FDA (the Philippines) to review the training plans and prioritization of topics for TA. MTaPS is working collaboratively with WHO to organize a workshop on good clinical practices in Bangladesh that is planned for quarter 3. Consultant recruitment is currently ongoing for both MTaPS and WHO while engaging with the DGDA to identify the best possible date for the training.

Activity 3.1.3: Develop a capacity-building action plan for SEARN

MTaPS continued to engage with SEARN and SEARO to develop a capacity-building action plan through consultative meetings—January 31 and February 26, 2024—with the SEARN working group to review the draft action plans' proposals in terms of training topics, training approaches, and regional objectives and to develop a criterion for training mode. MTaPS is continually updating the draft in consideration of the feedback being collected from SEARN member states.

Activity 3.1.4: Global and regional dissemination of MTaPS RSS work in Asia

MTaPS continued to develop manuscripts to document the lessons learned from its work in the Asia region. The draft manuscripts on convergence of medical registration and workforce development are currently undergoing internal technical reviews. The first publication, focusing on interventions addressing gaps in medicine registration, convergence, and reliance mechanisms, has been developed and is undergoing internal review.

Activity 3.1.5: Strengthen the capacity of NRAs in the ASEAN member states through regional harmonization

MTaPS continued to engage the ASEAN PPWG through USAID to provide clarifications and responses to comments made by the PPWG in the concept note on strengthening the capacity of NRAs in the ASEAN region in PV. MTaPS is waiting for feedback from the PPWG on the concept note and the final approval for activity implementation.

Activity 3.1.6: Support the development of a model for efficient regulation of medicines and vaccines by NRAs with very limited resources in SEARN

MTaPS provided input on the draft model for efficient regulations of medicines for incorporation before the final meeting held on February 21, 2024. A final version of the draft was developed after this meeting and will be validated during the meeting of the heads of NRAs planned for July 2024.

OBJECTIVE 4: PHARMACEUTICAL-SECTOR GOVERNANCE IN ASIAN COUNTRIES STRENGTHENED

Activity 4.1.1: COI, Y3 (Workshop on Corruption and Conflict of Interest in Healthcare)

MTaPS COI research and capacity-strengthening resources were presented as planned in the Workshop on Corruption and Conflict of Interest in Healthcare at the London School of Economics and Political Science (LSE) from January 12 to 14, 2024. There were a total of 30 participants in the workshop from 12 countries (Australia, Austria, Brazil, Canada, Kenya, Ireland, Mexico, Nigeria, Spain, Sweden, Switzerland, and United Kingdom), representing 25 organizations (Basel Institute of Governance, Bath University, Central European University, Dublin City University, Government Transparency Institute, Health Systems Global, IBEI, Imperial College London, Karolinska Institutet, LSE, Management Sciences for Health, New York University Wagner Graduate School of Public Service, Queen Mary University of London, RCSI University of Medicine and Health Sciences, Universidad Nacional Autónoma de México, Universidade de São Paulo, Universidade Federal do Pará, University of Barcelona, University of Bristol, University of Nigeria, University of Nigeria Nsukka, University of Pennsylvania, University of Southampton, and University of Toronto). Members of the workshop commented that they had not seen such material previously and welcomed the opportunity to engage with the material and circulate. Interactions with participants created links with LSE and other universities for dissemination. MTaPS will continue to look for opportunities to disseminate COI material developed as part of ongoing closeout activities.

LSE is exploring an opportunity for a special issue of a journal or technical report summarizing contents of the workshop. MTaPS will have the opportunity to contribute.

Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines (Y5)

MTaPS has been working with IQVIA (a subpartner) on finalizing the analysis and development of technical deliverables. We analyzed sales data of medicines for partially (7) and fully (5) devolved therapeutic areas, set criteria (sales volume and potential savings), and determined the priority list of health products, LGUs, and DOH-retained hospitals: 3 medicines from 12 therapeutic areas each (36) and 6 LGUs and 9 DOH-retained hospitals. MTaPS has provided detailed feedback to IQVIA on the remaining deliverables and is working with IQVIA to finalize them.

Activity 4.1.1 Assess factors that affect health commodity procurement (bid) failures in the Philippines at the DOH level and identify key interventions to address challenges (Y6)

MTaPS continued to work on getting more data while analyzing the available information. It has been challenging for MTaPS to access procurement related documents, such as bid resolution documents. MTaPS recently gained access to more documents, including the bid resolution documents for most of the failed procurements. Though the additional documents were valuable and provided more details, some lacked clarity on the root causes for failure. To mitigate this challenge, MTaPS developed additional questionnaires and interviewed DOH staff and representatives of suppliers. More explanations have been obtained, and a draft of the technical advisory has been developed and is under internal review.

BEST PRACTICES/LESSONS LEARNED

- Expanding participation of stakeholders to HTA discussions in Asia requires more than a one-time travel and participation support. A synthesis of root issues followed by ameliorative plans, per MTaPS' plan, will support sustainability of this catalytic support.
- Enhancing regional collaboration, harmonization, and convergence through adoption of common standards for regulatory information management is imperative for the strengthening of regulatory systems in ASEAN member states.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: TA to HTAsiaLink in shaping the HTA ecosystem in the Asia region **Description:** Commence executing subcontracts with HITAP/HTAsiaLink Secretariat for the remainder of PY6 activities.	April 2024
Activity 3.1.2: Implementation of priority capacity-strengthening activities of NRAs in Bangladesh and the Philippines **Description:** Finalize consultant recruitment, plan logistics with Bangladesh country office, DGDA, and WHO for the training planned for Q3.	June 2024
Activity 3.1.3: Develop a capacity-building action plan for SEARN **Description:** Review and incorporate comments and suggestions on the draft plan from SEARN member states. Finalize the draft for the meeting of the heads of NRAs later in Q4.	June 2024
Activity 3.1.4: Global and regional dissemination of MTaPS RSS work in Asia **Description:** Finalize the development of the two manuscripts on convergence and workforce development for submission to a peer review journal.	June 2024
Activity 3.1.5: Strengthen the capacity of NRAs in the ASEAN member states through regional harmonization **Description:** Continue to engage with PPWG through USAID for the approval of the implementation plans, recruit consultant and plan for the invitations for the workshop as well as conducting the workshop.	June 2024

Activity and Description	Date
Activity 3.1.6: Support the development of a model for efficient regulation of medicines and vaccines by NRAs with very limited resources in SEARN. **Description:** Provide technical review of the draft model; participate in consultative meetings with the NRAs to provide TA.	June 2024
(Y5) Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines **Description:** Finalize the remaining deliverables working with IQVIA.	June 2024
(Y6) Activity 4.1.1: Assess factors that affect health commodity procurement (bid) failures in the Philippines at DOH level and identify key interventions to address challenges **Description:** Internally validate the draft technical advisory and produce final versions. Develop summary flyers and package resources from the whole activity to make them available through a dedicated webpage for AB activities. Disseminate the resources through the webpage and other means such as webinars.	June 2024

Table 22. Quarter 2, FY24, Activity Progress, Asia Regional Bureau

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: TA to HTAsiaLink in shaping the HTA ecosystem in the Asia region	5.1	Actively working, support to HIPER-NUS participation completed.
Activity 2.1.1: Strengthen capacity for PE tracking in Bangladesh	1.1, 2.3, 4.1, 5.3	MTaPS conducted a four-day training in Bangladesh to enhance the MOH's resource tracking team's ability to implement PE tracking using the SHA 2011 framework. They updated PE tracking materials, endorsed champions, and developed a comprehensive report with a transition plan for the HEU.
Activity 3.1.1: Advocate for adoption of global standards to support the development of RIMSs for electronic transmission of information across NRAs in Asia	2.4.3	MTaPS, jointly with PQM+, held a workshop to advocate for the adoption of RIMSs for ASEAN member states from February 29 to March 1, 2024.
Activity 3.1.2: Implementation of priority capacity-strengthening activities of NRAs in Bangladesh and the Philippines	2.4.3	MTaPS engaged with the DGDA (Bangladesh) and held collaborative meetings with WHO to plan for a training in good clinical practice for the DGDA.
Activity 3.1.3: Develop a capacity-building action plan for the SEARN	2.4.3	MTaPS continued to engage with SEARN/SEARO to review the developed draft capacity-building action plan. This plan was shared with other stakeholders, including the Coalition of Interested Parties, for their input. MTaPS is incorporating comments to finalize the document.
Activity 3.1.4: Global and regional dissemination of MTaPS RSS work in Asia	5.1	Two manuscripts on convergence of medicine registration and competency mapping are undergoing technical review.
Activity 3.1.5: Strengthen the capacity of NRAs in the ASEAN member states through regional harmonization	2.4.3	The ASEAN PPWG provided comments to the concept notes shared for response by MTaPS. MTaPS was able to respond to and seek clarifications of the comments. The comments were shared with USAID for review and submission to get feedback and clarifications from the PPWG.
Activity 3.1.6: Support the development of a model for efficient regulation of medicines and vaccines by NRAs with very limited resources in SEARN	2.4.3	MTaPS provided TA in the draft model and participated in a stakeholders meeting held on February 21, 2024, to incorporate comments and finalize the development of the model.
(Y3) Activity 4.1.1: COI manual and eLearning course development	1.1.2	MTaPS COI research and capacity-strengthening resources were presented as planned at LSE in January 2024. There were a total of 30 participants in the workshop from 12 countries and 25 organizations.
(Y5) Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines	4.1	One of the three deliverables has been finalized; the remaining are currently being worked on.
(Y6) Activity 4.1.1: Assess factors that affect health commodity procurement (bid) failures in the Philippines at the DOH level and identify key interventions to address challenges	4.1.1	MTaPS conducted further investigations through reviews of more documents, the FDA website, and websites of suppliers. In addition, additional questions were developed and used to interview DOH staff and representatives of suppliers to get more understanding of root causes and recommendations.

6. PROGRESS IN ACHIEVING CONTRACT DELIVERABLES

Table 23. FY24 Quarter 2 Progress in Achieving Contract Deliverables

Contractual Deliverable	Due Date	Submission Date	Comments
Quarterly performance report—PY6 Quarter 1	2/28/24	2/21/24	

7. PROGRAM SPOTLIGHT

USAID MTaPS Supports Côte d'Ivoire to Improve the Quality of Care by Revitalizing Drug and Therapeutics Committees

Nepal Launches First-Ever Guidelines to Improve Quality of Pharmaceutical Products and Practices

USAID
FROM THE AMERICAN PEOPLE

SUCCESS STORY

USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTAPS) PROGRAM

USAID MTaPS Supports Côte d'Ivoire to Improve the Quality of Care by Revitalizing Drug and Therapeutics Committees

Entrance of the Regional Hospital Center of Gagnoa. Photo credit: Fernique Konan, GTT-RAM Secretary.

Dr. Kossounou Meisan is a pediatrician at the Regional Hospital Center of Gagnoa. Like many health professionals, he is facing an alarming reality: antimicrobial resistance (AMR). He shares: "AMR is a reality within the hospital of Gagnoa, with certain medicines being prescribed excessively, including two drugs prescribed for bacteriological infections, ceftriaxone and cefixime, without any microbiological samples taken from patients."

As mentioned by Dr. Kossounou, the overconsumption and misconsumption of antimicrobials contribute to AMR, as germs get used to the antimicrobial treatments, which can lead to new multiresistant pathogens: "The awareness and training regarding antimicrobial stewardship are insufficient, with sometimes motivational issues."

AMR can lead to dramatic consequences for the health and life of patients. Without efficient antibiotics that combat the infections they are meant to treat, patients can't fight the diseases that they suffer from.

USAID, through its Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program, supported the Ministry of Health, Public Hygiene, and Universal Health Coverage to strengthen the capacities of health agents to improve antimicrobial prescription. The program focused on revitalizing drug and therapeutics committees (DTCs), institutional groups that aim to improve accessibility, availability, and use of antimicrobials; Dr. Kossounou is a member of the DTC at the Regional Hospital Center of Gagnoa.

About USAID MTaPS

The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2024) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.

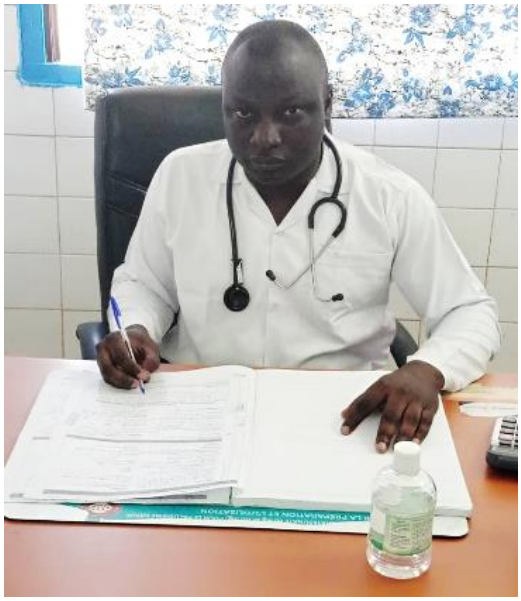
www.mtapsprogram.org

Contact: andiaye@mtapsprogram.org

In the Regional Hospital Center of Gagnoa, a baseline assessment on the functionality and capacities of the DTC showed a score of 25/55 in January 2022 and highlighted gaps, including the absence of an action plan for the DTC, a lack of monitoring for prescriptions and usage of antimicrobials, and a lack of awareness on antimicrobial stewardship.

Following this assessment, DTC members were trained on antimicrobial stewardship. These training sessions included themes such as the functioning of a DTC, AMR and the rational use of antimicrobials, and activities to foster better antimicrobial stewardship. In addition, a plan for continuous quality improvement for the use of antimicrobials was implemented in the pediatrics unit of the hospital, a plan which included an audit on antimicrobial prescription.

"The training for prescribers on the rational use of antimicrobials, the development of a policy to regulate the promotional activities of medical delegates, and providing awareness to prescribers on antimicrobial best practices were significant improvements that were noted." says Dr. Kossounou.



Dr. Kossounou Meisan in the pediatrics unit. Photo credit: Fernique Konan.

Left to right: the director of the hospital, the AMR national focal point, a DTC member, and Dr. Hérodias Ahimon from MTaPS during the ceremony to share the implementation guidelines for antimicrobial stewardship activities. Photo credit: Fernique Konan.

These efforts have led to important results. The score increased from 25/55 in January 2022 to 41/55 in November 2022 and 48/55 in July 2023, making the Regional Hospital Center of Gagnoa one of the centers of excellence in the fight against AMR. Dr. Kossounou shares the feeling of a number of health agents: "USAID MTaPS' capacity-strengthening work has helped the DTC to be revitalized and to better grasp antimicrobial stewardship activities. The plan was developed to provide continuous quality improvement to fix the gaps observed in the use of antimicrobials in our facility. In spite of remaining challenges, the DTC is committed to improve the quality of care by better using antimicrobials."

Following this first prescription audit implemented in the pediatrics unit, the DTC plans on expanding it to other services of the hospital to eventually provide a global improvement of antimicrobial prescription that will contribute to improving the quality of care in this hospital.

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USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTAPS) PROGRAM

Nepal Launches First-Ever Guidelines to Improve Quality of Pharmaceutical Products and Practices

USAID FROM THE AMERICAN PEOPLE

SUCCESS STORY

Overcoming years-long delays, the Department of Drug Administration (DDA) leadership takes action to release Nepal's first good practices guidelines and updated regulatory codes. The instruments will improve pharmacy and wholesaler practices and increase the availability of safe and quality products, thus contributing to the protection of public health in Nepal.

DDA Director General Narayan Prasad Dhakal signs the revised Codes on Sale and Distribution and the good practices guidelines to present to the Drug Advisory Committee.

Nepal's National Regulatory Authority, the Department of Drug Administration (DDA), has revised the Codes on Sale and Distribution of Drugs (CSD) and prepared Nepal's first Good Pharmacy Practices (GPP) and Good Storage and Distribution Practices (GSDP) guidelines. Nepal has more than 27,000 pharmacies and 5,000 wholesalers under the CSD's legal purview. The first CSD was approved in 2014 but was inadequate for ensuring the quality of services and products that pharmacies and wholesalers provide. The CSD revision and the development of the GPP guidelines for pharmacies and GSDP guidelines for wholesalers legally address this inadequacy and will improve service and product quality in the pharmaceutical sector.

Creating Nepal's First GPP and GSDP Guidelines and Updating the CSD

Using the World Health Organization's globally accepted GPP and GSDP guidelines and with support from the US Agency for International Development (USAID) Medicines, Technologies, Pharmaceutical Services (MTaPS) Program, the DDA and stakeholders measured the level of guideline adherence in 39 pharmacies and 30 wholesalers.

About USAID MTaPS

The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2024) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.

www.mtapsprogram.org

Contact: *mtaps@msh.org*

The findings showed that public-sector pharmacies implemented GPP relatively well compared to the GSDP implementation of private-sector pharmacies and wholesalers. The assessment found the wholesalers' compliance with the GSDP to be inadequate in the critical areas of quality management system, qualified pharmacy manpower, proper transportation, and product safety during transport.

Informed by the findings, the DDA prioritized the update of the CSD and the development of national GPP and GSDP guidelines. In November 2021, MTaPS began supporting the DDA, which involved stakeholders extensively from the conceptual to the final drafts and included representatives from pharmacy and wholesaler associations. Other stakeholders included representatives from Nepali pharmaceutical and professional associations and organizations. In July 2022, the DDA sent the revised CSD and the finalized good practices guidelines to the Drug Advisory Committee (DAC), which was formed by representatives from several government entities, such as the Ministry of Health and Population, the DDA, the Department of Health Services, the Ministry of Law, the Nepal Medical Association, and the Nepal Pharmaceutical Association, among others.

In June 2023, the newly appointed Director General of the DDA provided feedback and assigned DDA officers to update the drafts of the CSD revision and guidelines. Following coordination between the DDA and MTaPS, the final revised CSD and the annexed guidelines were presented to the Director General, who published them on the DDA website for a 15-day notice period. After rounds of discussion and feedback from the public and external and internal stakeholders over a few months, the DDA initiated the process of getting the documents mandated by the DAC.

Putting the Guidelines to Work as Part of the CSD

After the DAC mandates the instruments, the DDA will fully roll out the CSD and the guidelines. The DDA will work with pharmacies and wholesalers to phase in the guidelines as part of the CSD, using a multipronged approach that will strengthen the capacity of both the DDA and the stakeholders and enable good practices. Initially, the GPP certification of retail pharmacies is planned to be voluntary, while the GSDP certification of wholesalers will be mandatory.

