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

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FISCAL YEAR 2024
ANNUAL & QUARTER 4
(JULY–SEPTEMBER 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 4 (July–September 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

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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
COI	conflict of interest
COR	contracting officer representative
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 Community 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
e-GP	electronic Government Procurement
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 practice
GPVP	good pharmacovigilance practice
GRP	good regulatory practice
GSDP	good storage and distribution 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
HCIP	Health Care Infection Preventionist Course
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
HSD	Health Services Division
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
MCWC	Maternal and Child Welfare Centers
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	OneHealth 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-year MTaPS program (2018–2025) is to provide assistance 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.

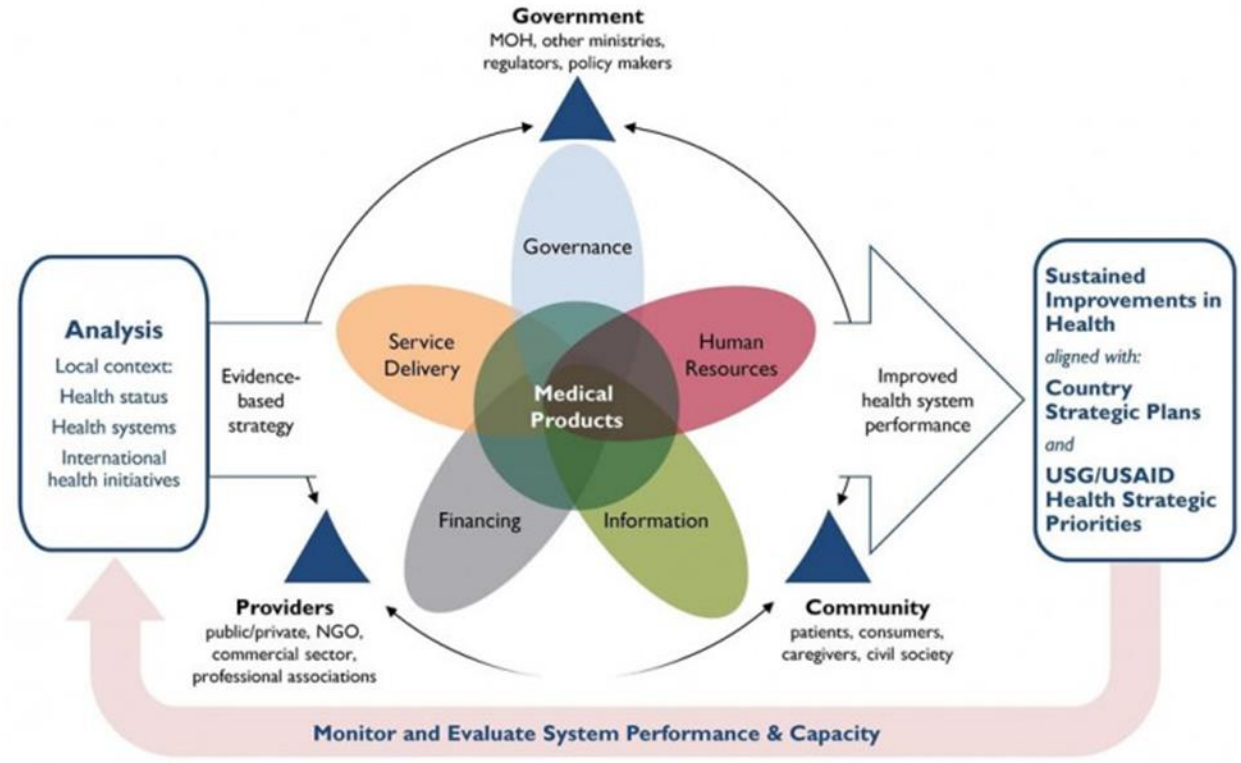


Figure 1. USAID pharmaceutical systems–strengthening approach

D. ABOUT THE REPORT

This report presents activity progress and achievements by portfolio for the fourth quarter (July–September 2024) and fiscal year 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 Q4, FY24.

CUMULATIVE PERFORMANCE TO DATE

MTaPS has systematically worked to strengthen pharmaceutical-sector governance in various functional areas of the pharmaceutical system in a variety of countries across the life of the program. In this report, the varied nature of these interventions is highlighted through select countries below.

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

Bangladesh (procurement) – MTaPS supported the government in developing a long-term strategic procurement plan and updated the MSR list specifications and reference prices in different project years, contributing to enhanced procurement transparency. Building on this, MTaPS assisted in developing a procurement handbook and a system to monitor procurement performance using key indicators, which streamlined the process for DGHS personnel. Further, offline and enhanced versions of UIMS and WIMS were integrated into the DGFP eLMIS, improving logistics data management and ensuring real-time information access for better accountability. The result is a more transparent and efficient medicines procurement system.