The prioritization of these critical regulatory documents resulted from the DDA leadership's commitment and inclusive, comprehensive stakeholder involvement informed by the initial assessment's evidence of inadequate pharmacy and wholesale practice. Effective implementation of the revised CSD and the introduction of the GPP and GSDP guidelines will contribute to good-quality pharmaceutical products and services that protect public health in Nepal.

"The revised Codes on Sale and Distribution of Drugs and the good practices guidelines will improve the standards of pharmacy and wholesaler practices and ensure safe and effective medicines and health technology products for the Nepali people."

—Mr. Naryan Prasad Dhakal, Director General, DDA

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8. MONITORING, EVALUATION, RESEARCH, & LEARNING

A. MONITORING & EVALUATION

QUARTER 2 PROGRESS

DEVRESULTS DATA AND DASHBOARDS

The DevResults data system continues to be used as the key platform for data submission by countries and portfolios, followed by review and validation by the Home Office (HO) MERL team. The HO MERL team continues to update the Data Reference Sheets on a quarterly basis for sharing with MTaPS countries and program staff to ensure easy access to the data for active review and reflection on the key successes and challenges and to encourage the inclusion of quantitative evidence in the end-of-project documents as needed. Power BI dashboards continue to be emphasized and used for performance-monitoring data visualizations. This quarter, the HO MERL team also developed and disseminated a survey on data-use for decision making to MTaPS staff, with the goal of better understanding the successes and challenges involved with using quantitative evidence in routine programming decision making.

M&E CLOSE-OUT COORDINATION

In PY6 Q2, the HO M&E team continued to work with all MTaPS country teams to ensure that all M&E-specific tasks are completed prior to the closeout date for each country. Some of the M&E closeout tasks include submission of the latest performance monitoring data in DevResults, a discussion on progress toward targets, review and reflection on historical data, and integration of any key performance-monitoring data in end-of-project reports, summaries, and presentations, etc. Each country will continue to follow its timeline to make sure all key tasks are completed by the deadlines provided. The HO M&E team has also begun working with the Global MTaPS end-of-project report coordination team to ensure that quantitative evidence is integrated and highlighted as needed.

COVID-19 IN-COUNTRY ACTIVITY REPORTS

MTaPS COVID-19 activities were completed in Nigeria before PY6 Q2. Côte d'Ivoire and Madagascar have continued their activities, and Kenya and Rwanda began their PY6 activities and have reported performance-monitoring data on selected indicators in PY6 Q2. Cameroon has also continued its COVID-19 activities in PY6 Quarter 2; however, no COVID indicators exist to capture these activities. Cameroon provided a narrative description for the quarterly report and development information solution of its ongoing work in PY6 Q2.

DATA QUALITY ASSURANCE (DQA)

High-quality data continues to be a focus of the M&E teams at the HO and country levels. During this quarter, teams consistently referred to the DQA SOP to ensure timely, accurate, and complete data are submitted. Data quality is also ensured through review of the Data Reference Sheets and prior to inclusion in end-of-project documents.

ACTIVITIES & EVENTS FOR NEXT QUARTER

Activity & Description	Date
M&E close-out coordination with all active MTaPS countries	April–June 2024
Data review and reflection to understand key successes and challenges	Ongoing
Integration of performance-monitoring data and end-of-project narratives to highlight key results	April–June 2024

B. KNOWLEDGE MANAGEMENT AND LEARNING

QUARTER 2 PROGRESS

TECHNICAL DOCUMENTATION

During quarter 2, MTaPS developed the following 19 technical briefs and highlights to address learning questions:

Asia Bureau: Using the OHT to Allocate Pharmaceutical Budgets. MTaPS developed a technical highlight to respond to the following learning question: What strategies and information are required for policymakers in the MOH, through using the OHT, to appropriately allocate budgets for pharmaceuticals?

Asia Bureau: Strengthening Medical Product Registration in the Asia Region. MTaPS developed a technical brief on its support for NRAs to improve regulatory capacity, streamline regulatory processes, and adopt best practices in medical product registration and MA. This technical brief addresses the following learning question: How will medical product registration contribute to the improvement of overall regulatory systems strengthening?

Strengthening Information Systems for PSCM in Bangladesh. MTaPS developed a technical brief on efforts to implement information management systems (e.g., eAMS, DGFP eLMIS, DGHS eLMIS, and QuanTB) that facilitate data-driven decision- making by system users and managers. This technical brief addresses the following learning question: What are the critical lessons learned in strengthening the capacity of national- and subnational-level managers to use data from the various information management systems for monitoring performance and decision-making processes?

Strengthening IPC at the National and HCF Levels in Bangladesh. MTaPS developed a technical brief on supporting IPC governance structures at the national and subnational levels, conducting facility-level IPC assessments, and building capacity for improved IPC practices. This technical brief addresses the following learning question: What are the lessons learned from strengthening IPC governance capacity and practice at the national and facility levels in Bangladesh?

Introducing Comprehensive Electronic Recording and Reporting for TB in Bangladesh. MTaPS developed a technical brief on e-TB Manager, a web-based national electronic TB recording and reporting system that improves the ability to adjust patients' treatment regimens in a timely manner. This technical brief addresses the following learning question: What are the critical success factors in the implementation and use of e-TB Manager in Bangladesh?

Building MSC to Combat AMR in Burkina Faso. MTaPS developed a technical highlight on use of the OHP as a mechanism for partner collaboration, an essential approach to strengthening global health security. This technical brief addresses the following learning questions: What are the key factors enabling or hindering MSC on AMR at the national level? How can MSC efforts be sustained? This highlight is currently with USAID for review and approval.

Strengthening MSC to Contain AMR in Cameroon. MTaPS developed a technical highlight on lessons learned from using the OHP to improve MSC and to ensure the updating of Cameroon's NAP-AMR.

This technical brief addresses the following learning question: What are the critical lessons learned in the strengthening of MSC bodies on AMR? This highlight is currently with USAID for review and approval.

Mapping Pharmaceutical Expenditure Data Sources in Indonesia. MTaPS completed a technical brief describing the program's efforts to identify sources of pharmaceutical expenditure data and build the capacity of Indonesia's HA team to track, collect, and analyze pharmaceutical expenditure data. This technical brief addresses the following learning question: What are the key policy questions related to pharmaceutical expenditure in Indonesia and what are the necessary adaptations to the general pharmaceutical expenditure tracking guidelines for the Indonesian context?

Strengthening the Health Care Priority-Setting Process in Indonesia. MTaPS completed a technical brief on the program's role in improving HTA in Indonesia, including improving the topic identification, selection, and prioritization process for better evaluation of health technologies and interventions. This technical brief addresses the following learning questions: What are the current processes and institutional structures for decision making/priority setting in Indonesia? What are the key policy/regulatory priorities for the primary stakeholders? How can these be aligned to streamline HTA processes?

The Rational Use of Antimicrobials in Jordan. MTaPS developed a technical highlight on its efforts to develop localized protocols for rational use of antimicrobials, through collaboration with the MOH in Jordan. This technical highlight addresses the following learning question: What approaches are effective for building institutional and HF capacity in rational use of antibiotics and IPC?

Sustaining Improvements in the Coordination and Governance of Pharmaceutical Systems in Jordan. MTaPS developed a technical brief on its efforts to support the institutionalization of framework agreements for public procurement of pharmaceuticals. This technical brief addresses the following learning question: What factors contribute to sustaining improvements in governance in pharmaceutical systems?

Effective and Sustainable Governance Structures for Combating AMR at HFs in Kenya. MTaPS completed a technical brief describing assistance to the Government of Kenya to establish IPC and AMR committees at the national, county, and HCF levels as effective and sustainable governance structures for AMR containment. This technical brief addresses the following learning question: What are some of the incentives and enablers for the effective and sustainable functioning of IPC and MTC/AMS committees?

Key Factors of MSC in the Fight Against AMR in Mali: A National Analysis. MTaPS developed a technical brief in French on supporting the GCMN-RAM and its IPC and AMS TWGs through activities aimed at strengthening MSC for AMR containment. This technical brief addresses the following learning question: What are the key factors enabling or hindering MSC on AMR at the national level?

Strengthening MSC for Containing AMR in Nigeria. MTaPS completed a technical brief describing program support to the Government of Nigeria to strengthen governance and capacity in the country for effective MSC for AMR containment. This technical brief addresses the following learning question: What are the critical drivers for improving MSC on AMR?

Strengthening IPC in Nigeria. MTaPS completed a technical brief on efforts to strengthen governance and capacity for IPC at the national, state, and HF levels in Nigeria. This technical brief addresses the following learning question: What are the minimum critical elements of IPC programs that are required to achieve successful and sustainable IPC improvements based on the experience working in MTaPS-supported HCFs?

Supporting Rwanda FDA to Strengthen Its Regulatory Services. MTaPS developed a technical brief summarizing program support to the Rwanda FDA in strengthening the quality of its regulatory services through implementation of a QMS. This technical brief addresses the following learning question: What is the effect of the QMS implementation on the quality of the Rwanda FDA's regulatory services?

Adherence to IPC Standards in MTaPS-Supported HFs in Senegal. MTaPS finalized a technical brief in French on its approach to improving IPC practices in Senegal through revitalization of nosocomial infection committees, which resulted in improved IPCAF scores at MTaPS-supported HFs. This technical brief addresses the following learning question: What is the level of adherence to IPC standards in MTaPS-supported facilities?

Improving IPC in Tanzania. MTaPS completed a technical brief on its efforts to assess and strengthen IPC governance, build institutional capacity to manage IPC, make IPC-related information available for use in decision making, and improve IPC practices and services. This technical brief addresses the following learning question: What factors contribute to an effective and sustainable national IPC program in Tanzania?

Introducing the WHO AWaRe Antibiotics Categorization in Tanzania. MTaPS completed a technical brief on efforts to introduce and implement the WHO-recommended AWaRe categorization of antibiotics to achieve more rational antibiotic use in Tanzania's HFs. This technical brief addresses the following learning question: What factors facilitate adherence to AWaRe antibiotics categorization guidelines in HFs?

During quarter 2, MTaPS also developed six technical briefs and highlights to document implementation knowledge:

Asia Bureau: Mapping Regulatory Workforce Competency for NRAs. MTaPS developed a technical brief on workforce competency mapping of NMRAs in Bangladesh, Nepal, and the Philippines to determine the regulatory capacity building needs of these NMRAs at the institutional and individual levels.

Institutionalizing the eAMS in Bangladesh. MTaPS developed a technical brief on development of a centralized, web-based eAMS to strengthen the process of deploying, operating, maintaining, upgrading, and disposing of assets cost effectively.

Improving COVID-19 Vaccination Rates in Low-Performing Districts in Côte d'Ivoire. MTaPS completed a technical brief on the use of microplanning as a tool to improve immunization coverage at the local level.

Improving Early TB Detection in DRC. MTaPS developed a technical brief on the strengthening of the capacity of community health workers in Ituri Province to improve TB screening and referral.

Implementing AMS at a Teaching Hospital in Nigeria. MTaPS completed a technical highlight on its approach to strengthen AMS at the facility level through improving governance structures and capacity building of HCWs, which resulted in stronger AMS practices at Enugu State University Teaching Hospital.

Strengthening Health Commodity PSCM in the Philippines. MTaPS completed a technical highlight on development and implementation of an eLMIS for addressing PSCM challenges in the Philippines.

COUNTRY SUMMARY REPORTS

MTaPS supported development of country summary reports to missions highlighting key achievements, results, recommendations, and future PSS considerations for each country. During quarter 2, three country summary reports were completed and submitted to the missions.

Indonesia Country Summary Report. This report summarized MTaPS' efforts to strengthen evidence-based decision making for resource allocation to health technologies and promote transparency in pharmaceutical expenditure tracking to improve value in purchasing.

Nepal Country Summary Report. This report summarized MTaPS' work to strengthen pharmaceutical-sector governance and the DDA's regulatory capacity to increase the availability of regulatory information for decision making, institute performance standards for pharmaceutical management and services in HFs, and contain AMR.

Philippines Country Summary Report. This report summarized MTaPS' efforts to strengthen pharmaceutical systems and capabilities related specifically to governance; human resources and institutional capacity strengthening; information systems; resource optimization and pharmaceutical services for improved TB, FP, and HIV/AIDS PSCM and PV; and COVID-19 response.

During quarter 2, three country summary reports were drafted.

Madagascar Country Summary Report. This report summarizes MTaPS' efforts to improve governance and management of the COVID-19 Response Mechanism, launched by the Global Fund (GF) to address the challenges posed by the pandemic. The program strengthened pharmaceutical systems and services in the areas of governance, capacity, information systems, and supply chain, which primarily corresponded to the laboratory system and coordination of operations result areas in the USAID's COVID-19 response framework.

Rwanda Country Summary Report. By instituting stronger governance mechanisms, management information systems, PV systems, and QMSs, MTaPS is working to increase Rwanda's capacity for regulating its medical products. This report summarizes MTaPS' efforts to strengthen pharmaceutical systems and services in Rwanda by improving regulatory systems, AMS, and IPC.

Senegal Country Summary Report. This report summarizes MTaPS' efforts to strengthen pharmaceutical systems and services to improve AMR prevention and containment, to strengthen capacity for hemorrhagic fever disease in EVD preparedness, and to support the COVID-19 emergency response.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Technical briefs and technical highlights	April–June 2024
Conference presentations	April–June 2024
Webinars	April–June 2024
Country summary reports	April–June 2024
Core and health area summary reports	April–June 2024
Country end-of-project presentations	April–June 2024
Country end-of-project events	April–June 2024
End-of-project event planning	April–June 2024

C. RESEARCH

QUARTER 2 PROGRESS

Under the Commodity Security and Logistics (CSL) portfolio, MTaPS completed the end line analysis for its impact evaluation of a client, stock, and workflow management application (OpenSRP) on unmet FP needs at the last mile in Luapula Province, Zambia. The findings show that over 96% of the intervention group received their resupply of FP commodities from community-based distributors at the end line, compared to 84% at baseline, a statistically significant difference. HF and district staff emphasized the application's utility for improving counseling quality, stock management, and planning, and community-based distributors emphasized the improvement in their recordkeeping and workflow efficiency. The findings indicate that the rollout and scale-up of the OpenSRP application would improve FP services at the last mile. The team submitted the draft report to USAID for review and is awaiting feedback.

Also, under CSL, MTaPS completed its exploratory study of the status of disability-inclusive employment practices in the health supply chain labor market across low- and middle-income countries. The study found that it is now common for countries to have disability inclusion policies and strategies to guide employment, but a gap exists between policy and implementation, also reflected in the broader labor market. Key implementation challenges are linked to interrelated insufficiencies regarding enforcement and monitoring, attitudes toward persons with disabilities, physical infrastructure, and communication and coordination. MTaPS submitted a draft manuscript to USAID for review and will incorporate their feedback before finalizing and submitting the manuscript for peer review.

Under Cross Bureau, the team continued its postintervention analysis for an evaluation study focused on a package of social behavior change interventions aimed at motivating compliance with antimicrobial prescribing guidelines among providers in selected hospitals in Uganda. The team will be drafting a manuscript for peer review next quarter.

This quarter, the Nepal team concluded the study of pricing policies to guide pricing policy development in the country. The study found that national stakeholders have no objection to price regulation. Further, to be acceptable to stakeholders, any pricing policy and updated regulation need to be transparent and rational. A manuscript reporting the findings, titled "Developing Nepal's Medicines Pricing Policy: Evidence Synthesis and Stakeholders' Consultation," was accepted with minor revisions by the *Journal of Pharmaceutical Policy and Practice* for peer review publication. In addition, the Nepal team completed the implementation study of SPARS, which resulted in four draft manuscripts:

- "Supervision, Performance Assessment, and Recognition Strategy (SPARS)—A Multipronged Strategy to Strengthen Medicines Management in Nepal: Pilot Study Methods and Baseline Results"
- "Supervision, Performance Assessment, and Recognition Strategy—A Quasi-experimental Pre-Post Study of the Multipronged Interventions to Strengthen Medicines Management in Nepal"
- "Inter-rater Reliability and Validity of Supervision Performance Assessment and Recognition (SPARS) Indicators to Assess Medicines Management in Public Health Facilities in Nepal"
- "Costs of the Supervision, Performance Assessment and Recognition Strategy (SPARS) for Medicines Management in Nepal: Evidence from a Pilot Study

The manuscript on SPARS implementation costs is currently under peer review.

The Jordan team drafted a manuscript for peer review, reporting on its assessment of the effectiveness of a programmatic approach to AMR education across Jordanian governorates, focusing on school-aged children. The assessment found that across 30 schools, 2,700 students showed significant improvements in understanding the importance of clinical consultation before taking antibiotics, the dangers of sharing medicines, and proper handwashing practices. The manuscript is currently under review. Additionally, the team is conducting a national assessment of IPC practices in public and private dental settings and has developed a protocol which it will submit for peer review.

With respect to conferences, MTaPS presented an abstract entitled "Addressing Conflicts of Interest in Pharmaceutical Systems in Low- and Middle-Income Countries: From Gap Analysis to Prevention and Management" at the Workshop on Corruption and Conflicts of Interest in Healthcare held January 12–14, 2024, at the London School of Economics.

The program also presented the following abstracts at the People that Deliver Global Indaba held March 6–8, 2024, in Bangkok, Thailand, and engaged an audience of 20 to 40 attendees in each session:

- "Including Persons with Disabilities in the Health Supply Chain Workforce"
- "Improving DRC's Supply Chain Management by Strengthening Local Supply Chain Organizations to Promote Linkage between Public and Private Sectors"
- "Strengthening Community Health Workers' Capacity for Stock Management and Service Provision at the Last Mile"
- "Innovative Approaches Ensuring a Systems Approach to Workforce When Undertaking Procurement and Supply Chain Management Strategic Change"
- "Enhancing Pharmaceutical Systems through Remote Capacity Strengthening: Results and Sustainability"
- « Un programme virtuel pour équiper les institutions locales afin de renforcer les systèmes pharmaceutiques »
- "What Can the Private Sector Teach Us about Professionalization of the Procurement and Supply Chain Management Workforce—A South East Asian Perspective"

This quarter, the Global Health Security Conference organizers informed MTaPS that the following abstracts have been accepted for presentation at the 2024 conference, scheduled for June 18–21 in Sydney, Australia:

- "Improvement of HAI Surveillance System in Tanzania"
- "Improving Infection Prevention and Control and Hand Hygiene Using a Continuous Quality Improvement Approach at Six Hospitals in Uganda"
- "Antimicrobial Consumption Surveillance in Uganda: Analysis of National Import Data for the Human Health Sector, 2018–2021"
- "Building Functional Multisectoral Coordination to Fight Antimicrobial Resistance: Experiences from 13 Countries"
- "Development and Evaluation of a Continuous Quality Improvement Programme for Antimicrobial Stewardship in Six Hospitals in Uganda"
- "Optimizing Prophylactic Antibiotic Use among Surgery Patients in Ethiopian Hospitals"

- "Pandemic Preparedness and the Elephant in the Room: Combatting AMR in Resource-Constrained Settings"
- "Advancing Subnational Level Multisectoral Coordination in Kenya for AMR Containment"
- "Implementation of AMS in Resource Constrained Settings: Perspectives from Kenya"

Additionally, of four abstracts that were submitted to the 25th International AIDS Conference, to be held July 22–26, 2024, in Munich, Germany, one (entitled "Building Local Capacity for Improved HIV Treatment Safety in Mozambique") has been accepted to be presented as a poster.

Lastly, MTaPS submitted one abstract (entitled "Pharmaceutical Systems Governance: The Critical Role of National Pharmaceutical Services Units") for consideration for the 82nd FIP Congress of Pharmacy and Pharmaceutical Sciences, scheduled for September 1–4 in Cape Town, South Africa.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Finalize abstract submissions for International Society of Pharmacovigilance annual meeting	April 2024
Prepare presentation and posters for Global Health Security Conference and International AIDS Conference	June 2024
Complete submission of remaining manuscripts to target journals	May 2024

9. ANNEXES

ANNEX 1. MTAPS INDICATORS

Annex Table 1. MTaPS performance indicator tracking table

N/A is placed when activities are out of scope for the portfolio in the reporting year.

Code	Performance indicator	Reporting frequency	Baseline value	PY2 result	PY3 result	PY4 result	PY5 result	PY6 Q1 result	PY6 Q2 result	PY6 Q3 result	PY6 Q4 result	PY6 cumulative result
GH-IO 1	Has the country developed policies for prescription of Access, Watch, or Reserve class of antibiotics according to AWaRe categorization (yes/no)?	Annually	0/12	4/12	5/12	5/12	10/10					
	Bangladesh		No	Yes	Yes	Yes	Yes					
	Burkina Faso		No	No	Yes	No	Yes					
	Cameroon		No	No	No	No	Yes					
	Côte d'Ivoire		No	No	No	No	N/A					
	DRC		No	Yes	Yes	Yes	Yes					
	Ethiopia		No	No	No	Yes	Yes					
	Kenya		No	No	No	No	Yes					
	Mali		No	No	No	No	N/A					
	Mozambique		No	No	No	No	Yes					
	Nigeria		No	No	No	No	Yes					
	Senegal		No	Yes	Yes	Yes	Yes					
	Tanzania		No	Yes	Yes	Yes	Yes					
GH-IO 2	Has the country implemented WHO AWaRe categories (yes/no)?	Annually	1/12	3/12	8/12	7/12	10/12					
	Bangladesh		Yes	Yes	Yes	Yes	Yes					
	Burkina Faso		No	No	Yes	Yes	Yes					
	Cameroon		No	No	No	No	Yes					
	Côte d'Ivoire		No	No	No	No	Yes					
	DRC		No	Yes	Yes	Yes	Yes					
	Ethiopia		No	No	Yes	Yes	Yes					
	Kenya		No	No	Yes	Yes	Yes					
	Mali		No	No	Yes	No	N/A					
	Mozambique		No	No	No	No	Yes					
	Nigeria		No	No	No	No	No					
	Senegal		No	No	Yes	Yes	Yes					

	Tanzania		No	Yes	Yes	Yes	Yes		
GH-IO 5	*% of MTaPS-supported facilities with compliance with at least 60% prescribed antibiotics coming from WHO's AWaRe Access category*	Baseline/ endline	71%	N/A	49%	55%	67% (35/52)		
	Cote d'Ivoire		0%	N/A	N/A	100%	N/A		
	DRC		28%	N/A	N/A	0%	25% (3/12)		
	Jordan		0%	N/A	N/A	N/A	N/A		
	Kenya		80%	N/A	N/A	N/A	92% (22/24)		
	Mali		80%	N/A	49%	56%	62% (10/16)		
	Senegal		0%	N/A	N/A	0%	N/A		
	Tanzania		100%	N/A	N/A	N/A	N/A		
	Uganda		100%	N/A	N/A	100%	N/A		
IO.1	% of median international price paid for a set of tracer medicines that was part of the last regular MOH procurement	Baseline/ endline	179%	N/A	N/A	N/A	N/A		
IO.2	Mean % availability across a set of tracer medicines	Annually	78%	75%	76%	78%	50% (50/100)	N/A	N/A
	Nepal							N/A	N/A
IO.3	% of medicines on the EML that have at least one registered product available	Annually					29% (434/1,477)		
	DRC MNCH		0%	N/A	N/A	17%	79% (30/38)		
	Nepal		84%	N/A	73%	72%	75% (318/426)	N/A	N/A
	Rwanda		49%	N/A	N/A	N/A	15% (86/1,013)		
IO.4	Has the country's regulatory system increased its score since the last WHO global regulatory benchmarking assessment in at least one regulatory function (yes/no)?	Annually	0	N/A	N/A	N/A	Yes		
	Nepal		Yes	Yes	Yes	N/A	Yes	N/A	N/A
IO.5/GH-IO-4	*% of surveyed patients who can correctly state instructions dosage of antimicrobial prescriptions*	Baseline/endline	76%	N/A	N/A	N/A	39% (1,324/3,376)		
	Nepal		76%	N/A	N/A	N/A	37% (1,166/3,136)	N/A	N/A

	Mali		32%	N/A	55%	54%	66% (158/240)		
IO.6	*Optimal level of medicines prescribing indicators (composite indicator)*	Annually	0.38	N/A	0.5	N/A	0.25	N/A	N/A
	Nepal								
MNCH 17	# of countries participating in the dissemination of the regulation guidelines for medical devices	Annually	0	0	0	N/A	N/A		
MNCH 18	# of MNCH medical devices included in the guidelines	Annually	0	N/A	0	N/A	N/A		
MNCH 19[6]	# of stakeholders from regulatory authorities and manufacturers of oxygen participating in the dissemination and adoption of the oxygen regulatory framework	Annually	0	0	0	N/A	N/A		
MNCH 4	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	0	0	0	N/A	N/A		
MNCH 6	# of countries using the RMNCH forecasting supplement	Annually	0	N/A	5	8	N/A		
MNCH 9	# of best practices identified and documented on elements of pharmaceutical management in social accountability MNCH interventions from the literature	Annually	0	3	N/A	N/A	N/A		
MNCH 10	# of MTaPS-supported NMRAs implementing improved registration practices relevant for MNCH medical products	Semiannually	0	1	N/A	1	0	N/A	-
MNCH 11	# of countries supported to develop and implement action plans for regional harmonization efforts	Semiannually	0	0	N/A	N/A	0	N/A	-

[6] The activity being reported under MNCH 19 has changed scope and to measure the changed activity, MNCH 27 has been added.

	relevant for MNCH medical products									
MNCH 12	# of quality-assured MNCH products registered in selected country	Semiannually	0	N/A	N/A	123	N/A	N/A		
MNCH 13	# of countries supported to implement decentralized procurement systems	Semiannually	0	1	N/A	1	N/A	N/A		
MNCH 21	# of quantification guidance documents developed	Annually	0	0	0	5	2			
MNCH 22	# of countries in selected region implementing regulation of medical devices	Semiannually	0	N/A	N/A	N/A	N/A	N/A		
MNCH 23	# of countries participating in the joint assessment of MNCH medical devices	Annually	0	N/A	N/A	N/A	0			
MNCH 24	# of countries participating in the meetings to disseminate the call-to-action paper to improve use of amoxicillin and gentamicin	Annually	0	N/A	N/A	N/A	23			
MNCH 25	# of countries receiving MTaPS support to include nonmalaria commodities in their GF proposals	Annually	0	N/A	N/A	N/A	6			
MNCH 26	# of countries participating in the dissemination of the oxygen quality assurance (QA) resource document	Annually	0	N/A	N/A	N/A	42			
MNCH 27	Number of stakeholders involved in validation of oxygen QA resource document	Annually	0	N/A	N/A	N/A	36			
MT 1.1.1	# of entities that have clarified roles and	Annually	0	3	11	6	2			

	responsibilities in pharmaceutical systems and made information publicly available with MTaPS support								
	Bangladesh		0	2	1	2	N/A		
	DRC		0	N/A	N/A	N/A	N/A		
	Indonesia		0	N/A	2	N/A	N/A		
	Jordan		0	0	0	3	N/A		
	Nepal		0	0	0	N/A	1	3	3
	Rwanda		0	1	4	1	1		
	IGAD		0	0	4	N/A	N/A		
MT 1.1.2	# of MTaPS-supported entities that monitor key elements of pharmaceutical management operations and make the information publicly available	Annually	0	0	29	17	17		
	DRC MNCH		0	0	29	17	17		
MT 1.1.3	% of MTaPS-supported decision-making entities that have publicly available guidelines for key elements of pharmaceutical management operations	Annually	0	N/A	100% (2/2)	0% (0/1)	100% (1/1)		
	IGAD		0	N/A	100% (2/2)	N/A	N/A		
	Mali		0	N/A	N/A	0% (0/1)	100% (1/1)		
MT 1.2.1	# of pharmaceutical sector–related policy, legislation, regulation, or operational documents developed or updated with technical assistance from MTaPS	Annually	0	30	28	20	80		
	Asia Bureau		0	0	1	4	1		
	Cross Bureau		0	N/A	N/A	1	1		
	Bangladesh		0	2	2	5	1		
	Burkina Faso PV		0	1	0	N/A	N/A		
	Global MNCH		0	1	0	N/A	N/A		
	Indonesia		0	N/A	0	N/A	1		
	Jordan		0	0	0	0	11		
	Mali MNCH		0	N/A	N/A	1	N/A		
	Mozambique		0	1	2	N/A	N/A		
	Nepal		0	N/A	3	6	65	22	22

	Philippines		0	0	3	1	Data not available[7]					
	Rwanda		0	26	17	0	N/A					
	Tanzania PEPFAR		0	N/A	2	2	N/A					
PP 1.1.1	# of policies and plans developed, enhanced, or implemented to improve service delivery governance and regulation because of MTaPS support	Annually	0	2	3	1	Data not available[7]	-				
PP 1.2.1	# of health workers who received in-service training using nontraditional platforms on PSS, PSCM, or PV with MTaPS support	Quarterly	0	0	N/A	1,872	1,863	548	2,935			
MT 1.2.2	# of pharmaceutical regulatory enforcement mechanisms established or strengthened with MTaPS support	Semiannually	0	0	5	8	24	0				
	Burkina Faso		0	N/A	N/A	N/A	0	N/A				
	Global MNCH		0	N/A	0	N/A	1	N/A				
	Mozambique		0	0	2	N/A	N/A	N/A				
	Philippines		0	N/A	N/A	N/A	N/A	0				
	Rwanda		0	0	2	8	23	N/A				
	Tanzania PEPFAR		0	N/A	1	N/A	N/A	N/A				
MT 1.2.3	% of established pharmaceutical regulatory enforcement mechanisms that are functional	Semiannually	50%	42% (11/26)	88% (15/17)	75% (3/4)	100% (1/1)	N/A				
	Bangladesh		50%	100% (2/2)	100% (8/8)	100% (2/2)	100% (1/1)	N/A				
	Mozambique		0%	22% (2/9)	67% (2/3)	N/A	N/A	N/A				
	Rwanda		0%	83% (5/6)	83% (5/6)	75% (6/8)	N/A	N/A				
MT 1.3.1	# of platforms for citizen and consumer engagement in the pharmaceutical sector established or strengthened with MTaPS support	Annually	0	0	1	1	N/A					
	DRC MNCH		0	0	1	1	1					

[7] Indicator data are collected through government sources that were not available at the time of data collection.

	Jordan		0	0	0	0	N/A						
PP 1.3.1	% of US Government (USG)-supported facilities using MTaPS-supported eLMIS[8]	Quarterly	0	N/A	N/A	Data not reported	28% (39/68)	269.44% (97/36)		100% (10/10)			
MT 1.3.2	# of civil society organizations or media groups that have disseminated information on pharmaceutical sector–monitoring activities or conducted advocacy for equity in access to medical products with MTaPS support	Annually	0	0	0	0	N/A						
	Jordan		0	0	0	0	N/A						
MT 2.1.2	# of MTaPS-supported health professional training curricula developed or revised to address pharmaceutical management topics	Annually	0	5	2	7	5						
	Asia Bureau		0	N/A	1	2	N/A						
	Bangladesh		0	4	0	1	N/A						
	IGAD		0	1	1	N/A	N/A						
	Jordan		0	N/A	N/A	4	2						
	Mali MNCH		0	N/A	N/A	N/A	3						
MT 2.2.2	# of persons trained in pharmaceutical management with MTaPS support	Quarterly	0	1,827	12,480	9,862	8,815	3,623		2,164			
	Asia Bureau[9]		0	N/A	101	413	184	*Female*	0	*Female*	5	*Female*	*Female*
								Male	0	*Male*	18	*Male*	*Male*
								Unknown	1,064	*Unknown*	401	*Unknown*	*Unknown*
								Total	1,064	***Total***	424	***Total***	***Total***
	Bangladesh		0	1,678	2,856	3,013	1,961	*Female*	7	*Female*	46	*Female*	*Female*
								Male	47	*Male*	16	*Male*	*Male*
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*
								Total	54	***Total***	62	***Total***	***Total***
	Burkina Faso		0	N/A	N/A	N/A	32	*Female*	N/A	*Female*	N/A	*Female*	*Female*
								Male		*Male*		*Male*	*Male*
								Unknown		*Unknown*		*Unknown*	*Unknown*
								Total		***Total***		***Total***	***Total***
	Cross Bureau		0	N/A	N/A	124	2,895	*Female*	0	*Female*	0	*Female*	*Female*
								Male	0	*Male*	0	*Male*	*Male*

[8] PY6 Quarter 1 data was not reported in the quarter 1 report due to delays in data sources. Data for quarter 1 has now been collected and is included in this report.
[9] Data reporting in PY6Q1 is for the Asia Bureau PY5 e-Learning course.

								Unknown	1,713	*Unknown*	1,393	*Unknown*	*Unknown*	
								Total	1,713	***Total***	1,393	***Total***	***Total***	
	DRC MNCH		0	N/A	373	192	334	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	DRC Supply Chain		0	N/A	N/A	0	223	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	IGAD		0	N/A	843	23	N/A	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Indonesia		0	N/A	0	251	75	*Female*	43	*Female*		*Female*	*Female*	
								Male	20	*Male*	N/A	*Male*	*Male*	
								Unknown	0	*Unknown*		*Unknown*	*Unknown*	
								Total	63	***Total***		***Total***	***Total***	
	Jordan		0	N/A	N/A	50	677	*Female*	130	*Female*	103	*Female*	*Female*	
								Male	110	*Male*	84	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	240	***Total***	187	***Total***	***Total***	
	Mali MNCH		0	N/A	N/A	8	37	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Mozambique		0	105	21	125	N/A	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Nepal		0	N/A	38	121	733	*Female*	196					977
								Male	781					
								Unknown	0					
								Total	977					
	Philippines		0	N/A	7,615	5,191	1,048	*Female*	304	*Female*	22	*Female*	*Female*	
								Male	133	*Male*	47	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	437	***Total***	69	***Total***	***Total***	
	Rwanda[10]		0	44	603	246	616	*Female*	22	*Female*	1	*Female*	*Female*	
								Male	30	*Male*	3	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	52	***Total***	4	***Total***	***Total***	
	Rwanda PEPFAR		0	N/A	N/A	78	N/A	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	

[10] Rwanda PY6 field support activities are a continuation of the PY5 work plan.

								Total		***Total***		***Total***	***Total***		
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	*Female*	0	*Female*	9	*Female*	*Female*		
								Male	0	*Male*	16	*Male*	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*		
								Total	0	***Total***	25	***Total***	***Total***		
	Tanzania PEPFAR		0	N/A	30	27	N/A	*Female*	0	*Female*	N/A	*Female*	*Female*		
								Male	0	*Male*		*Male*	*Male*		
								Unknown	0	*Unknown*		*Unknown*	*Unknown*		
								Total	0	***Total***		***Total***	***Total***		
MT 2.2.3	# of in-person or e-Learning courses developed with MTaPS assistance	Annually	0	1	11	11	1								
	Asia Bureau		0	N/A	3	2	1								
	Bangladesh		0	0	0	N/A	N/A								
	Cross Bureau		0	1	1	2	N/A								
	IGAD		0	N/A	0	N/A	N/A								
	Mozambique		0	0	1	1	N/A								
	Nepal		0	N/A	N/A	N/A	N/A			2					2
	Philippines		0	0	4	6	Data not available[11]			-					-
	Rwanda		0	0	2	N/A	N/A								
MT 2.2.4	# of people successfully completing MTaPS-developed e-Learning courses	Quarterly	0	65	6,917	4,227	5,961	2,753		1,506					
	Asia Bureau		0	0	52	0	8	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Bangladesh FS		0	0	0	0	2,012	*Female*	64	*Female*	7	*Female*	*Female*		
								Male	395	*Male*	105	*Male*	*Male*		
								Unknown	5	*Unknown*	1	*Unknown*	*Unknown*		
								Total	464	***Total***	113	***Total***	***Total***		
	Bangladesh GHSA		0	N/A	N/A	N/A	56	*Female*	173	*Female*	N/A	*Female*	*Female*		
								Male	401	*Male*		*Male*	*Male*		
								Unknown	2	*Unknown*		*Unknown*	*Unknown*		
								Total	576	***Total***		***Total***	***Total***		
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	*Female*	0	*Female*	0	*Female*	*Female*		
								Male	0	*Male*	0	*Male*	*Male*		
								Unknown	0	*Unknown*	1,393	*Unknown*	*Unknown*		
								Total	0	***Total***	1,393	***Total***	***Total***		
	Cross Bureau		0	6	8	208	3,123	*Female*	0	*Female*	N/A	*Female*	*Female*		
								Male	0	*Male*		*Male*	*Male*		
								Unknown	1,713	*Unknown*		*Unknown*	*Unknown*		
								Total	1,713	***Total***		***Total***	***Total***		
	DRC		0	N/A	N/A	N/A	N/A	*Female*	N/A	*Female*	0	*Female*	*Female*		

[11] Indicator data are collected through government sources that were not available at the time of data collection.