Rwanda (pharmaceutical regulation) – MTaPS provided support to the Rwanda FDA in developing a four-year strategic plan (2021–2024) and a costed five-year business plan (2021–2026), which included the creation of 12 regulations and other regulatory documents to enhance the pharmaceutical framework. The implementation of a QMS at the Rwanda FDA, in line with ISO 9001:2015

[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.

requirements, involved developing a quality manual and SOPs; training 27 staff; and improving accountability and regulatory efficiency, which has been further enhanced with the strengthening of the IRIMS. As a result, the Rwanda FDA has improved its efficiency and accountability. For example, between May 2023 and January 2024, 14,630 applications were processed digitally through IRIMS across various regulatory functions.

Asia Bureau (COI) – MTaPS conducted a landscape analysis of COI approaches within public pharmaceutical-sector committees in 10 countries to identify gaps and opportunities to strengthen governance. Having identified these gaps, MTaPS coordinated the development of a WHO-approved manual on managing COI in pharmaceutical-sector committees, which is publicly available, and launched a COI e-learning course on the OpenWHO platform, which has been completed by more than 1,400 learners. These tools are available to a global audience for local application.

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

Bangladesh (health supply chain) – MTaPS supported the DGDA to develop and begin implementation of a five-year strategic plan (2022–2026) with the goal of addressing gaps in WHO GBT assessments and ensuring regulatory compliance, providing a roadmap for ongoing development of its NRA.

DRC (health supply chain) – MTaPS successfully advocated for the government to grant health products "social product status" instead of "business product status," which will reduce or eliminate tariffs and taxes on health products. Draft ministerial decrees were developed to enforce this status change, and MTaPS is continuing to support stakeholders and ministries in enacting these decrees.

Jordan (procurement) – MTaPS supported the JFDA and the MOH in legislative changes and the formulation of the PSD Operational Plan 2023–2025, alongside the creation of six priority supply chain management policies, forming the foundation of ongoing health supply chain interventions that will increase availability and use of quality health products at improved prices.

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

Bangladesh – MTaPS promoted stakeholder engagement by collaborating with HEU, government agencies, and CSOs to track pharmaceutical expenditures, contributing to more effective resource allocation.

DRC (supply chain) – MTaPS worked with WHO; USAID; *Santé Rurale (*SANRU); and government and civil society stakeholders, including the office of the President, the Prime Minister's office, and professional boards, to push for changes in the legal status of health products in DRC, promoting cost reductions and improved access for the public. In FY23, MTaPS provided ongoing support to 350 community members in monitoring medicine management, focusing on stock management and accountability between HFs and the community. This involvement improved collaboration between health center managers and community health workers, enhanced transparency regarding health commodities and finances, and promoted community participation in inventory management.

YEAR 6 ACHIEVEMENTS & RESULTS

Throughout PY6, MTaPS continued to strengthen pharmaceutical-sector governance in various functional areas with a focus on ensuring the progress made through MTaPS interventions will continue beyond the program. Select country examples are provided.

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

***Burkina Faso (GHSA)* –** MTaPS supported the development of an organigram for the TS-OHP to enhance clarity on the roles and responsibilities of various departments and partners, which increased transparency in the platform's operations. Through supporting the semiannual AMR-TC meeting, a sustainability plan for AMR activities was completed, promoting long-term accountability.

***Rwanda (pharmaceutical regulation)* –** To prepare for a successful transition of IRIMS to the Rwanda FDA, MTaPS revised and submitted a comprehensive transition plan. This plan ensures that all necessary steps for final transition and handover of the system to Rwanda FDA are clearly outlined.

***Bangladesh (procurement)* –** MTaPS supported the establishment of the Directorate General Procurement Monitoring and Evaluation Cell (DPMEC) at the DGHS to ensure compliance with procurement policies and enforce accountability among procuring entities. The DPMEC was linked to the Procurement and Logistics Management Cell (PLMC), ensuring its participation in PLMC meetings, while a procurement handbook, developed with the DGHS and approved by the government, now serves as a reference guide for public procurement processes.

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

Burkina Faso (GHSA) – MTaPS supported the drafting and validation of an inter-ministerial order for the AMR-TC, which was submitted for official government endorsement.