								Male		*Male*	0	*Male*	*Male*	
								Unknown		*Unknown*	0	*Unknown*	*Unknown*	
								Total		***Total***	0	***Total***	***Total***	
	Mozambique		0	65	0	0	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Philippines		0	0	6,857	3,892	762	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Rwanda		0	0	0	127	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
MT 2.4.1	# of days reduced for product registration in countries with MTaPS-supported NMRAs	Annually	0	0	180	0	N/A							
	Mali MNCH		0	N/A	N/A	0	N/A							
	Rwanda		0	N/A	N/A	N/A	240							
MT 2.4.2	# of premises inspected by MTaPS-supported NMRAs	Annually	0	N/A	N/A	3,751	N/A	N/A						N/A
	Nepal		0	N/A	N/A	3,751	N/A	N/A						N/A
MT 2.4.3	# of regional harmonization initiatives with participation by MTaPS-supported NMRAs	Annually	0	0	3	10	2							
	Asia Bureau		0	N/A	1	10	1							
	Cross Bureau		0	N/A	N/A	N/A	1							
	IGAD		0	N/A	2	N/A	N/A							
	Mozambique		0	0	0	N/A	N/A							
MT 2.4.4	# of countries that have conducted an assessment at any level of the regulatory system	Annually	2	1	2	1	1							
	Nepal		Yes	Yes	Yes	Yes	Yes	N/A						N/A
	Rwanda		Yes	N/A	Yes	No	No							
MT 2.4.5	# of medicines with current valid registration	Annually	0	N/A	N/A	60	482							
	Mali MNCH		0	N/A	N/A	60	N/A							
	Rwanda		0	N/A	N/A	N/A	482							
MT 3.3.1	*Has the country used PSS metrics to assess its pharmaceutical system?*	Annually	No	N/A	N/A	No	No							

	Cross Bureau		No	N/A	N/A	No	No		
NP 1	% of USG-assisted organizations with improved performance	Annually	0	0%	0%	0% (0/1)	100% (1/1)	N/A	N/A
NP 2	# of wholesalers inspected according to the new good distribution practice inspection guidelines	Annually	0	0	0	22	8	2	2
NP 3	# of public- and private-sector pharmacies inspected according to the new good pharmacy practice inspection guidelines	Annually	0	0	12	N/A	N/A	10	10
NP 4	# of innovations supported through USG assistance	Annually	0	0	2	4	5	2	2
NP 5	% of surveyed medicines labeled in compliance with labeling requirements	Annually	8.70%	N/A	8.70%	0%	60% (60/100)	N/A	N/A
NP 6	% of private-sector pharmacies surveyed dispensing prescription medicines without prescription	Annually	25%	N/A	25%	N/A	N/A	N/A	N/A
NP 8	# of monitoring visits in which the Government of Nepal (GON) participates	Annually	0	N/A	2	6	17	9	9
PP 1.5.1	# of TB and FP commodities for which a quantification process is completed with MTaPS support	Annually	0	0	0	6	14		
PP 1.5.2	# of TB and FP commodities procured by the DOH through FAs, pooled procurement, or other innovative procurement mechanisms with support from MTaPS	Annually	0	0	0	0	Data not yet available[12]		
PP 2.2.1	# of TB and FP products registered in	Annually	0	0	0	9	Data not yet available[12]	-	

[12] Indicator data are collected through government sources that were not available at the time of data collection.

	the Philippines with MTaPS support									
PP 3.2	# of synergized approaches for supply chain management, human resources for health, and engagements with the private sector and local government units	Annually	0	2	5	1	Data not yet available[12]			
PP 3.3	% of MTaPS-supported entities carrying out supply chain management functions without external TA	Annually	0	0	33% (4/12)	25% (2/8)	Data not yet available[12]			
MT 3.1.1	# and % of MTaPS-supported HFs that have newly implemented or improved PMIS to document-specific components of the pharmaceutical system for analysis and reporting with MTaPS support	Semiannually	90%	92% (4,303/ 4,690)	99% (2,006/2,016)	100% (20/20)	N/A	N/A		
	Bangladesh		90%	92% (4,293/ 4,680)	100% (2,006/2,006)	N/A	N/A	N/A		
	Rwanda Field Support		0%	100% (10/10)	0% (0/10)	N/A	N/A	N/A		
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	N/A		
MT 3.1.2	# and % of MTaPS-supported HFs using interoperable PMIS tools	Semiannually	61% (61/100)	88% (3,884/ 4,410)	85% (6,434/7,565)	72% (8,957/ 12,367)	70% (10,253/ 14,537)	N/A		
	Bangladesh[13]		61% (61/100)	88% (3,875/ 4,396)	77% (4,734/6,173)	72% (4,418/6,106)	70% (10,243/ 14,527)	Data not available		
	Mozambique		0%	64% (9/14)	85% (1,412/ 1,652)	64% (9/14)	100% (5/5)	N/A		
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	N/A		
MT 3.1.3	# of countries that have a functional early warning system linking clinical and stock data	Annually	0	0	2	1	1			
	Bangladesh		0	Yes	Yes	Yes	Yes			
	Mozambique		0	No	No	No	N/A			

[13] Bangladesh PY6Q1-Q2 indicator data are collected through government sources that were not available at the time of data collection.

MT 3.2.1	# and % of MTaPS-supported HFs that complete and submit an LMIS report on time for the most recent reporting period	Quarterly	54.11% (158/292)	92% (4,293/4,680)	76% (4,588/6,003)	72% (18,362/25,490)	76% (69,514/91,009)	N/A		91% (396/433)				
	Bangladesh		74.3% (84/115)	92% (4,293/4,680)	77% (4,488/5,826)	74% (4,830/6,500)	77% (5,002/6,501)	*Hospitals* *Other* ***Total***	N/A	*Hospitals* *Other* ***Total***	N/A	*Hospitals* *Other* ***Total***	*Hospitals* *Other* ***Total***	
	DRC MNCH[14]		42% (74/177)	Data not reported	56% (100/177)	74% (132/177)	78% (1,123/1,441)	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	N/A	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	0% (0/0) 92% (385/419) 79% (11/14) 0% (0/0) 91% (396/433)	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	
MT 3.3.2	# of PSS technical documents authored by MTaPS	Semiannually	0	14	39	56	48	27						
	Asia Bureau		0	N/A	N/A	0	2	N/A						
	Burkina Faso		0	N/A	N/A	N/A	N/A	0						
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0						
	Cross Bureau		10	13	10	11	16	2						
	CSL		0	N/A	1	10	1	3						
	DRC MNCH		0	N/A	N/A	N/A	N/A	2						
	Global MNCH		0	1	1	9	10	1						
	Indonesia		0	N/A	0	7	8	3						
	Jordan		0	N/A	N/A	2	7	0						
	Kenya		0	N/A	N/A	N/A	N/A	2						
	Mali GHSA		0	N/A	N/A	N/A	N/A	6						
	Mali MNCH		0	N/A	N/A	N/A	1	N/A						
	Mozambique		0	N/A	N/A	N/A	N/A	1						
	Philippines		0	N/A	N/A	N/A	N/A	5						
	Rwanda		0	N/A	27	17	3	0						
	Senegal		0	N/A	N/A	N/A	N/A	1						
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	1						
MT 3.3.3	# of activities to engage with stakeholders to advance the PSS global learning agenda	Quarterly	0	4	12	64	67	29		17				
	Asia Bureau		0	N/A	N/A	1	7	0		N/A				
	Cross Bureau		0	11	12	31	34	17		10				
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0		N/A				
	CSL		0	N/A	0	16	N/A	N/A		N/A				
	Global MNCH		0	N/A	N/A	N/A	N/A	N/A		N/A				
	Indonesia		0	N/A	0	16	23	4		N/A				

[14] DRC MNCH PY6 activities began in PY6Q2.

	Kenya		0	N/A	N/A	N/A	N/A	4	4			
	Mali		0	N/A	N/A	N/A	N/A	2	2			
	Mozambique		0	N/A	N/A	N/A	0	0	1			
	Tanzania		0	N/A	N/A	N/A	N/A	2	N/A			
PP 3.1	# of joint success stories produced	Annually	0	2	3	2	8					
PP 3.4	# of gender assessments, analyses, studies, or research activities conducted by MTaPS on PSCM and PV	Annually	0	0	1	1	1					
DRC 6	% of MTaPS-supported HFs that used data to inform medicine use, patient safety, quality of pharmaceutical services, and/or pharmacy benefits	Semiannually	0	N/A	100%	100% (50/50)	N/A	N/A				
MNCH 13	# of countries supported to implement decentralized procurement systems	Semiannually	0	N/A	N/A	N/A	N/A	N/A				
MNCH 15	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	0	N/A	0	N/A	N/A					
MT 4.1.2	# of new or revised medicine pricing policies developed with MTaPS' assistance	Annually	0	N/A	N/A	N/A	N/A					
	DRC Supply Chain		0	N/A	N/A	N/A	N/A					
	Indonesia		0	N/A	N/A	N/A	N/A					
MT 4.2.1	# of pharmacy benefits programs introduced or improved in health sector with MTaPS support	Annually	0	1	N/A	N/A	N/A					
	Bangladesh		0	1	N/A	N/A	N/A					
MT 4.2.2	Has the country established a national-level, multistakeholder platform for evidence-based pharmacy benefits program decision making (yes/no)?	Annually	0	N/A	0	N/A	N/A					
	Indonesia		0	N/A	0	N/A	N/A					

MT 4.2.3	# of strategic plans developed or updated to address pharmaceutical costs and financing with MTaPS support	Semiannually	0	2	0	2	3	N/A			
	Asia Bureau		0	N/A	N/A	N/A	0	N/A			
	Bangladesh		0	2	0	0	N/A	N/A			
	Indonesia		0	N/A	N/A	2	3	N/A			
MT 4.3.1	Has the country increased domestic funding budgeted for or spent on high-priority diseases or conditions (yes/no)?	Annually	0	N/A	No	Data not reported	Yes				
	Indonesia		0	N/A	No		Yes				
MT 4.3.2	Has the country reviewed public-sector pharmaceutical financing in the last fiscal year (yes/no)?	Annually	0	N/A	Yes	Yes	Yes				
	Indonesia		0	N/A	Yes	Yes	Yes				
MT 4.3.3	Does the country have a system(s) to track pharmaceutical expenditures (yes/no)?	Annually	0	N/A	N/A	No	Yes				
	Indonesia		0	N/A	N/A	No	Yes				
MT 4.3.4	Has the country reduced the value of product losses (due to expired medicines, damage, or theft) per value of commodities received (yes/no)?	Annually	0	N/A	0	N/A	N/A				
	Indonesia		0	N/A	0	N/A	N/A	N/A			
MT 4.4.1	*# of proposals or grants developed or submitted, with technical assistance from MTaPS, that were funded by a global initiative or donor*	Semiannually	0	N/A	N/A	N/A	N/A	N/A			
	Global MNCH		0	N/A	N/A	N/A	N/A	N/A			
PP 1.4.1	# of private-sector outlets providing FP or TB commodities through a referral and reimbursement scheme	Annually	0	N/A	5	0	N/A	N/A			
MT 5.1.1	% of SDPs with stockout of FP, TB, and HIV/AIDS tracer commodities	Quarterly	40.50%	45% (5,896/ 13,114)	31% (5,661/ 18,258)	37% (15,398/ 40,738)	26% (7,511/2,8717)	32.6% (5,763/17,679)	N/A		

	Philippines[15]		40.50%	45% (5,896/ 13,114)	31% (5,661/ 18,258)	37% (15,398/ 40,738)	26% (7,511/28,717)	32.6% (5,763/17,679)	N/A			
	First-line TB meds (4 fixed-dose combinations)		40.50%	52% (929/1,784)	21% (358/1,705)	23% (1,085/4,703)	17% (525/3,024)	27% (554/2,021)	N/A			
	TB pediatric meds (4 fixed-dose combinations)		90.60%	97% (506/519)	49% (694/1,418)	53% (1,966/3,706)	19% (896/4,683)	N/A	N/A			
	TB preventive treatment (for children)		63.80%	77% (582/753)	81% (967/1,189)	86% (1,663/1,940)	N/A	67% (406/600)	N/A			
	TB second-line drug (levofloxacin 500 mg)		0	64% (127/199)	10% (18/186)	3.5% (7/198)	17% (84/504)	19% (102/535)	N/A			
	TB second-line drug (moxifloxacin 400 mg)		0	50% (100/199)	7% (12/168)	N/A	N/A	N/A	N/A			
	TB second-line drug (linezolid 600 mg)		0	47% (95/199)	5% (9/184)	9% (17/198)	21% (105/504)	38% (203/535)	N/A			
	TB second-line drug (bedaquiline)		0	47% (95/199)	8% (14/183)	4.5% (9/198)	19% (95/504)	29% (155/535)	N/A			
	GeneXpert cartridges		0	3% (13/395)	14% (46/338)	30% (367/1,207)	69% (932/1,345)	36% (239/654)	N/A			
	FP injectable		30.20%	27% (466/1,703)	22% (500/2,237)	28% (1,420/5,017)	25% (813/3,299)	20% (443/2,199)	N/A			
	FP implant		52.70%	69% (796/1,150)	42% (784/1,879)	50% (2,022/4,208)	40% (916/2,285)	47% (859/1,836)	N/A			
	FP oral COC		25.60%	24% (418/1,716)	14% (318/2,273)	34% (1,734/5,062)	28% (941/3,319)	27% (617/2,292)	N/A			
	FP oral POP		69.30%	52% (715/1,374)	24% (540/2,229)	22% (1,101/5,053)	18% (607/3,313)	21% (470/2,195)	N/A			
	IUD		36.70%	37% (466/ 1,264)	41% (836/2,022)	43% (1,892/4,369)	39% (1,006/2,593)	62% (1,264/2,022)	N/A			
	Male condom		38.90%	36% (592/ 1,661)	25% (568/2,249)	20% (1,036/5,059)	18% (591/3,344)	20% (451/2,255)	N/A			
MT 5.1.1 (FP)	Stockout rates of tracer medicines in MTaPS-supported HFs (FP)	Semiannually	0%	N/A	N/A	.00116% (70/60,363)	0.36% (202/56,464)	Data not available				
	Bangladesh[16]							Data not available				
MT 5.1.1	Stockout rates of tracer medicines in MTaPS-supported HFs (MNCH)	Semiannually	0%	N/A	N/A	N/A	31% (29,836/ 97,060)	Data not available				
	Bangladesh[16]							Data not available				
MT 5.1.1 (TB)	Stockout rates of tracer medicines in MTaPS-supported HFs (TB)	Semiannually	78%%	N/A	N/A	N/A	10% (145/1,408)	Data not available				
	Bangladesh[16]							Data not available				

[15] PY6 Quarter 1 data were not reported in the Quarter 1 report due to delays in data sources. Data for Quarter 1 have now been collected and is included in this report.
[16] Bangladesh PY6Q1-Q2 indicator data are collected through government sources that were not available at the time of data collection.

MT 5.1.2	% of tracer products stocked according to plan	Semiannually	0%	N/A	28% (52/186)	28% (25/88)	46% (27/59)	100%(31/31)			
	Bangladesh		0%	N/A	0% (0/7)	50% (3/6)	N/A	N/A			
					92% (12/13)	50% (3/6)					
					14% (1/7)	0					
					0% (0/7)	0					
	DRC MNCH		0%	N/A	37% (14/38)	56% (11/19)	46% (27/59)	*Stocked according to plan*	0% (0/0)		
					42% (16/38)	26% (5/19)		*Overstocked*	100% (15/15)		
					18% (7/38)	16% (3/19)		*Understocked*	100% (9/9)		
					53% (2/38)	0% (0/19)		*Stocked out*	100% (7/7)		
MT 5.1.2 (FP)	% of tracer products stocked according to plan (FP)	Semiannually	0%	N/A	N/A	50% (12/14)	16% (2/12)	N/A			
	Bangladesh		0%	N/A	N/A	50% (12/14)		N/A			
MT 5.1.2 (TB)	% of tracer products stocked according to plan (TB)	Semiannually	0%	N/A	N/A	N/A	N/A	N/A			
	Bangladesh		0%	N/A	N/A	N/A	N/A	N/A			
MT 5.1.3	% of initially MTaPS-supported supply chain functions carried out by national entities that are done without external TA	Semiannually	0%	Data not reported	100% (3/3)	100% (3/3)	100%	N/A			
	Bangladesh		0%	Data not reported	100% (3/3)	100% (3/3)		N/A			
MT 5.2.1	% of MTaPS-supported HFs which have developed, adopted, or implemented pharmaceutical service standards	Semiannually	0%	0%	0% (0/100)	0%	N/A	N/A			
	Rwanda		0%	0%	0% (0/100)	0%	N/A	N/A			
MT 5.2.2	% of MTaPS-supported HFs promoting patient-centered pharmaceutical services	Semiannually	0%	N/A	N/A	100% (20/20)	N/A	N/A			
	Rwanda		0%	N/A	N/A	100% (20/20)	N/A	N/A			
MT 5.2.3	% of MTaPS-supported HFs implementing CQI approaches to improve medicine use	Semiannually	0%	N/A	N/A	100% (20/20)	100% (20/20)	N/A			
	Rwanda		0%	N/A	N/A	100% (20/20)	100% (02/20)	*Hospitals* *Health centers* *Pharmacies* *Other* *Total*	N/A		

MT 5.3.1	% of MTaPS-supported HFs that have implemented medicine safety activities	Quarterly	31% (31/100)	3% (3/110)	44% (46/105)	67% (414/615)	74% (252/340)	83% (75/90)		77% (50/65)					
	Bangladesh		31% (31/100)	3% (3/100)	56% (28/50)	58% (38/65)	77% (50/65)	*Pharmacies*	75% (49/65)	*Pharmacies*	77% (50/65)	*Pharmacies*	*Pharmacies*		
								Total	75% (49/65)	***Total***	77% (50/65)	***Total***	***Total***		
	Burkina Faso PV		0%	N/A	N/A	N/A	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	*Health centers*		
	IGAD		0%	Data not reported	24% (10/41)	6.5% (8/123)	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Pharmacies		*Pharmacies*		*Pharmacies*	*Pharmacies*		
								Total		***Total***		***Total***	***Total***		
	Mozambique		0%	N/A	100%	100% (14/14)	100% (5/5)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Total		***Total***		***Total***	***Total***		
	Rwanda[17]		0% (0/10)	0% (0/10)	50% (5/10)	N/A	100% (20/20)	*Hospitals*	100%(10/10)	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers	100% (10/10)	*Health centers*		*Health centers*	*Health centers*		
								Pharmacies	0% (0/0)	*Pharmacies*		*Pharmacies*	*Pharmacies*		
								Other	N/A	*Other*		*Other*	*Other*		
								Total	100% (20/20)	***Total***		***Total***	***Total***		
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Total		***Total***		***Total***	***Total***		
MT 5.3.2	% of ADEs reported to the NMRA and reviewed by the NMRA	Semiannually		22% (95/440)	53% (7,419/ 13,881)	16% (3,801/ 22,758)	43% (1,311/3,000)	2% (10/687)							
	Bangladesh		68% (68/100)	22%	77% (449/ 586)	90% (852/945)	80% (617/774)	N/A							
	Burkina Faso		0	N/A	N/A	N/A	N/A	N/A							
	IGAD		0% (0/0)	N/A	100% (1,104/1,104)	N/A	N/A	N/A							
	Mozambique		60%	N/A	56% (1,237/2,213)	12.19% (1,223/10,035)	N/A	N/A							
	Mozambique PEPFAR		0	0	23% (1,563/6,635)	12.19% (1,223/10,035)	N/A	N/A							
	Rwanda		0	73% (274/374)	55% (102/186)	29% (503/1,746)	31% (694/2,226)	2% (10/687)							
	Tanzania PEPFAR		0	N/A	2,641/	N/A	N/A	N/A							

[17] Rwanda PY6 field support activities are a continuation of the PY5 work plan.

NP-MT 5.3.2	# of ADEs reported in Nepal	Annually	194	29	43	6	27					
MT 5.3.4	# of medical product regulatory actions carried out by the NMRA for reasons of drug safety during the reporting period	Annually	0	N/A	N/A	15	Data source not yet available					
	Nepal		0	N/A	N/A	15	Data source not yet available					
MT 5.4.1	% of MTaPS-supported HFs that have documented evidence of improvement in antimicrobial medicine prescription and/or use	Annually	0	N/A	N/A	0% (0/3)	N/A	-				
	Jordan		0	N/A	N/A	0% (0/3)	N/A					
MT 5.4.2	% of MTaPS-supported HFs implementing locally identified and prioritized core elements of IPC activities	Semiannually	0%	100%	100% (7/7)	100% (7/7)	N/A	100% (81/81)				
	Jordan		0%	N/A	N/A	N/A	N/A	100% (81/81)				
	Mozambique		0%	100%	100% (7/7)	100% (7/7)	N/A	N/A				
MT 5.4.3	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	0	N/A	N/A	4	N/A	N/A	N/A			
	Jordan		0	N/A	N/A	4	N/A	N/A	N/A			
	Nepal		0	N/A	N/A	N/A	9	N/A				N/A
ML 1	# of marketing authorization commission meetings supported by MTaPS	Quarterly	0	0	0	1	N/A	N/A	N/A			
	Mali MNCH		0	0	0	1	N/A	N/A	N/A			
ML 2	# of quarterly meetings to orient key stakeholders on using directory of registered medical products	Quarterly	0	0	0	1	N/A	N/A	N/A			
	Mali MNCH		0	0	0	1	N/A	N/A	N/A			
EVD 1	# of policies, legislation, regulations, operational documents, or guidelines for EVD management	Quarterly	0	0	0	3	N/A	N/A	N/A			

	developed or updated with TA from MTaPS												
	Mali		0	0	0	0							
	Rwanda		0	0	0	1							
	Senegal		0	0	0	0							
	Uganda		0	0	0	2							
EVD 2	# of entities implementing EVD guidelines with MTaPS support	Quarterly	0	0	0	66	N/A	N/A		N/A			
	Côte d'Ivoire		0	0	0	N/A	N/A	*ETU* *Non-ETU* *POE* ***Total***	N/A	*ETU* *Non-ETU* *POE* ***Total***	N/A	*ETU* *Non-ETU* *POE* *Total*	*ETU* *Non-ETU* *POE* *Total*
	Mali		0	0	0	7		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***
	Rwanda		0	0	0	0		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***
	Senegal		0	0	0	0		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***
	Uganda		0	0	0	59		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***
EVD 3	# of persons who received EVD training with MTaPS support	Quarterly	0	0	0	924	N/A	N/A		N/A			
	Côte d'Ivoire		0	0	0	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***
	Mali		0	0	0	0		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***
	Rwanda		0	0	0	32		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***
	Senegal		0	0	0	0		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***

	Uganda		0	0	0	892		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***		*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***	
EVD 4	# of MTaPS-supported entities in compliance with EVD IPC guidelines	Quarterly	0	0	0	7		N/A		N/A				
	Côte d'Ivoire		0	0	0	N/A	N/A	*ETU* *Non-ETU* *POE* ***Total***	N/A	*ETU* *Non-ETU* *POE* ***Total***	N/A	*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***	
	Mali		0	0	0	7		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***	
	Rwanda		0	0	0	0		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***	
	Senegal		0	0	0	0		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***		*ETU* *Non-ETU* *POE* ***Total***	*ETU* *Non-ETU* *POE* ***Total***	
PP 2.3.1	% of sentinel facilities using PViMS	Quarterly	0	0	20%	70% (564/801)	100% (197/197)	N/A		N/A			-	
	Philippines		0	0	20%	70% (564/801)	100% (197/197)	N/A		N/A				
PH-P 1	# of products that complete HTA process with MTaPS support	Annually	0	N/A	N/A	1	N/A							
	Philippines													
PH- P 2	# of HIV/AIDS commodities that complete the quantification process with MTaPS support	Annually	0	N/A	N/A	9	Data not yet available[18]							
	Philippines													
JO 1	# of National Vaccine Procurement Modernization Committee meetings with MTaPS support	Quarterly	0	N/A	N/A	3	1	N/A		N/A				
	Jordan						1	N/A		N/A				
JO 2	# of HFs implementing AMR guidelines/protocols developed by MTaPS	Annually	0	N/A	N/A	N/A	3							

[18] Indicator data are collected through government sources that were not available at the time of data collection.

	Jordan		0									
JO 3	# of active hospital-level AMS teams	Annually	0	N/A	N/A	3	3					
	Jordan		0									
JO 4	# of awareness-raising activities on AMR and rational use of antibiotics conducted	Quarterly	0	N/A	N/A	4	30	N/A	N/A			
	Jordan		0	N/A	N/A	4	30	N/A	N/A			
JO 5	# of youth reached through AMR activities covering health education messages related to AMR with MTaPS support	Quarterly	0	N/A	N/A	0	2,700	N/A	N/A			
	Jordan		0	N/A	N/A	0		*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***
JO 6	# of awareness-raising activities to promote vaccine safety messages and reporting of ADRs conducted at the community level	Quarterly	0	N/A	N/A	0	N/A	N/A	N/A			
	Jordan		0	N/A	N/A	0	N/A	N/A	N/A			
JO 7	# of COVID-19 vaccine safety surveillance reports produced with MTaPS support	Quarterly	0	N/A	N/A	3	N/A	N/A	N/A			
	Jordan		0	N/A	N/A	3	N/A	N/A	N/A			
JO 8	# of IPC assessments conducted at HFs	Annually	0	N/A	N/A	N/A	N/A					
	Jordan			N/A	N/A	N/A						
MSC 1	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	0	122	170	188	144	45	21			
	Bangladesh		0	3	2	9	9	2	N/A			
	Burkina Faso		0	2	2	4	11	1	3			
	Cameroon		0	5	7	4	3	1	1			
	Côte d'Ivoire		0	35	67	76	29	11	7			
	DRC		0	6	20	8	8	3	0			
	Ethiopia		0	1	N/A	5	9	N/A	N/A			
	Jordan		0	0	2	N/A	N/A	N/A	N/A			
	Kenya		0	38	26	24	18	18	5			
	Mali		0	16	6	13	8	4	1			
	Mozambique		0	0	13	12	9	N/A	N/A			

	Nigeria		0	N/A	6	10	12	1	1			
	Senegal		0	2	5	8	14	1	1			
	Tanzania		0	4	2	8	6	3	2			
	Uganda		0	9	7	7	8	N/A	N/A			
MSC 2	# and % of female participants in meetings or other events organized by the multisectoral body on AMR	Semiannually		39% (842/2,135)	42% (346/825)	32% (779/2,458)	33% (990/2,972)	39% (731/1,873)				
	Bangladesh		29% (24/84)	29% (24/84)	29% (12/41)	20% (60/300)	24% (41/171)	N/A				
	Burkina Faso		18% (3/17)	22% (6/27)	33% (10/10)	29% (5/17)	33% (56/171)	37% (176/480)				
	Cameroon		50% (2/4)	39% (39/101)	52% (32/62)	27% (38/138)	49% (40/81)	30% (5/17)				
	Côte d'Ivoire		38% (21/55)	38% (42/110)	43% (70/163)	39% (151/382)	37% (145/392)	30% (79/260)				
	DRC		34%	36% (76/212)	32% (30/93)	35% (54/154)	39% (41/105)	36% (21/59)				
	Ethiopia		22%	17% (16/93)	N/A	22% (71/321)	14% (70/490)	N/A				
	Jordan		45% (5/11)	Data not reported	45% (5/11)	N/A	N/A	N/A				
	Kenya		66%	44% (562/1270)	51% (105/207)	45% (101/226)	45% (205/453)	49% (375/771)				
	Mali		15%	16% (20/124)	20% (22/109)	21% (82/394)	26% (103/392)	25% (62/247)				
	Mozambique		48% (11/23)	N/A	40% (4/10)	40% (36/92)	48% (93/195)	N/A				
	Nigeria		Data not reported	N/A	41% (17/41)	46% (44/95)	45% (25/56)	N/A				
	Senegal		58% (54/93)	58% (54/93)	34% (11/32)	39% (70/181)	38% (127/332)	N/A				
	Tanzania		14% (3/21)	14% (3/21)	0% (0/0)	22% (14/63)	28% (12/42)	33% (13/39)				
	Uganda		Data not reported	N/A	61% (28/46)	43% (44/102)	35% (32/92)	N/A				
MSC 3	# of policies, legislation, regulations, and operational documents related to NAP-AMR implementation developed or updated with MTaPS support	Annually	0	17	13	12	19					
	Bangladesh		0	0	2	1	N/A					
	Burkina Faso		0	0	1	1	0					
	Cameroon		0	1	1	0	1					
	Côte d'Ivoire		0	0	0	1	N/A					

	DRC		0	3	0	0	N/A							
	Kenya		0	3	3	1	3							
	Mali		0	8	N/A	1	1							
	Mozambique		0	N/A	2	N/A	3							
	Nigeria		0	N/A	0	1	1							
	Senegal		0	1	2	3	4							
	Tanzania		0	1	2	1	3							
	Uganda		0	0	0	2	1							
MSC 4	# of multisectoral bodies that have developed a national monitoring framework with MTaPS support	Annually	0	1	1	8	3							
	Bangladesh		0	0	0	N/A	N/A							
	Burkina Faso		0	0	0	0	N/A							
	Cameroon		0	0	0	1	1							
	Côte d'Ivoire		0	0	0	1	N/A							
	DRC		0	0	0	1	N/A							
	Kenya		0	1	1	1	1							
	Mali		0	0	N/A	N/A	N/A							
	Mozambique		0	0	0	0	N/A							
	Nigeria		0	N/A	0	1	0							
	Senegal		0	0	1	2	1							
	Tanzania		0	0	0	1	N/A							
	Uganda		0	0	0	0	N/A							
MSC 5	# of persons trained in AMR-related topics in leadership/management related to multisectoral engagement in AMR with MTaPS support	Quarterly	0	164	655	237	240	0		22				
	Bangladesh		0	0	0	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***	
	Burkina Faso		0	0	80	0	0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***	
	Cameroon		0	0	20	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***	
	Côte d'Ivoire		0	134	0	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***	
	DRC		0	0	463	0	N/A	*Female* *Male*	N/A	*Female* *Male*	N/A	*Female* *Male*	*Female* *Male*	

								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Ethiopia		0	150	N/A	22	144	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Kenya		0	N/A	N/A	22	0	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Mali		0	30	2	0	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Mozambique		0	0	45	67	67	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Nigeria		0	N/A	0	25	29	*Female*	N/A	*Female*	8	*Female*	*Female*	
								Male		*Male*	14	*Male*	*Male*	
								Unknown		*Unknown*	0	*Unknown*	*Unknown*	
								Total		***Total***	22	***Total***	***Total***	
	Senegal		0	0	0	0	N/A	*Female*	0	*Female*	0	*Female*	*Female*	
								Male	0	*Male*	0	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	**0**	***Total***	**0**	***Total***	***Total***	
	Tanzania		0	0	0	N/A	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Uganda		0	0	45	101	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*	
								Male		*Male*		*Male*	*Male*	
								Unknown		***Unknown***		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
MSC 6	# of e-Learning courses or m-mentoring platforms related to AMR developed or adapted with MTaPS support	Annually	0	2	25	26	50							
	Bangladesh		0	0	0	0	1							
	Burkina Faso		0	0	1	0	N/A							
	Cameroon		0	0	20	20	46							
	Côte d'Ivoire		0	1	2	6	1							
	DRC		0	0	0	N/A	N/A							
	Ethiopia		0	N/A	N/A	N/A	2							
	Kenya		0	0	0	0	N/A							
	Mali		0	1	2	N/A	N/A							
	Mozambique		0	N/A	0	N/A	N/A							

	Nigeria		0	N/A	0	N/A	N/A						
	Senegal		0	0	0	0	N/A						
	Tanzania		0	0	0	N/A	N/A						
	Uganda		0	0	0	0	N/A						
MSC 7	# of data collection and analysis mechanisms for tracking AMR-related indicators developed or strengthened with MTaPS support	Annually	0	0	2	5	5						
	Bangladesh		0	0	0	N/A	N/A						
	Burkina Faso		0	0	0	0	N/A						
	Cameroon		0	0	0	1	1						
	Côte d'Ivoire		0	0	0	0	N/A						
	DRC		0	0	1	0	N/A						
	Kenya		0	0	0	1	1						
	Mozambique		0	N/A	1	2	1						
	Nigeria		0	N/A	0	0	N/A						
	Senegal		0	0	0	0	2						
	Tanzania		0	0	0	1	N/A						
	Uganda		0	0	0	0	N/A						
IP 1	# of updated policies, pieces of legislation, regulations, or operational documents for improving IPC	Annually	0	9	3	7	13						
	Bangladesh		0	0	0	N/A	5						
	Burkina Faso		0	0	0	N/A	N/A						
	Cameroon		0	0	1	1	N/A						
	Côte d'Ivoire		0	7	0	0	N/A						
	DRC		0	0	0	N/A	N/A						
	Kenya		0	0	3	2	3						
	Mali		0	1	N/A	1	N/A						
	Mozambique		0	N/A	1	N/A	N/A						
	Nigeria		0	N/A	1	1	2						
	Senegal		0	0	0	1	3						
	Tanzania		0	1	0	1	N/A						
	Uganda		0	0	0	1	N/A						
IP 2	# of persons trained in IPC with MTaPS support	Quarterly	0	1,199	7,477	3,886	3,717	252		581			
	Bangladesh		0	0	95	264	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***
	Cameroon		0	86	88	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	*Female* *Male* *Unknown* ***Total***

	Côte d'Ivoire		0	0	131	158	N/A	*Female*	18	*Female*	5	*Female*	*Female*	
								Male	88	*Male*	10	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	106	***Total***	15	***Total***	***Total***	
	DRC		0	0	94	N/A	N/A	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Ethiopia[19]		0	0	N/A	28	394	*Female*	13	*Female*		*Female*	*Female*	
								Male	12	*Male*	N/A	*Male*	*Male*	
								Unknown	0	*Unknown*		*Unknown*	*Unknown*	
								Total	25	***Total***		***Total***	***Total***	
	Kenya		0	642	5,230	742	926	*Female*		*Female*	198	*Female*	*Female*	
								Male	N/A	*Male*	97	*Male*	*Male*	
								Unknown		*Unknown*	0	*Unknown*	*Unknown*	
								Total		***Total***	295	***Total***	***Total***	
	Mali		0	N/A	21	29	39	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Mozambique		0	0	0	57	73	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Nigeria		0	N/A	15	51	1,478	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
	Senegal		0	0	22	717	397	*Female*	11	*Female*	150	*Female*	*Female*	
								Male	10	*Male*	121	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	21	***Total***	271	***Total***	***Total***	
	Tanzania		0	471	17	117	108	*Female*	46	*Female*	0	*Female*	*Female*	
								Male	54	*Male*	0	*Male*	*Male*	
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*	
								Total	100	***Total***	0	***Total***	***Total***	
	Uganda		0	0	1,247	1,770	302	*Female*		*Female*		*Female*	*Female*	
								Male	N/A	*Male*	N/A	*Male*	*Male*	
								Unknown		*Unknown*		*Unknown*	*Unknown*	
								Total		***Total***		***Total***	***Total***	
IP 3	# and % of MTaPS-supported facilities that are using a standardized tool(s) for monitoring IPC and informing	Quarterly	50% (8/16)	100% (9/9)	94% (107/114)	100% (141/141)	98% (137/140)	100%(87/87)		92%(83/90)				

[19] Ethiopia PY6Q1 trainings are continued activities from the PY5 workplan. Ethiopia implementation concluded in November 2023.