***Jordan (procurement)* –** MTaPS collaborated with the GPD to automate FA SOPs in the Jordan Online E-Procurement System through workshops, resulting in the development and approval of FA procurement workflows to enhance efficiency, transparency, and governance. Additionally, MTaPS contributed to developing FA standard bidding documents to standardize procurement processes and drafted a supplier evaluation policy that will improve procurement decisions by identifying top suppliers and supporting informed, efficient choices.

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

***Côte d'Ivoire (GHSA)* –** MTaPS engaged various stakeholders by organizing meetings that included key sectors involved in AMR activities, such as the MOPH and the agriculture and environmental sectors. These meetings evaluated the implementation of the NAP-AMR, identifying barriers and proposing strategies to address challenges. Furthermore, 62 individuals, including women, were trained in drug committee evaluation tools and AMS data collection tools, promoting capacity strengthening among stakeholders. MTaPS also established an e-learning platform to enhance training accessibility, engaging 146 participants in AMS training. This comprehensive stakeholder involvement has fostered empowerment across various sectors, promoting a collaborative approach to combating AMR.

***Mali (GHSA)* –** MTaPS has prioritized stakeholder engagement by supporting the GCMN-RAM in updating a TOR to integrate new actors focused on UHC, PHC, and health emergencies. This work aligns with the ongoing transition and sustainability efforts for the governance body. Furthermore, MTaPS collaborated with the IPC and AMS TWGs to develop a comprehensive strategy for scaling up IPC and AMS practices, informed by the 2023 JEE.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

In this section, selected pharmaceutical governance activities that were undertaken in this quarter are highlighted, with a focus on transition and moving counties forward on the pathway to sustainability.

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

***Bangladesh (procurement)* –** MTaPS printed and distributed the DGHS Procurement Handbook to various health care facilities. This will serve as a reference for procurement officers, enabling more efficient and transparent procurement processes at these facilities.

DRC (regulation) – MTaPS supported the National Pharmaceutical Regulatory Authority (*Autorité Congolaise de Réglementation Pharmaceutique* [ACOREP]) in organizing a July 2024 workshop to update the Directory of Registered Medicines in DRC, with 12 ACOREP members and an MTaPS advisor attending. This directory will guide the importation of quality medicines. Additionally, MTaPS helped ACOREP develop a roadmap for its 2024–2028 Strategic Plan.

DRC (supply chain) – MTaPS, in collaboration with FTO, SANRU, and IHP, supported a TOT workshop in Matadi August 14–22 that focused on improving HIV data analysis and cross-checking between HIMS and LMIS for better data quality and report completeness. The workshop involved 24 participants from key health programs. Following the workshop, MTaPS strengthened the capacity of 40 health executives across Kinshasa, Haut Katanga, and Lualaba provinces, enabling them to analyze HIV data and identify discrepancies between consumption trends (SIGL data) and patient numbers, guiding informed decision making for HIV commodity management.

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

***Côte d'Ivoire (GHSA)* –** MTaPS supported the AMR TWG and its MTC5 to strengthen the governance and oversight system for AMS in HFs by monitoring the implementation of related policies, guidelines, and standards. This effort included organizing three preparatory meetings with participants from various working committees (MTC2, MTC3, MTC4, and MTC5) to review the KoboCollect platform.

***Nigeria (GHSA)* –** MTaPS collaborated with the AMR Coordinating Committee to finalize the NAP-AMR for 2024–2028, which is set to launch in October 2024. This was achieved through workshops involving multiple ministries and organizations, including WHO and UNICEF.

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

Kenya (GHSA) – MTaPS supported Kiambu County in establishing its County Medicines and Therapeutics Committee and provided TA for AMS CQI plans. The team helped coordinate AMR/AMS activities, supported WAAW 2024 planning, and provided guidance on prescribing practices and rational drug use.

Cameroon (GHSA) – MTaPS facilitated a meeting organized by the National Zoonoses Program and the National Public Health Laboratory July 11–12, 2024, in Ebolowa, aimed at evaluating the implementation of NAP-AMR activities. Fourteen participants, including five women, from various sectors involved in AMR (MOPH; Ministry of Livestock, Fisheries, and Animal Industries; Ministry of Agriculture and Rural Development; Ministry of Environment; Protection of Nature and Sustainable Development; *Centre Pasteur du Cameroun*; USAID; FAO; CODEX; and the National Zoonoses Program) attended this second meeting in a series focused on AMR activities.

BEST PRACTICES/LESSONS LEARNED

- Developing transition plans as part of post-program sustainability is most effective when considered early in a development program and undertaken with the government entities concerned. This approach is seeing effective transition of digital systems in Bangladesh and Rwanda, as well as ongoing effective GHSA governance in Cameroon, Côte d'Ivoire, and Kenya.