	programmatic improvement												
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	100% (4/4)	100% (9/9)	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Cameroon		0% (0/0)	0% (0/0)	100% (12/12)	100% (12/12)	100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	100% (12/12) 0% (0/0) 0% (0/0) 100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	100% (13/13) 0% (0/0) 0% (0/0) 100% (13/13)	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Côte d'Ivoire		0% (0/0)	0% (0/0)	100% (12/12)	100% (22/22)	100% (20/20)	*Hospital* *Animal health centers* *Others* ***Total***	100% (12/12) 0% (0/0) 100% (8/8) 100% (20/20)	*Hospital* *Animal health centers* *Others* ***Total***	100% (12/12) 0% (0/0) 100% (8/8) 100% (20/20)	*Hospital* *Animal health centers* *Others* ***Total***	*Hospital* *Animal health centers* *Others* ***Total***	
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	100%(12/12) 0% (0/0) 0% (0/0) 100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	58%(7/12) 0% (0/0) 0% (0/0) 58% (7/12)	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Ethiopia		0% (0/0)	50% (15/30)	N/A	100% (5/5)	100% (8/8)	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Kenya		0% (0/0)	0% (0/0)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals* *Health centers* *Others* ***Total***	100% (4/4) 0% (0/0) 0% (0/0) 100% (4/4)	*Hospitals* *Health centers* *Others* ***Total***	67% (4/6) 0% (0/0) 0% (0/0) 67% (4/6)	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Mali		0% (0/0)	0% (0/0)	100% (16/16)	100% (16/16)	100% (16/16)	*Hospital* *Health centers* *Others*	100% (9/9) 100% (7/7) 0% (0/0)	*Hospital* *Health centers* *Others*	100% (9/9) 100% (7/7) 0% (0/0)	*Hospital* *Health centers* *Others*	*Hospital* *Health centers* *Others*	

								Total	100% (16/16)	***Total***	100% (16/16)	***Total***	***Total***	
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (7/7)	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	*Hospital*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
	Nigeria		0% (0/0)	N/A	0% (0/0)	100% (7/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	*Hospitals*	
								Health centers	0%(0/0)	*Health centers*	0%(0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	***Total***	
	Senegal		100% (3/3)	100% (3/3)	100% (8/8)	100% (13/13)	77% (10/13)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (6/6)	***Total***	100% (6/6)	***Total***	***Total***	
	Tanzania		33% (2/6)	100% (6/6)	100% (10/10)	100% (10/10)	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	***Total***	
	Uganda		0% (0/0)	0% (0/0)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
IP 4	# of countries with improved performance in core IPC components at the national level from baseline to follow-up	Annually	0%	40%	73%	83%	100%							
			(0/12)	(4/10)	(8/11)	(10/12)	(11/11)							
	Bangladesh		No	No	No	No	Yes							
	Cameroon		No	No	Yes	Yes	Yes							
	Cote d'Ivoire		No	Yes	Yes	Yes	N/A							
	DRC		No	No	No	Yes	Yes							
	Ethiopia		No	Yes	N/A	Yes	Yes							
	Kenya		No	Yes	Yes	Yes	Yes							

	Mali		No	No	Yes	Yes	Yes							
	Mozambique		No	N/A	Yes	Yes	Yes							
	Nigeria		No	N/A	Yes	No	Yes							
	Senegal		No	Yes	Yes	Yes	Yes							
	Tanzania		No	No	Yes	Yes	Yes							
	Uganda		No	No	No	Yes	Yes							
IP 5	# and % of MTaPS-supported facilities implementing CQI to improve IPC	Quarterly	40% (23/57)	83% (39/47)	99% (106/107)	88% (125/141)	42% (134/315)	98% (74/75)		97% (76/78)				
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	50% (2/4)	100% (9/9)	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Cameroon		0% (0/6)	100% (6/6)	100% (12/12)	100% (12/12)	100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	100%(12/12) 0% (0/0) 0% (0/0) 100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	100%(13/13) 0% (0/0) 0% (0/0) 100% (13/13)	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Côte d'Ivoire		50% (2/4)	100% (4/4)	100% (12/12)	92% (20/22)	100% (20/20)	*Hospitals* *Animal health centers* *Others* ***Total***	100% (12/12) 0% (0/0) 100% (8/8) 100% (20/20)	*Hospitals* *Animal health centers* *Others* ***Total***	100% (12/12) 0% (0/0) 100% (8/8) 100% (20/20)	*Hospitals* *Animal health centers* *Others* ***Total***	*Hospitals* *Animal health centers* *Others* ***Total***	
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Ethiopia		0% (0/0)	70%	N/A	0% (0/5)	100% (8/8)	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	*Hospitals* *Health centers* *Others* ***Total***	
	Kenya		100% (16/16)	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals* *Health centers* *Others*	100% (4/4) 0% (0/0) 0% (0/0)	*Hospitals* *Health centers* *Others*	67% (4/6) 0% (0/0) 0% (0/0)	*Hospitals* *Health centers* *Others*	*Hospitals* *Health centers* *Others*	

								Total	100% (4/4)	***Total***	67% (4/6)	***Total***	***Total***	
	Mali		0% (0/5)	0% (0/5)	94% (15/16)	100% (16/16)	100% (16/16)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*	*Hospital*	
								Health centers	86%(6/7)	*Health centers*	100%(7/7)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	94% (15/16)	***Total***	100% (16/16)	***Total***	***Total***	
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (6/6)	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	*Hospital*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
	Nigeria		0% (0/3)	N/A	0% (0/0)	14% (1/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	***Total***	
	Senegal		0% (0/3)	0% (0/3)	100% (8/8)	92% (12/13)	54% (7/13)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (6/6)	***Total***	100% (6/6)	***Total***	***Total***	
	Tanzania		33% (2/6)	100% (6/6)	100% (10/10)	100% (10/10)	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	***Total***	
	Uganda		0% (0/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
IP 6	# and % of MTaPS-supported facilities with functional IPC committees	Quarterly	35% (18/51)	87% (41/47)	94% (104/110)	98% (139/141)	98% (137/140)	98% (86/87)		97% (88/90)				
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	100% (6/6)	100% (9/9)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*	

								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Cameroon		0% (0/0)	83% (5/6)	100% (12/12)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (13/13)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	100% (12/12)	***Total***	100% (13/13)	***Total***	***Total***		
	Côte d'Ivoire		100% (4/4)	100% (4/4)	100% (12/12)	100% (22/22)	100% (20/20)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	*Hospitals*		
								Animal health centers	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	*Animal health centers*		
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	*Others*		
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	***Total***		
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0%(0/0)	*Others*	0%(0/0)	*Others*	*Others*		
								Total	100% (12/12)	***Total***	100% (12/12)	***Total***	***Total***		
	Ethiopia		0% (0/0)	100%	N/A	100% (5/5)	100% (8/8)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Kenya		0% (0/16)	100% (16/16)	92% (18/20)	100% (20/20)	100% (20/20)	*Hospitals*	100% (4/4)	*Hospitals*	67% (4/6)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	100% (4/4)	***Total***	67% (4/6)	***Total***	***Total***		
	Mali		0% (0/5)	0% (0/5)	75% (12/16)	100% (16/16)	100% (16/16)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*	*Hospital*		
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		

								Total	94% (15/16)	***Total***	100% (16/16)	***Total***	***Total***	
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (6/6)	*Hospitals*	N/A	*Hospital*	N/A	*Hospital*	*Hospital*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
	Nigeria		0% (0/3)	N/A	0% (0/3)	86% (6/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100%(7/7)	***Total***	100%(7/7)	***Total***	***Total***	
	Senegal		100% (3/3)	100% (3/3)	100% (8/8)	92% (12/13)	77% (10/13)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (6/6)	***Total***	100% (6/6)	***Total***	***Total***	
	Tanzania		17% (1/6)	100% (6/6)	100% (10/10)	100% (10/10)	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	***Total***	
	Uganda		100% (7/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
IP 7	# and % of MTaPS-supported facilities with improved HH compliance	Annually	0	100% (36/36)	85% (88/104)	73% (103/141)	82% (112/137)							
	Bangladesh		0	N/A	100% (2/2)	100% (4/4)	22% (2/9)	*Hospitals*						
								Total						
	Cameroon		0	N/A	100% (12/12)	92% (11/12)	42% (5/12)	*Hospitals*						
								Total						
	Côte d'Ivoire		0	100% (4/4)	90% (9/12)	45% (10/22)	90% (18/20)	*Hospitals*						
								Others						
								Total						
	DRC		0	N/A	57% (4/7)	100% (12/12)	100% (12/12)	*Hospitals*						
								Total						

	Ethiopia		0	N/A	N/A	0% (0/5)	62% (5/8)	*Hospitals*		
								Total		
	Kenya		0	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*		
								Health centers		
								Total		
	Mali		0	N/A	94% (15/16)	75% (12/16)	86% (14/16)	*Hospital*		
								Health centers		
								Total		
	Mozambique		0	N/A	0% (0/7)	43% (3/7)	100% (3/3)	*Hospitals*		
								Total		
	Nigeria		0	N/A	0% (1/3)	14% (1/7)	100% (7/7)	*Hospitals*		
								Total		
	Senegal		0	100% (3/3)	100% (8/8)	54% (7/13)	83% (10/13)	*Hospitals*		
								Health Centers		
								Total		
	Tanzania		0	100% (6/6)	100% (10/10)	100% (10/10)	100% (10/10)	*Hospitals*		
								Total		
	Uganda		0	100% (7/7)	100% (7/7)	100% (13/13)	86% (6/7)	*Hospitals*		
								Total		
IP 8	# and % of MTaPS-supported facilities with improved performance in core IPC components	Annually	0	35% (26/73)	75% (78/104)	80% (113/141)	89% (122/137)			
	Bangladesh		0	50% (1/2)	100% (2/2)	100% (4/4)	100% (9/9)	*Hospitals*		
								Total		
	Cameroon		0	N/A	100% (12/12)	92% (11/12)	92% (11/12)	*Hospitals*		
								Total		
	Côte d'Ivoire		0	N/A	80% (8/12)	41% (9/22)	90% (18/20)	*Hospitals*		
								Others		
								Total		
	DRC		0	N/A	0% (0/7)	100% (12/12)	100% (12/12)	*Hospitals*		
								Total		
	Kenya		0	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*		
								Health centers		
								Total		
	Mali		0	N/A	94% (15/16)	81% (13/16)	87% (14/16)	*Hospital*		
								Health centers		
								Total		
	Mozambique		0	N/A	100% (7/7)	100% (7/7)	100% (3/3)	*Hospitals*		
								Total		
	Nigeria		0	N/A	0% (0/3)	14% (1/7)	100% (7/7)	*Hospitals*		
								Total		
	Senegal		0	100% (3/3)	100% (8/8)	100% (13/13)	54% (7/13)	*Hospitals*		

								Health centers										
								Total										
	Tanzania		0	100% (6/6)	60% (6/10)	100% (10/10)	100% (10/10)	*Hospitals*										
								Total										
	Uganda		0	N/A	0% (0/7)	100% (13/13)	86% (6/7)	*Hospitals*										
								Total										
AS 1	# of policies, pieces of legislation, regulations, or operational documents related to AMS developed or updated with MTaPS support	Annually	0	5	12	18	20											
	Bangladesh		0	0	0	1	N/A											
	Burkina Faso		0	0	2	2	N/A											
	Cameroon		0	0	0	0	1											
	Côte d'Ivoire		0	1	0	0	N/A											
	DRC		0	1	3	1	N/A											
	Ethiopia		0	N/A	N/A	2	2											
	Kenya		0	1	3	3	5											
	Mali		0	1	N/A	1	N/A											
	Mozambique		0	N/A	1	3	6											
	Nigeria		0	N/A	0	1	1											
	Senegal		0	0	1	1	1											
	Tanzania		0	1	2	1	3											
	Uganda		0	0	0	2	1											
AS 2	# and % of MTaPS-supported facilities' MTC/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework	Quarterly	10% (4/39)	81% (25/31)	60% (74/123)	72% (112/155)	86% (131/153)	84%(72/85)		94%(82/87)								
	Bangladesh		0% (0/0)	0% (0/0)	0% (0/2)	50% (2/4)	100% (9/9)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		*Hospitals*				
								Health centers		*Health centers*		*Health centers*		*Health centers*				
								Others		*Others*		*Others*		*Others*				
								Total		***Total***		***Total***		***Total***				
	Burkina Faso		0% (0/0)	0% (0/0)	25% (3/12)	0% (0/10)	60% (6/10)	*Hospitals*	30% (3/10)	*Hospitals*	100% (10/10)	*Hospitals*		*Hospitals*				
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		*Health centers*				
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*		*Others*				
								Total	30% (3/10)	***Total***	100% (10/10)	***Total***		***Total***				
	Cameroon		0% (0/0)	0% (0/0)	92% (11/12)	100% (12/12)	100% (11/11)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		*Hospitals*				

								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Côte d'Ivoire		0% (0/0)	0% (0/0)	75% (9/12)	91% (20/22)	85% (17/20)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	*Hospitals*		
								Health centers	0%(0/0)	*Health centers*	0%(0/0)	*Health centers*	*Health centers*		
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	*Others*		
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	***Total***		
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	100% (12/12)	***Total***	100% (12/12)	***Total***	***Total***		
	Ethiopia		0% (0/0)	N/A	N/A	0% (0/5)	100% (8/8)	*Hospitals*		*Hospitals*		*Hospitals*	*Hospitals*		
								Health centers	N/A	*Health centers*	N/A	*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Kenya		6% (1/16)	100% (18/18)	83% (20/24)	100% (21/21)	92% (22/24)	*Hospitals*	100% (6/6)	*Hospitals*	75% (6/8)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Pharmacy	0% (0/0)	*Others*	0% (0/0)	*Pharmacy*	*Pharmacy*		
								Total	100% (6/6)	***Total***	75% (6/8)	***Total***	***Total***		
	Mali		0% (0/0)	0% (0/0)	56% (9/16)	75% (12/16)	100% (16/16)	*Hospital*	89% (8/9)	*Hospitals*	100% (9/9)	*Hospital*	*Hospital*		
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	87% (14/16)	***Total***	100% (16/16)	***Total***	***Total***		
	Mozambique		0% (0/7)	Data not reported	0% (0/7)	43% (3/7)	100% (6/6)	*Hospitals*		*Hospitals*		*Hospitals*	*Hospitals*		
								Health centers	N/A	*Health centers*	N/A	*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Nigeria		0% (0/3)	N/A	0% (0/0)	100% (7/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	*Hospitals*		

								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	***Total***		
	Senegal[20]		0% (0/0)	0% (0/0)	0% (0/8)	0% (0/14)	0% (0/13)	*Hospitals*	0% (0/4)	*Hospitals*	25% (1/4)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	0% (0/4)	***Total***	25% (1/4)	***Total***	***Total***		
	Tanzania		0% (0/6)	0% (0/6)	20% (2/10)	100% (10/10)	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	***Total***		
	Uganda		43% (3/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
AS 3	# of persons trained in AMS topics with MTaPS support	Quarterly	0	436	4721	4,051	2,638	962		64					
	Bangladesh		0	0	0	420	260	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Burkina Faso		0	0	97	86		*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Cameroon		0	0	222	17	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Côte d'Ivoire		0	0	237	104	36	*Female*	7	*Female*	1	*Female*	*Female*		
								Male	55	*Male*	11	*Male*	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*		
								Total	62	***Total***	12	***Total***	***Total***		
	DRC		0	0	274	91	N/A	*Female*	0	*Female*	0	*Female*	*Female*		

[20] Senegal PY6 AMS activities are a continuation of the PY5 work plan.

								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Ethiopia		0	0	N/A	180	490	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Kenya		0	165	1,333	869	895	*Female*	325	*Female*	15	*Female*	*Female*		
								Male	436	*Male*	11	*Male*	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*		
								Total	761	***Total***	26	***Total***	***Total***		
	Mali		0	0	136	49	6	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Mozambique		0	0	0	34	72	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Nigeria		0	N/A	18	108	50	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
	Senegal[20]		0	0	0	0	61	*Female*	8	*Female*	15	*Female*	*Female*		
								Male	15	*Male*	11	*Male*	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*		
								Total	23	***Total***	26	***Total***	***Total***		
	Tanzania		0	201	0	N/A	24	*Female*	53	*Female*	0	*Female*	*Female*		
								Male	63	*Male*	0	*Male*	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	*Unknown*		
								Total	116	***Total***	0	***Total***	***Total***		
	Uganda		0	70	2,513	1,776	N/A	*Female*	N/A	*Female*	N/A	*Female*	*Female*		
								Male		*Male*		*Male*	*Male*		
								Unknown		*Unknown*		*Unknown*	*Unknown*		
								Total		***Total***		***Total***	***Total***		
AS 4	# and % of MTaPS-supported facilities implementing CQI to improve AMS	Quarterly	49% (24/49)	75% (41/55)	57% (71/124)	68% (106/155)	87% (137/154)	87% (74/85)		89% (78/87)					
	Bangladesh		0% (0/0)	0% (0/0)	0% (0/2)	50% (2/4)	100% (9/9)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		

								Total		***Total***		***Total***	***Total***		
	Burkina Faso		0% (0/0)	100% (5/5)	25% (3/12)	0% (0/10)	100% (10/10)	*Hospitals*	30% (3/10)	*Hospitals*	100% (10/10)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	30% (3/10)	***Total***	100% (10/10)	***Total***	***Total***		
	Cameroon		0% (0/0)	0% (0/6)	92% (11/12)	100% (12/12)	100% (12/12)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Côte d'Ivoire		0% (0/0)	100% (2/2)	90% (9/10)	91% (20/22)	85% (17/20)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	*Others*		
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	***Total***		
	DRC		0% (0/0)	100% (3/3)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	50% (6/12)	*Hospitals*	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		
								Total	100% (12/12)	***Total***	50% (6/12)	***Total***	***Total***		
	Ethiopia		3% (1/30)	13% (4/30)	N/A	0% (0/5)	100% (8/8)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*		
								Health centers		*Health centers*		*Health centers*	*Health centers*		
								Others		*Others*		*Others*	*Others*		
								Total		***Total***		***Total***	***Total***		
	Kenya		100% (18/18)	100% (18/18)	92% (22/24)	91% (21/23)	92% (22/24)	*Hospitals*	100% (6/6)	*Hospitals*	75% (6/8)	*Hospitals*	*Hospitals*		
								Health centers	0%(0/0)	*Health centers*	0%(0/0)	*Health centers*	*Health centers*		
								Pharmacy	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*	*Pharmacy*		
								Total	100% (6/6)	***Total***	75% (6/8)	***Total***	***Total***		
	Mali		0% (0/5)	0% (0/5)	13% (2/16)	75% (12/16)	100% (16/16)	*Hospital*	89% (8/9)	*Hospitals*	100% (9/9)	*Hospital*	*Hospital*		
								Health centers	85% (6/7)	*Health centers*	100% (7/7)	*Health centers*	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*		