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 program activities are fully institutionalized, and country owned, for example by integrating e-learning materials into ministries' learning systems 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

Institutional and human resource capacity strengthening is evident across all MTaPS objectives. In this section of the report, we have chosen select examples that demonstrate systematic, multidimensional interventions in different areas of the pharmaceutical system.

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

Bangladesh (cross cutting) – MTaPS supported the development and integration of comprehensive e-learning modules for procurement practices, pharmaceutical management, and IPC, strengthening the capacity of DGHS personnel. These modules have been uploaded into the government-run Muktopaath learning management system, with written directives from the government driving ongoing learning in these critical areas and ensuring that health workers have access from across the country.

Asia Bureau (regulation) **–** MTaPS supported ASEAN member states to strengthen the individual capacity of NRA regulatory personnel through multiple approaches, including peer learning in workshop settings and training focused on Good Review Practices and WHO collaborative procedures to strengthen capacity for medical product registration. Twenty-five regulatory personnel trainers from ASEAN countries were trained in the areas of vaccine evaluation and access to biologics, including COVID-19 vaccines, to encourage intercountry information exchange. In addition, competency mapping results were used to develop capacity-strengthening plans; promote a data-informed approach across

the region; and improve product safety, quality, and efficacy. HTA capabilities were strengthened through mentoring and workshops, with national HTA agencies integrating these tools for systematic priority setting in health care budgeting, including real-world evidence.

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

Bangladesh (supply chain and regulation) – MTaPS enabled the DGHS to scale up the eLMIS across HFs and warehouses, strengthening the government's capacity to manage pharmaceutical logistics. The project also provided TA to the DGDA to develop and use regulatory IMS for the registration of biosimilars and vaccines, increasing the efficiency of the regulatory process.

Rwanda (GHSA) **–** Technical support was provided to the MOH to assign antibiotics into the AWaRe categories per WHO recommendations, enhancing effective antibiotic use and inclusion in the NEML. This is the basis for improved management of antimicrobials.

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

DRC (supply chain) – MTaPS supported the Association of Supply Chain Managers and Logisticians (AGCAL) in obtaining legal documentation, including its MOH registration certificate; NGO membership certificate for the health sector; and *personnalité juridique* (legal personality), which granted it full legal existence to operate in DRC. AGCAL staff were capacitated on the annual quantification exercise, human resource management, and procurement and logistics contracts, resulting in the development of an AGCAL semiannual action plan and M&E framework. Building off this foundation, AGCAL successfully enrolled more than 200 members, including 128 women, primarily pharmacy and medicine students, enhancing its capacity to support pharmaceutical operations in DRC.

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

Nepal (pharmaceutical regulation) – 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, implementing OpenRIMS and PViMS for medicine registration and PV, capacity strengthening and competence development of DDA personnel, and establishing QMS standards and practices. MTaPS provided TA to the DDA to implement 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 supported the development of a new MIS known as the Drug Administration Management System 2 (DAMS-2). With MTaPS' support, the DDA has addressed all 55 recommendations for ML 1 and 2 indicators in the CAPA plan.

Asia Bureau (pharmaceutical regulation) – MTaPS used a mapping exercise to identify 18 key entities (initiatives, networks, and stakeholders), including ASEAN and the WHO Collaborative Procedure for Accelerated Registration, that strengthen pharmaceutical regulatory systems and offer potential opportunities for collaboration. Additionally, 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 toward the achievement of ML3. MTaPS also

facilitated technical capacity strengthening trainings on various aspects, including Good Manufacturing Practice, vaccine dossier evaluation, and Good Review Practices for medical products registration. MTaPS, in collaboration with the WHO-Bangladesh office, engaged the DGDA to organize and implement a training on Good Clinical Practices (GCP) June 2–4, 2024, in Bangladesh.

YEAR 6 ACHIEVEMENTS & RESULTS

Through PY6, MTaPS has continued to strengthen pharmaceutical systems across various functional areas with a focus on ensuring that progress made through MTaPS interventions will continue beyond the program. Select country examples are provided.

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

Burkina Faso (GHSA) – MTaPS supported formative supervision visits to hospitals, strengthening staff capacity to monitor and improve RUA and enforce updated STGs.

Côte d'Ivoire (GHSA) **–** MTaPS developed AMS training modules, validated by subject matter experts, for use in HFs. MTaPS facilitated the establishment of e-learning platforms to support AMS and IPC capacity strengthening, training 146 health professionals on AMS programs and 164 on IPC guidelines and practices. The materials are now available for ongoing use. MTaPS supported monitoring and supervision visits to 18 HFs to assess AMS program implementation and effectiveness of the interventions.

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

Burkina Faso (GHSA) – MTaPS provided technical and logistical support for the AMR-TC and TS-OHP, improving the functioning of these government bodies and advancing their operational capacity to combat AMR. The development of a sustainability plan for AMR initiatives, supported by MTaPS, has laid the foundation for long-term government commitment and oversight.

Tanzania (GHSA) **–** MTaPS supported the AMR MCC in facilitating meetings for AMS, IPC, and M&E TWGs. This collaboration led to the development of a draft M&E framework for the NAP-AMR 2023–2028. In preparation for WAAW 2023, MTaPS partnered with the MOH and other stakeholders to promote awareness, including a poster presentation on "Improving IPC Practices through e-Learning" at the national AMR symposium, which aimed to advance the AMR agenda in private hospitals and raise community awareness. Tanzania now has the necessary systems in place to further combat AMR.

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

Burkina Faso (GHSA) – Collaboration with private-sector organizations like RAM-Burkina and AJRAM during the AMR symposium strengthened the role of nongovernmental stakeholders in the national AMR response.

Tanzania (GHSA) **–** MTaPS conducted in-service AMS training for health care providers, regional and district pharmacists, public-private partnership focal persons, and members of the Association of Private Health Facilities in Tanzania (APHFTA). The training included hands-on practices such as data collection,

analysis, and report writing on AMU using the WHO PPS methodology at Mwananyamala Regional Referral Hospital. Engaging PO-RALG and APHFTA members was crucial for facilitating the continued rollout of AMS implementation at the subnational level, encompassing the primary health care and private sectors.

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

Bangladesh (pharmaceutical regulation) – Under the CAPA plan, MTaPS guided the DGDA to review three registration dossiers and evaluate a risk management plan for the Typhoid vaccine. The DGDA drafted guidelines for GRP aligned with the Drugs and Cosmetics Act 2023. A review of the DGDA's five-year strategic plan showed progress in regulatory framework improvements, QMS implementation, internal audits, digitization (regulatory IMS and OpenRIMS-PV), and stakeholder engagement. These efforts will contribute to enhancing the DGDA's efficiency and increase its WHO GBT score toward achieving ML3. The formal benchmarking exercise to determine the official maturity of the DGDA is slated for 2025.

AMRH Support (pharmaceutical regulation) – MTaPS collaborated with AUDA-NEPAD and the AMRH Initiative to support operationalization of the African Medicines Agency (AMA). MTaPS worked with the Evaluation of Medicinal Products TC to develop a Continental Reliance Framework for member states to use and apply the reliance mechanism, which would facilitate expedited review of product approvals for MA. In addition, MTaPS worked with the AMRH IMS TC to develop a strategy for digitalization of the regulatory IMS to facilitate systems interoperability and exchange of information across the continent, regions, and member states.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

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

Rwanda (regulation) – MTaPS continued providing support and knowledge transfer to Rwanda FDA ICT staff to troubleshoot and fine-tune the implementation of the IRIMS system. This included updating the transition plan to account for system changes and assisting the ICT team in resolving Helpdesk tickets. In August and September, two staff from the software development firm and the MTaPS Principal Technical Advisor collaborated with the Rwanda FDA's ICT team using a coaching approach to address user requests and prepare the system for its transition and handover.

Cameroon (supply chain) – MTaPS supported the development of CPD training curricula, including e-learning modules, in pharmaceutical supply chain management. A workshop in Ebolowa July 4–6, 2024, reviewed and validated the training curriculum with 28 participants (11 women) from various health sectors. Following this, MTaPS organized a workshop August 26–30, 2024, to review and edit the supply chain management training modules based on the validated curriculum. A final workshop September 11–14, 2024, with 26 participants (12 women) validated the modules, preparing them for implementation. These workshops enhanced capacity strengthening efforts in pharmaceutical supply chain management.

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

Cameroon (supply chain) – MTaPS supported the MOPH in implementing OpenRIMS, a digital tool for the electronic submission and evaluation of pharmaceutical product registration applications. MTaPS facilitated a follow-up meeting in Yaoundé August 8–9, 2024, with 11 participants (7 women) from the DPML to review the configuration progress of the OpenRIMS tool. The consultant demonstrated key functionalities, and participants suggested improvements, including defining mandatory fields, specifying required documents, and setting user access levels.