								Total	87% (14/16)	***Total***	100% (16/16)	***Total***	***Total***	
	Mozambique		0% (0/7)	Data not reported	57% (4/7)	100% (7/7)	100% (6/6)	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	*Hospital*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
	Nigeria		0% (0/3)	N/A	0% (0/3)	14% (1/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	***Total***	
	Senegal[20]		0% (0/3)	0% (0/3)	0% (0/8)	0% (0/14)	8% (1/13)	*Hospitals*	50% (2/4)	*Hospitals*	75% (3/4)	*Hospitals*	*Hospitals*	
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	50% (2/4)	***Total***	75% (3/4)	***Total***	***Total***	
	Tanzania		0% (0/6)	100% (6/6)	20% (2/10)	60% (6/10)	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	*Hospitals*	
								Health centers	0%(0/0)	*Health centers*	0%(0/0)	*Health centers*	*Health centers*	
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	*Others*	
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	***Total***	
	Uganda		86% (6/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	*Hospitals*	
								Health centers		*Health centers*		*Health centers*	*Health centers*	
								Others		*Others*		*Others*	*Others*	
								Total		***Total***		***Total***	***Total***	
AS 5	#/% of MTaPS-supported facilities that have documented evidence of improvement in antimicrobial medicine prescribing or use	Annually		49% (27/55)	29% (35/120)	36% (57/155)	65% (88/135)							
	Bangladesh		0%	N/A	0% (0/2)	50% (2/4)	0% (0/9)	*Hospitals*						
								Total						
	Burkina Faso		0%	0% (0/5)	0% (0/12)	0% (0/10)	0% (0/10)	*Hospitals*						
								Total						
	Cameroon		0%	N/A	0% (0/12)	92% (11/12)	92% (11/12)	*Hospitals*						
								Total						

	Côte d'Ivoire		0%	0% (0/2)	0% (0/12)	14% (3/22)	75% (15/20)	*Hospitals*		
								Health centers		
								Total		
	DRC		0%	100% (3/3)	0% (0/7)	58% (7/12)	100% (12/12)	*Hospitals*		
								Total		
	Kenya		0%	100% (18/18)	92% (22/24)	91% (21/23)	92% (22/24)	*Hospitals*		
								Health centers		
								Pharmacies		
								Total		
	Mali		0%	N/A	13% (2/16)	0% (0/16)	N/A	*Hospital*		
								Health centers	-	
								Total		
	Mozambique		0%	N/A	71% (5/7)	28% (2/7)	100% (3/3)	*Hospitals*		
								Total		
	Nigeria		0%	N/A	0% (0/3)	0% (0/7)	57% (4/7)	*Hospitals*		
								Total		
	Senegal		0%	N/A	0% (0/8)	0% (14/14)	0% (0/13)	*Hospitals*		
								Total		
	Tanzania		0%	100% (6/6)	60% (6/10)	70% (7/10)	100% (10/10)	*Hospitals*		
								Total		
	Uganda		0%	0% (0/7)	0% (0/7)	31% (4/13)	86% (6/7)	*Hospitals*		
								Total		
DRC 1	# of quality-assured MNCH, RH/FP, and TB medicine products registered with MTaPS support	Semiannually	0	0	29	26	N/A	N/A		
DRC 2	# of community-based organization (CBO) members that have been capacitated to participate in oversight of pharmaceutical management for MNCH commodities with MTaPS support	Annually	0	0	350	344	323			
DRC 3	# of HFs that are implementing the post-training action plan	Annually	0	0	0	50	22			
DRC 4	% of facilities implementing appropriate storage of oxytocin	Quarterly	0	N/A	64% (46/72)	75% (54/72)	83% (60/72)	N/A	N/A	
DRC 5	# of Provincial Health Divisions and/or Provincial Health Inspectorates using the updated directory of registered medicines	Semiannually	0	0	7	4	8	4		

DRC 8	# of HZs involved in provincial quantification exercises with MTaPS support	Semiannually	0	0	19	10	N/A	N/A			
DRC 9	# of MNCH treatment protocols or job aids disseminated to HFs with MTaPS support	Semiannually	0	0	0	0	N/A	N/A			
DRC 10	# of contraceptive kits (reduced FP package) distributed to CCSs in MTaPS-supported HZs	Semiannually	0	0	0	0	0	N/A			
DRC 11	% of CCSs reporting contraceptive data to HFs in MTaPS-supported HZs	Semiannually	0%	0	0% (0/12)	0%	100% (152/152)	100% (151/151)			
DRC 12	# of mini awareness-raising campaigns for active detection of TB and adherence to TB treatment supported by MTaPS	Semiannually	0	0	0	2	N/A	N/A			
DRC 13	# of sensitization meetings to explain the role and scope of National Supply Chain Management Professionals Association	Annually	0	N/A	N/A	N/A	N/A				
DRC 14	# of people starting e-Learning courses with MTaPS support	Quarterly	0	N/A	N/A	N/A	N/A	N/A	0		
DRC 15	Number of health products for which a quantification process is completed with MTaPS support	Semiannually	0	N/A	N/A	N/A	N/A	0			
DRC 16	# of medicines TWG meetings organized without financial/logistical MTaPS support	Quarterly	0	N/A	N/A	N/A	N/A	N/A	5		
BG 1	% of procurement packages of DGFP and DGHS that are on schedule	Annually	0	0	82%	50%	50% (1/2)				
BG 4	% of target HFs that keep complete TB patient information (as per national standards)	Annually	0	N/A	44%	71% (64/90)	66% (58/88)				

BG 8	# of laws, policies, regulations, action plans, or standards formally proposed, adopted, or implemented as supported by USG assistance	Annually	0	N/A	N/A	N/A	4					
BG 9	# of program approaches/initiatives adopted/changed because of evidence-based recommendations and/or advocacy by USAID-supported activities	Annually	0	N/A	N/A	N/A	3					
BG 10	# and % of district hospitals using eAMS	Annually	0	N/A	N/A	N/A	75% (46/61)					
BG 12	# of health commodities tracked through USAID-supported eLMIS	Annually	0	N/A	N/A	N/A	N/A					
BG 13[21]	# of organizations whose members/staff were trained and/or mentored through USAID support	Semiannually	0	N/A	N/A	N/A	64	Data Not Available				
BG 14	# of TB patients registered in e-TB Manager	Quarterly	0	N/A	N/A	N/A	295,280	77,866	74,290			
IN 4.3.1a	# of analytical products developed and used to inform policies or guidance based on evidence	Annually	0	N/A	N/A	1	5					
IN 4.3.1b	% of TB financing expected from domestic sources	Annually	0	N/A	N/A	N/A	22%					
IN 4.3.3b	# of health personnel receiving capacity development support to optimize the management of health services	Annually	0	N/A	N/A	242	60					
IP.MP.1	# of facilities receiving MTaPS support to strengthen IPC and/or	Quarterly	0	N/A	N/A	N/A	177	N/A	N/A			

[21] Bangladesh PY6Q1–Q2 indicator data are collected through government sources that were not available at the time of data collection.

	WASH practices for monkeypox											
	DRC[22]		0	N/A	N/A	N/A	177	N/A	N/A			
IP.MP.2	# of people trained to prevent, detect, and/or respond to monkeypox outbreak with MTaPS support	Quarterly	0	N/A	N/A	N/A	319	N/A	N/A			
	DRC[22]		0	N/A	N/A	N/A	319	N/A	N/A			
IP.MP.3	# of post-training supervision visits conducted	Quarterly	0	N/A	N/A	N/A	6	N/A	N/A			
	DRC[22]		0	N/A	N/A	N/A	6	N/A	N/A			
IP.MP.4	# of field supervision visits conducted	Quarterly	0	N/A	N/A	N/A	10	N/A	N/A			
	DRC[22]		0	N/A	N/A	N/A	10	N/A	N/A			
IP.MP.5	Were the findings from supervision visits sent to HZs and/or HFs?	Quarterly	0	N/A	N/A	N/A	6	N/A	N/A			
	DRC[22]		0	N/A	N/A	N/A	6	N/A	N/A			
IP.MP.6	Are the recommendations made after supervision visits implemented by HZs and/or HFs?	Quarterly	0	N/A	N/A	N/A	17	N/A	N/A			
	DRC[22]		0	N/A	N/A	N/A	17	N/A	N/A			
IP.MP.7	# and % of MTaPS-supported HFs that are using standardized tool(s) for monitoring IPC and informing programmatic improvement for monkeypox	Semiannually	0	N/A	N/A	N/A	47	N/A				
	DRC[22]		0	N/A	N/A	N/A	47	N/A				
AB HL5	# of analytical products and services completed and used to advance health development goals in Asia	Annually	0	N/A	8	3	1					
	Asia Bureau		0	N/A	8	3	1					
AB HL7	# of individuals receiving capacity development support to advance health development goals in Asia	Annually	0	N/A	401	173	134					
	Asia Bureau		0	N/A	401	173	134					

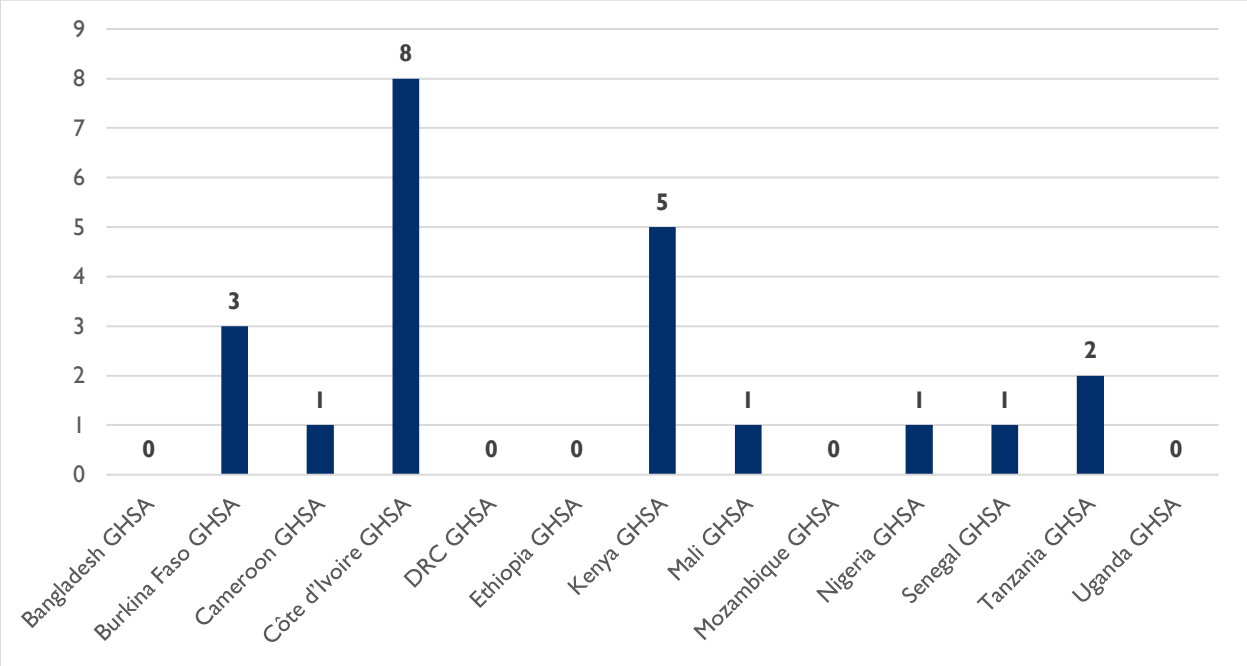
[22] DRC monkeypox activities concluded at the end of PY5.

AB HL8	# of institutions and/or platforms receiving capacity strengthening support to advance health development goals in Asia	Annually	0	N/A	30	15	2		
	Asia Bureau		0	N/A	30	15	2		

ANNEX 2. GLOBAL HEALTH SECURITY AGENDA—QUARTER PROGRESS FOR FY24Q2

SUMMARY OF ACTIVITIES FOR THIS QUARTER (FY24Q2)

SELECTED MTAPS GHSA INDICATOR PROGRESS



Annex Figure 1. MSC1. Number of AMR-related in-country meetings or activities conducted with multisectoral participation in PY6Q2

Bangladesh, Ethiopia, Mozambique, and Uganda concluded support for GHSA activities. DRC did not have planned activities toward MSC1 in Q2.

Annex Table 2.1 IP3. Percentage of MTaPS-supported facilities that are using standardized tools for monitoring IPC and informing programmatic improvement

	Country											
Quarter	Bangladesh[1]	Cameroon[2]	Côte d'Ivoire[3]	DRC[4]	Ethiopia[5]	Kenya[6]	Mali	Mozambique[7]	Nigeria	Senegal[8]	Tanzania	Uganda[9]
PY5Q2	67% (6/9)	100% (12/12)	100% (20/20)	50% (6/12)	100% (7/7)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	77% (10/13)	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	N/A	100% (7/7)	61% (8/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	100% (12/12)	100% (20/20)	100% (12/12)	N/A	100% (4/4)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q2	N/A	100% (13/13)	100% (20/20)	58% (7/12)	N/A	67% (4/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon added support for one facility at the request of the facility director.
[3] In PY5Q4, CHR of San Pedro was not functional because the hospital IPC committee members were relocated.
[4] In PY5Q2, six facilities did not receive supportive supervision; thus, data could not be obtained. In PY6Q2, five facilities did not receive supportive supervision visits; thus, data were not collected.
[5] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[6] For PY6Q1, refer to the Kenya narrative in the report for details of closeout in the previously reported 16 facilities. In PY6Q2, with new project funding, two new facilities were added. MTaPS engagement at the facilities has just begun, with no data to be reported yet.
[7] In PY5Q3, four facilities were dropped (total facilities reduced from seven to three) due to budget constraints. The Mozambique GHSA portfolio completed implementation in June 2023; thus, no data are reported for PY6.
[8] In PY5Q2, one facility had inadequate IPC capacity; a strategic plan was created in Q2 to improve capacity. Data for the two remaining facilities were not obtained. In PY5Q3, data were not collected at facilities and values could not be reported due to time constraints. Activities were focused on national IPC implementation. In PY5Q4, data could not be collected from five facilities. This data collection resumed in PY6Q1 and Q2, targeting six facilities.
[9] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex Table 2.2. IP5. Percentage of MTaPS-supported facilities implementing CQI to improve IPC

	Country											
Quarter	Bangladesh[1]	Cameroon[2]	Côte d'Ivoire[3]	DRC[4]	Ethiopia[5]	Kenya[6]	Mali[7]	Mozambique[8]	Nigeria	Senegal[9]	Tanzania	Uganda[10]
PY5Q2	67% (6/9)	100% (12/12)	100% (20/20)	50% (6/12)	100% (7/7)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	31% (4/13)	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	100% (12/12)	0% (0/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	N/A	100% (7/7)	61% (8/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	100% (12/12)	100% (20/20)	N/A	N/A	100% (4/4)	94% (15/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q2	N/A	100% (13/13)	100% (20/20)	N/A	N/A	67% (4/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A

[1] A consultant was hired to assist CDC/DGHS in developing and updating CQI plans in PY5Q2 and to implement the plans in the remaining three facilities. Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon added support for one facility at the request of the facility director.
[3] In PY5Q4, CQI assessments and meetings were not conducted at any facilities; these resumed in PY6Q1 and Q2.
[4] In PY5Q2, six facilities did not receive supportive supervision; thus, data could not be obtained. No CQI activities were planned in PY6Q1 and Q2.
[5] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[6] For PY6Q1, refer to the Kenya narrative in the report for details of closeout in the previously reported 16 facilities. In PY6Q2, with new project funding, two new facilities were added. MTaPS engagement at the facilities has just begun, with no data to be reported yet.
[7] In PY6Q1 Koutiala health center did not implement CQI activities, due to competing priorities. MTaPS continued to sensitize for CQI plan implementation; in Q2, the health center resumed CQI activities.
[8] In PY5Q3, four facilities were dropped due to budget constraints. Mozambique GHSA support for IPC activities concluded in June 2023; therefore, PY5Q4 and subsequent data are not reported.
[9] In PY5Q2, four facilities conducted a self-evaluation. The six facilities that implemented standardized tools and the remaining two facilities were not evaluated for CQI. In PY5Q3, data were not collected at facilities and values could not be reported. Activities were focused on national IPC implementation. In PY5Q4, data could not be collected from five facilities. Data collection and activities have since resumed in PY6, targeting six facilities.
[10] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex Table 2.3. IP6. Percentage of MTaPS-supported facilities with functional IPC committees

	Country											
Quarter	Bangladesh[1]	Cameroon[2]	Côte d'Ivoire[3]	DRC[4]	Ethiopia[5]	Kenya[6]	Mali[7]	Mozambique[8]	Nigeria	Senegal[9]	Tanzania	Uganda[10]
PY5Q2	100% (9/9)	100% (12/12)	100% (20/20)	50% (6/12)	86% (6/7)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	77% (10/13)	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	N/A	100% (7/7)	61% (8/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	100% (12/12)	100% (20/20)	100% (12/12)	N/A	100% (4/4)	94% (15/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q2	N/A	100% (13/13)	100% (20/20)	100% (12/12)	N/A	67% (4/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon added support for one facility at the request of the facility director.
[3] In PY5Q4, CHR of San Pedro was not functional because the hospital IPC committee members were relocated. Activities resumed in PY6.
[4] In PY5Q2, six facilities did not receive supportive supervision; thus, data could not be obtained.
[5] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[6] For PY6Q1, refer to the Kenya narrative in the report for details of closeout in the previously reported 16 facilities. In PY6Q2, with new project funding, two new facilities were added. MTaPS engagement at the facilities has just begun, with no data to be reported yet.
[7] In PY6Q1, the IPC committee of the Koutiala health center did not hold any meetings or implement activities due to competing priorities; activities resumed in Q2.
[8] In PY5Q3, four facilities were dropped due to budget constraints. Mozambique GHSA support for IPC activities concluded in June 2023; therefore, Q4 and subsequent data are not reported.
[9] In PY5Q2, one facility had inadequate IPC capacity and a strategic plan was to improve. Data for the two remaining facilities were not obtained. In PY5Q3, data were not collected at facilities and values could not be reported. Activities were focused on national IPC implementation. In PY5Q4, data could not be collected from five facilities. Data collection and activities have since resumed in PY6.
[10] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex Table 2.4. AS2. Percentage of MTaPS-supported facilities' medicines and therapeutics/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework