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

DRC (supply chain) – MTaPS facilitated the recruitment of a consultant to develop organizational SOPs for AGCAL. The consultant shared a draft with MTaPS and is incorporating their feedback to finalize the SOPs. AGCAL now has improved organizational functionality that provides a basis for longstanding contribution to PSCM development in the country.

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

Rwanda (pharmaceutical regulation) – In September 2024, MTaPS participated in the Coalition of Interested Parties (CIP) meeting led by WHO and presented on the program's planned support to the Rwanda FDA through November 2024. The meeting evaluated how various partners have provided support to the Rwanda FDA to address the remaining four institutional development plans raised in the May 2024 WHO GBT evaluation as well as priority activities being undertaken by the Authority in its journey toward ML3. The next CIP meeting is planned for December 2024.

MTaPS, through engagement of an expert in GCP, continued to provide mentorship and coaching to enhance the knowledge of Rwanda FDA GCP regulatory personnel, including new staff, through WhatsApp. The Rwanda FDA team will continue to leverage the memorandum of understanding between the Rwanda FDA and Ghana FDA after the closure of MTaPS to obtain further mentoring in GCP, especially in the current situation where clinical trials are ongoing to develop a vaccine for Marburg disease.

Asia Bureau (pharmaceutical regulation) – MTaPS continued to engage with SEARN and the WHO Southeast Asia Regulatory Office and participated in the Assembly of the Members of SEARN/Meeting of the Heads July 1–4, 2024. MTaPS gave a presentation during the meeting to highlight its work, share lessons learned, and advocate for the adoption of minimum common standards for regulatory IMS as part of the 2024–2025 work plan. The regulatory IMS was adopted as an action point in the 2024–2025 SEARN work plan during the meeting.

MTaPS also participated in the first formal meeting of the CIP Network Regional Steering Group for SEARN, convened September 3, 2024, with the objective of providing an overview and update of the CIP Network to SEARN, endorsement of the TOR for the CIP Network Regional Steering Group SEARN, and elect the Chair and the Vice-Chair of the CIP Network Regional Steering Group SEARN.

MTaPS continued its engagement with the ASEAN Pharmaceutical Product Working Group and the SEARN Secretariat to plan the implementation of PV training and a regional workshop to advocate for the adoption of the regulatory IMS, respectively. These are planned for PY7, Q1.

BEST PRACTICES/LESSONS LEARNED

- There has been a realization that adoption of regional centers of regulatory excellence will sustain the push for regulatory systems strengthening at the regional level as they will serve as centers of collaboration, be used as centers for capacity strengthening, and serve as models of practice that can be adopted by other countries.

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 capacities, recognizing their pivotal role in realizing UHC and sustainable development objectives and fostering self-reliance.

CUMULATIVE PERFORMANCE TO DATE AND YEAR 6 ACHIEVEMENTS

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

Bangladesh: In PY1, MTaPS enhanced versions of the UIMS and **WIMS**, and these were integrated into the DGFP **eLMIS**, improving inventory management and supply chain efficiency. From May 2019 to September 2023, MTaPS supported FP warehouses to ensure uninterrupted availability of FP commodities, maintaining a stock-out rate below 1% for commodities at SDPs.

During PY2, MTaPS 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. MTaPS supported the NTP by evaluating and integrating 478 of 484 peripheral storage systems for TB medicines into the Upazila Health Complexes network. In collaboration, they ensured that all 868 TB sites adopted **e-TB Manager** for case management, enhancing data management.

In PY3, e-TB Manager was improved for electronic reporting and interoperability with the Janao app.

By PY5, the system included a dashboard for better analysis and decision making. MTaPS and the NTP rolled out the **eLMIS** for TB commodities across all districts and subdistricts.

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 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, thereby enhancing efficiency and effectiveness in managing its expanding scope of responsibilities.

During PY5, significant progress was made with the **DAMS-2** (**OpenRIMS**) project. The DDA, supported by MTaPS, devised a phased approach for the pharmacy and wholesale module implementation. The initial phase prioritized 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 Preventive and Social Medicine/Community Medicine) the responsibility of overseeing the handover process and continuing the software development life cycle following MTaPS' close out in March 2025. This ensures the project's stability and long-term success.

At the end of PY6, MTaPS completed server installation at the National Information Technology Center and networking tasks at the DDA.

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 7 central and 28 regional units, 64 LGUs, and 125 SDPs, 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.

MTaPS has been actively assisting the DOH in the rollout of the **eLMIS** in selected LGUs and SDPs, with 10 new sites added. A TOT session for provincial health personnel was conducted February 27–March 1, 2024, with 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 eLMIS to all RHUs by December 2024, with SCMS, CHD, and the Provincial Department of Health identifying RHUs ready for implementation. eLMIS is operational across 224 sites, facilitating stock assessment and PSCM decisions, with a high-level eLMIS dashboard deployed for the DOH.

Rwanda: To increase the efficiency of the Rwanda FDA's regulatory functions, MTaPS provided technical support in customizing **IRIMS** to the FDA's requirements and implementing it with training for internal and external users. MTaPS collaborated with the Rwanda FDA and the Rwanda Information Society Authority (RISA) to facilitate the final hosting of IRIMS in the country's National Data Center. Since going live, IRIMS has enhanced efficiency and accountability in regulatory service provision and improved access to information for decision making at the Rwanda FDA. MTaPS supported the integration of IRIMS with the digital certificate platform through RISA to enhance the authenticity of the licenses and permits issued and iRembo—Rwanda's national payment gateway—to improve efficiency in the application and renewal process. Furthermore, MTaPS facilitated a service-level agreement for system maintenance with the developer and has initiated the transition and handover of the system by strengthening the capacity of the Rwanda FDA team to ensure system sustainability.

Cameroon: 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.

At the end of PY6, the consultant, in collaboration with the DPML and MTaPS, configured the system for MA and provided training to DPML staff. For sustainability, the consultant and DPML staff were introduced to the online discussion forum on https://talk.openrims.org.

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

Bangladesh: For patient safety, MTaPS evaluated more than 4,500 AE reports, leading to more than 35 regulatory decisions since PY1. MTaPS assisted the DGDA in developing a pharmacy inspection strategy in PY2 and launched an electronic inspection and licensing system in PY3. By PY4, MTaPS had supported the DGDA in achieving the highest GBT score for PV function and updated the national PV guidelines, which the MOHFW endorsed in PY5. In PY5, MTaPS supported the DGDA totrain staff on the strategic plan and implementation the Regulatory Information Management System (**RIMS**) for online registration of vaccines and biosimilars and **PViMS (now OpenRIMS-PV**) for online AE reporting.

At the end of PY6, the DGDA approved 18 biosimilar products using DGDA RIMS and deployed a dashboard to increase data use and process monitoring.

Burkina Faso: To facilitate a medicine study on the introduction of Pyramax, MTaPS worked with the *Secrétariat Permanent pour l'élimination du Paludisme* (SP Palu) and *la Direction des Services informatiques* (DSI) to acquire a local server and deploy OpenRIMS-PV.

In PY6, MTaPS provided initial configuration and system administrator training to DSI staff for sustainability. MTaPS also engaged with a data analyst who will be providing support to SP Palu when data collection concludes in 2024.

Mozambique: The ART-related TLD study, conducted by ANARME, IP, successfully achieved its objectives, which involved characterizing the AE profile among patients using TLD and estimating the incidence of AEs, including adverse pregnancy outcomes. Using **OpenRIMS-PV,** 105 patients enrolled in the study reported 149 AEs. The most frequently recorded ones included headache, insomnia, nausea, and skin rash. 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 (4 male, 5 female) were trained. In PY4, OpenRIMS-PV underwent an update to include treatment and prevention of TB data collection forms, further enhancing its capabilities and relevance.

In PY6, MTaPS provided training to ANARME, IP on causality assessment and engaged a data analyst to provide a study report and train ANARME, IP staff on PV data use and trends. The report was reviewed by the CDC before it was finalized and shared with ANARME, IP.

Moving forward, ANARME, IP will be able to use OpenRIMS-PV for additional studies and benefit from the additional functionality provided through support in other countries (e.g., direct transmission of AE reports using the E2B R2/3 format to the WHO Uppsala Monitoring Center [UMC]).

Philippines: Since the initiation of the PViMS (now OpenRIMS-PV) rollout in PY3, MTaPS has achieved full coverage, reaching 100% (199) of the targeted TB facilities. To date, 597 AEs have been reported through PViMS, and causality assessments have been conducted to inform decision making processes. MTaPS has supported the DOH in analyzing stock information for critical tracer commodities related to TB, FP, and HIV since PY3 (FY21). 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: In strengthening the RIMS for both active and spontaneous PV, **PViMS** (now **OpenRIMS-PV)**, was adapted to manage data for spontaneous reporting of AEs as well as AEFIs for Ebola and COVID-19 vaccines and for active safety monitoring of DTG-based ART regimens. From June 2021 to April 2024, 2,002 AEFIs were submitted by health care providers and reported to the Rwanda FDA. Of these, 858 were related to COVID-19 vaccines and were serious AEs, which the Rwanda FDA reported to the WHO UMC due to PViMS' interoperability with WHO's **VigiFlow** using a specialized E2B Release 2 and 3 (R2/3) format. The use of OpenRIMS-PV ensures that medicine safety monitoring reports are quickly received and analyzed by the Rwanda FDA, allowing timely regulatory feedback to clients, patients, and HFs.