	Country												
Quarter	Bangladesh[1]	Burkina Faso[2]	Cameroon[3]	Côte d'Ivoire[4]	DRC	Ethiopia[5]	Kenya[6]	Mali[7]	Mozambique[8]	Nigeria	Senegal[9]	Tanzania	Uganda[10]
PY5Q2	44% (4/9)	N/A	100% (12/12)	100% (20/20)	100% (12/12)	100% (7/7)	92% (22/24)	87% (14/16)	100% (7/7)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	60% (6/10)	92% (11/12)	95% (19/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	100% (3/3)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	40% (4/10)	92% (11/12)	85% (17/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	N/A	100% (7/7)	0% (0/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	30% (3/10)	N/A	100% (20/20)	100% (12/12)	N/A	100% (6/6)	87% (14/16)	N/A	100% (7/7)	0% (0/4)	100% (10/10)	N/A
PY6Q2	N/A	100% (10/10)	N/A	100% (20/20)	100% (12/12)	N/A	75% (6/8)	100% (16/16)	N/A	100% (7/7)	25% (1/4)	100% (10/10)	N/A

[1] In PY5Q2, six facilities received supportive supervision and training. During visits, it was found that facilities were not implementing AMS activities due to a lack of technical expertise and training. The MTaPS team gave strong feedback on AMS

activities at each facility at that time, and activities improved in Q3. Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY5Q3, four facilities did not receive site visits to document achievements. In PY5Q4, MTaPS only had budget to implement CQI in four facilities. In PY6Q1, MTaPS provided supportive supervision to three facilities; in Q2, all facilities received visits and implemented activities as planned.
[3] In PY5Q3, activity implementation was not optimal in Mbalmayo District Hospital because the trained personnel were posted to different HFs. PY5Q4 Mbalmayo Hospital became nonfunctional, as the hospital director DTC members were transferred to other facilities; thus, the facility was dropped. In PY6, no facility-level AMS activities are planned.
[4] In PY5Q1, six sites did not receive supportive supervision from the AMS team; thus, information for this indicator was not collected for the facilities. In PY5Q3, San Pedro's AMS committee was not functional. San Pedro received a new CHR. This has led to a suspension of the AMS committee's activities. PY5Q4, data reports were not obtained for three facilities. In PY6, activities and data collection resumed as planned.
[5] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[6] In PY5Q2 to Q4, all facilities had active AMS committees; however, two community pharmacies did not develop and implement plans due to the nature of AMS activities in a community pharmacy setting. Additional materials were developed to guide the process. For PY6Q1, refer to the Kenya narrative in the report for details of closeout in the previously reported 16 facilities. In PY6Q2, with new project funding, two new facilities were added. MTaPS engagement at the facilities has just begun, with no data to be reported yet.
[7] In PY5Q2, MTaPS provided coaching sessions. However, two facilities reported competing priorities in implementing AMS activities. In PY6Q1, Point G hospital and the Gavardo health center did not implement AMS activities due to competing priorities. MTaPS and the DPM continue to encourage CQI implementation to improve AMS, and in Q2, activities resumed as planned.
[8] In PY5Q3, four facilities were dropped due to budget constraints. Mozambique GHSA support for IPC activities concluded in June 2023; therefore, Q4 and subsequent data are not reported.
[9] AMS activities continued at the national level through PY5Q2 and Q3; implementation of facility-level AMS activities started in July 2023 after approval of the STGs and training materials. In PY5Q4, AMS trainings were completed in one facility, and in PY6Q1, one other facility completed AMS training; however, no improvement plans were created. In PY6Q2, progress has been made in one facility. PY6 activities are a continuation of the PY5 work plan.
[10] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex Table 2.5. AS4. Percentage of MTaPS-supported facilities implementing CQI to improve AMS

	Country												
Quarter	Bangladesh[1]	Burkina Faso[2]	Cameroon[3]	Côte d'Ivoire[4]	DRC[5]	Ethiopia[6]	Kenya[7]	Mali[8]	Mozambique[9]	Nigeria	Senegal[10]	Tanzania[11]	Uganda[12]
PY5Q2	44% (4/9)	N/A	100% (12/12)	100% (20/20)	33% (6/12)	100% (7/7)	92% (22/24)	87% (14/16)	0% (0/7)	100% (7/7)	N/A	70% (7/10)	100% (7/7)
PY5Q3	100% (9/9)	N/A	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	100% (3/3)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	N/A	92% (11/12)	85% (17/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	N/A	100% (7/7)	7% (1/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	30% (3/10)	N/A	100% (20/20)	100% (12/12)	N/A	100% (6/6)	87% (14/16)	N/A	100% (7/7)	50% (2/4)	100% (10/10)	N/A
PY6Q2	N/A	100% (10/10)	N/A	100% (20/20)	50% (6/12)	N/A	75% (6/8)	100% (16/16)	N/A	100% (7/7)	75% (3/4)	100% (10/10)	N/A

[1] In PY5Q2, six facilities received supportive supervision and training. During visits, it was found that facilities were not implementing AMS activities due to a lack of technical expertise and training. The MTaPS team gave strong feedback on AMS activities at each facility at that time, and activities improved in Q3. Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] There was no related activity included in the PY5 work plan. In PY6Q1, MTaPS provided supportive supervision to three facilities; in Q2, all facilities received visits and implementing activities as planned.
[3] In PY5Q4, Mbalmayo Hospital AMS activities were nonfunctional, as the hospital director DTC members were transferred to other facilities; thus, the facility was dropped. In PY6, no facility-level AMS activities are planned.
[4] In PY5Q3, San Pedro's AMS committee was not functional. San Pedro got a new CHR, which led to a suspension of the AMS committee's activities. In PY5Q4, data reports were not obtained for three facilities. In PY6, activities and data collection resumed as planned.

[5] In PY5Q2, supported facilities provided written reports on AMS activities; CQI activities were not included, and only six facilities received supervision visits to obtain this information. In PY6Q2, six facilities did not share the CQI report; thus, data were unable to be collected and verified.
[6] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[7] In PY5Q2 to Q4, all facilities had active AMS committees; however, two community pharmacies did not develop and implement plans due to the nature of AMS activities in a community pharmacy setting. Additional materials were developed to guide the process. For PY6Q1, refer to the Kenya narrative in the report for details of closeout in the previously reported 16 facilities. In PY6Q2, with new project funding, two new facilities were added. MTaPS engagement at the facilities has just begun, with no data to be reported yet.
[8] In PY5Q2, MTaPS provided coaching sessions; however, two facilities reported competing priorities in implementing AMS activities. In PY6Q1, Point G hospital and the Gavardo health center did not implement AMS activities due to competing priorities. MTaPS and DPM continued to encourage CQI implementation to improve AMS, and in Q2, activities resumed as planned.
[9] AMS site visits delayed for PY5; thus, no facility progress was documented in Q2. In PY5Q3, four facilities were dropped due to budget constraints. Mozambique GHSA support for IPC activities concluded in June 2023; therefore, Q4 and subsequent data are not reported.
[10] AMS activities continued at the national level through PY5Q2 and Q3; however, implementation of facility-level AMS activities continued to experience challenges because of stakeholder support. In PY5Q4, AMS trainings were completed in one facility and CQI was implemented. In PY6Q1, one additional facility completed AMS training and implemented CQI, and in Q2, a third facility implemented CQI.
[11] Four facilities had slow uptake of MTCs for AMS CQI implementation in PY5. The Tanzania team conducted supportive supervision for MTCs and AMS CQI activities. Progress was made in PY5Q2 onward.
[12] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

ANNEX 3. QUARTERLY COVID-19 INDICATORS, FY24Q2[23]

Annex Table 3.1. Number of staff and volunteers trained on COVID-19 vaccine-related topics with MTaPS' support (COV 2. [CV1.3-3.])

Portfolio/ disaggregation	Country	January–March 2024
	Cameroon	122
	Kenya	N/A*
	Rwanda	29
	Total	**151**
Sex	Male	90
	Female	61
	Unknown sex	0
Technical area*	Storage, handling, delivery, and waste management of COVID-19 vaccines	122
	Planning and organizing COVID-19 vaccination sessions	23
	AEFI monitoring for COVID-19 vaccination	0
	Recording and monitoring COVID-19 vaccination	0
	Communication with the community about COVID-19 vaccination	6
	Other	0

*Activity was originally planned for quarter 2 but was shifted to April/May due to a health workers strike in the target region.
**Trainees may be recorded under more than one technical area.

Annex Table 3.2. Number of policies, protocols, standards, and guidelines across any of the result areas developed or adapted with MTaPS' support for COVID-19 (COV7 [CV.2.6-22])

Portfolio/ disaggregation	Country	January–March 2024
	Côte d'Ivoire	11
	Kenya	13
	Madagascar	2
	Total	**26**
Technical area	Risk communication and community engagement	0
	Surveillance, rapid response teams, case investigation	0
	Laboratory systems	2
	Case management	0
	IPC	0
	Coordination and operations	13
	Vaccines	11

[23] The following countries have approved COVID work plans and completed activities during PY6 quarter 2: Cameroon, Côte d'Ivoire, Kenya, Madagascar, and Rwanda.

Annex Table 3.3. Number of AEFI reports reviewed by the appropriate responsible bodies with USG support among those submitted to country monitoring systems (COV1 [CV.1.5-9])

Portfolio/ disaggregation	Country	January–March 2024
	Kenya	3
	Total	**3**
USG support	Direct support	0
	Indirect support	3
Severity of event*	Minor	N/A
	Moderate	N/A
	Serious/severe	N/A

*In Kenya, data on severity of events are not available from the government.

Annex Table 3.4. Country has developed or adapted COVID-19 vaccine microplans with MTaPS' support (COV8 [C.1])

Country	January–March 2024
Côte d'Ivoire	Yes

Annex Table 3.5. Number of health workers who were remunerated by MTaPS to support workload required for COVID-19 vaccine delivery in the reporting period (COV14 [CV.1.3-4])

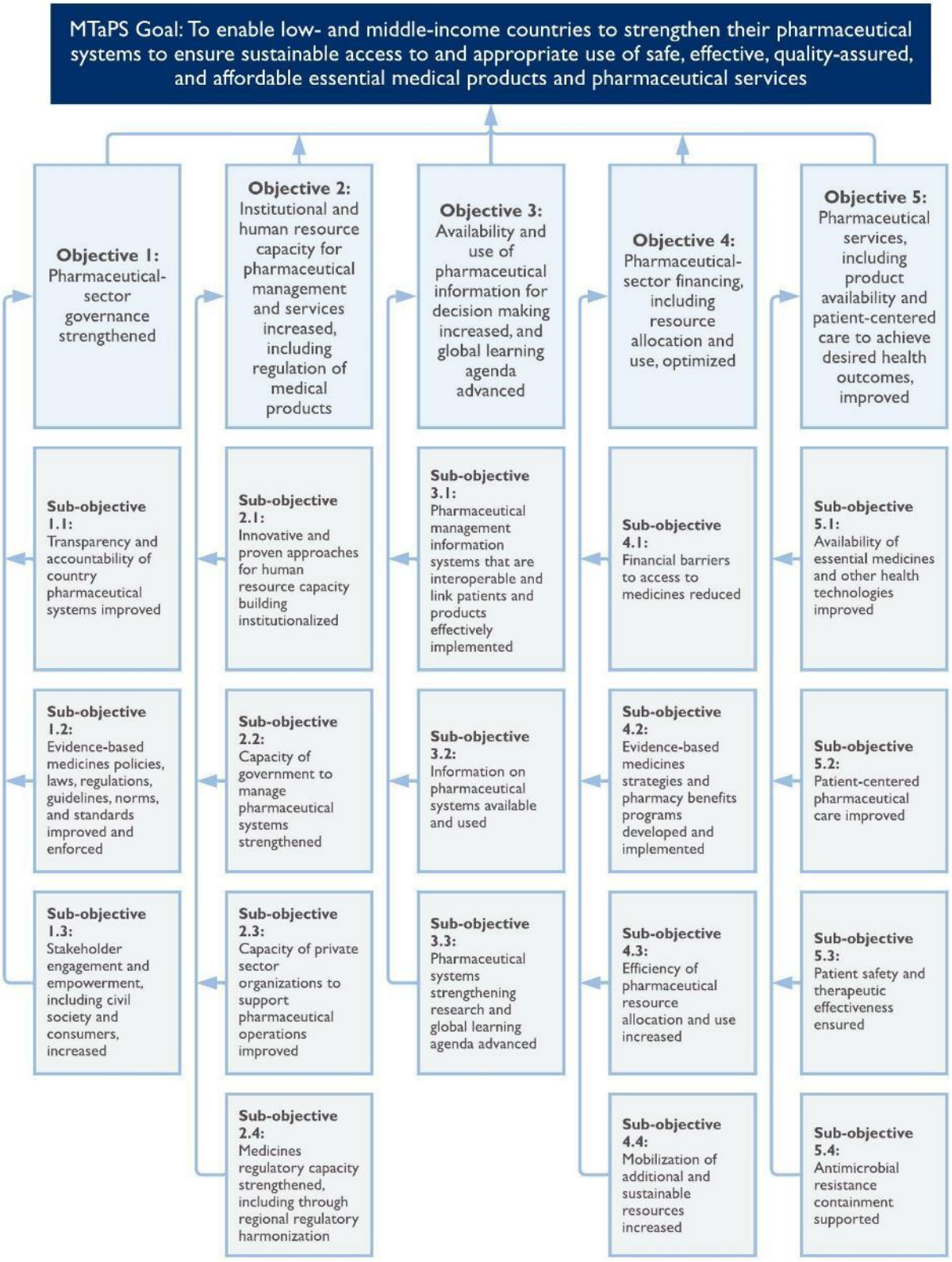
Portfolio/ disaggregation	Country	January–March 2024
	Côte d'Ivoire	0*
	Total	**0**
Sex	Clinical	0
	Community/law	0
	Data management	0
	Supervision and logistics	0

*In Côte d'Ivoire, the activity was planned but could not be conducted in time for reporting in PY6Q2.

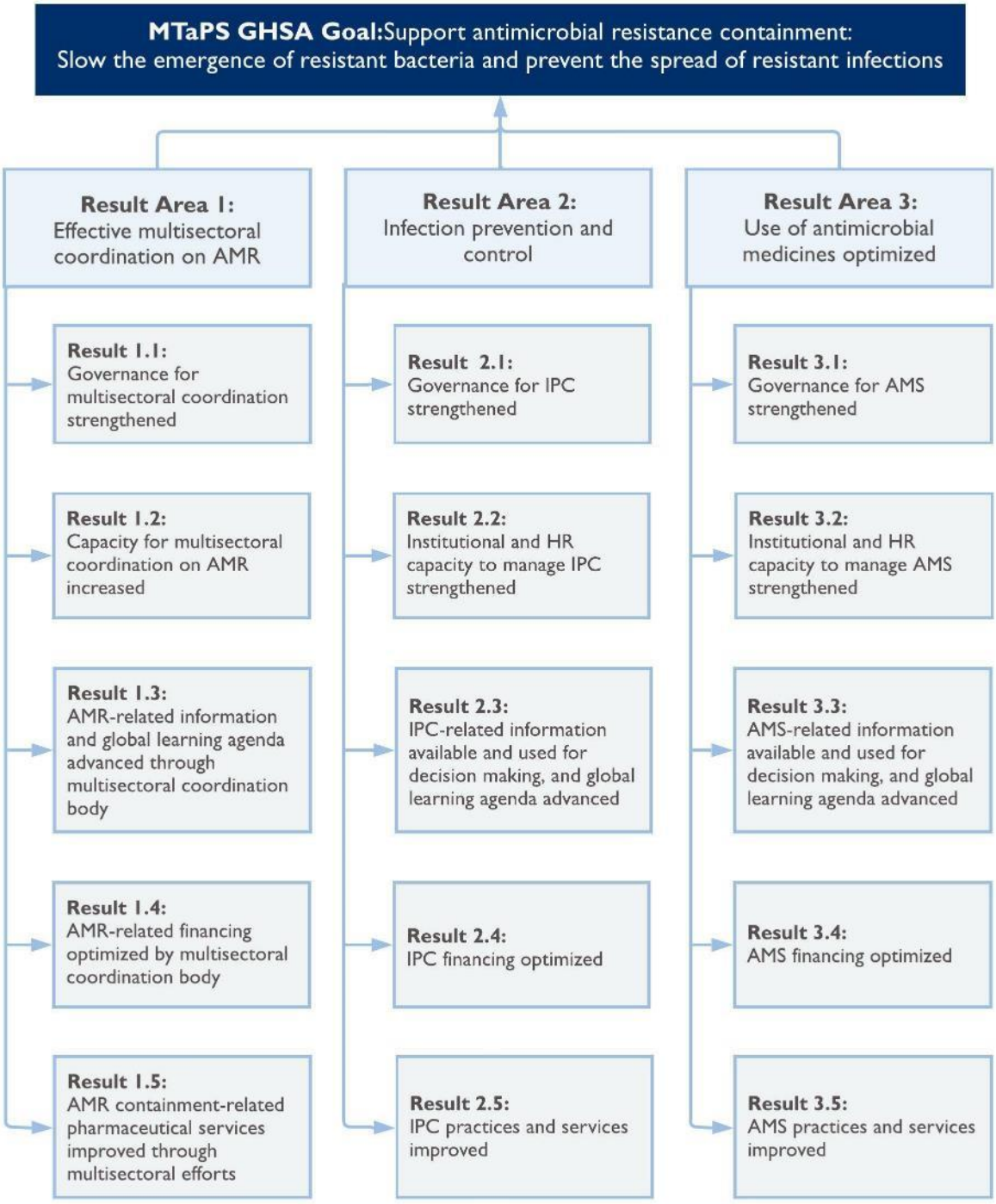
Annex Table 3.6. Number of health workers trained in COVID-19 testing or specimen transport with USG support (CV.2.3-15)

Portfolio/ disaggregation	Country	January–March 2024
	Madagascar	155
	Total	**155**
Sex	Male	91
	Female	64
	Unknown	0

ANNEX 4. MTAPS RESULTS FRAMEWORK



ANNEX 5. GHSA RESULTS FRAMEWORK



ANNEX 6. COVID-19 RESULTS FRAMEWORK

USAID Objective 1: Accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations

USAID Objective 2: Reduce morbidity and mortality from COVID-19, mitigate transmission, and strengthen health systems, including to prevent, detect, and respond to pandemic threats

Result Area 4: Infection Prevention and Control

Result Area 6: Coordination and Operations

ANNEX 7. MNCH RESULTS FRAMEWORK