At the end of PY6, a full system administrator training was provided to the Rwanda Information and Communication Technologies staff to ensure sustainability of the system.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

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

Bangladesh: MTaPS enhanced OpenRIMS-PV to enable full interoperability with the WHO Uppsala data center. This was achieved using the E2B R3 format and tested and verified by experts at the WHO UMC.

Rwanda: During Q4, MTaPS conducted a six-week onsite support visit to facilitate transition of IRIMS, implemented the enterprise service bus—an interoperability feature that allow easy integration of IRIMS with other systems and change requests in the system based on key policy changes—and updated user manuals and other technical documentation.

Cameroon: During Q4, MTaPS supported the DPML to finalize configuration and train staff to maintain and sustain OpenRIMS for the MA process.

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

Bangladesh: MTaPS successfully concluded the handover of IT systems, including **e-TB Manager**, **eLMIS**, **DGDA RIMS** (based on OpenRIMS), **PViMS** (OpenRIMS-PV), AMR Web Portal and STG App, eAMS, and DGDA web portal, to the NTP and DGDA. Key systems transitioned include those managed by the DGHS, DGDA, DGFP, CDC, NTP, and CMSD. The handover was done with the appropriate documentation and access credentials, ensuring continuity in operations and equipping stakeholders for ongoing management. The handover of e-learning courses is ongoing.

Rwanda: MTaPS provided specialized information communication technology training to the team at the Rwanda FDA and a customized training to PV experts. The AEFI form was implemented on the live server to meet Rwanda FDA requirements.

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

Refer to Cross Bureau Activity 2 for a full description of progress on this activity.

BEST PRACTICES/LESSONS LEARNED

- It is important to adopt tools such as OpenRIMS -PV to align to international best practices that allow for interoperability with existing systems at both the national and international levels. The MTaPS OpenRIMS-PV in Bangladesh and Rwanda PViMS were customized to transmit data to the UMC.

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 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 stock-outs 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 worked 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 the 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 negotiate 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 pricing of pharmaceutical products. The government's Cabinet Secretariat provided approval to replace the 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 Regulation on Distribution, Import, and Export of Medical Products. The Price Control Regulation will enable the DNF/ANARME, IP to control product price mark-ups of medicines as they move through the supply chain, stimulating wider availability of and access to medicines and other health products.

In **DRC**, MTaPS successfully advocated to 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. 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 more than 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 with more than 50 stakeholders in Asia. This led to a partnership with the Health Intervention and Technology Assessment Program (HITAP) and Health Intervention and Policy Evaluation Research - National University of Singapore (HIPER-NUS) to support the improvement of the HTA ecosystem in Asia. MTaPS supported the participation of seven country representatives (Vietnam, Timor Leste, Indonesia, India, Cambodia, Philippines, and Lao PDR) in the HIPER symposium, hosted by NUS. With the exception of India, this was the first time HIPER welcomed policy makers from these countries. 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 finalized the HTA Institutionalization Canvas, adapted from Osterwalder's business model canvas. MTaPS designed an organized session for the upcoming HTAi conference titled "Advancing Health Technology Assessment (HTA) Worldwide: Insights from Global Initiatives," highlighting its work establishing and strengthening priority setting and resource allocation in Ethiopia, Indonesia, and the Philippines.

In **Indonesia**, MTaPS supported 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 HTA topics, from 19 topics in 2022 to 46 in 2023 and 131 in 2024—increasing the breadth of lifesaving technology options to be evaluated for coverage to Indonesians. MTaPS also organized a capacity strengthening 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 setup 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**, an 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 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 in 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 pharmaceuticals, which in turn helps governments better allocate their finite resources.

In **Asia**, MTaPS works to strengthen country capacity for defining and costing evidence-based pharmaceutical benefits 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 led to significant improvements in pharmaceutical management and resource use in 44% of the 286 pilot facilities. 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 initiating 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 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 included the PE tracking budgetary provision in the government's next Health Sector Program Operational Plan. It is 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 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 3 online surveys of health experts working in 21 countries to gather real-time COVID-19 vaccine delivery data, integrating COVID-19 vaccination into immunization programs and primary health care, and 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 PY2, MTaPS assisted the NTP in preparing concept notes for funding through the Global Fund to Fight AIDS, Tuberculosis, 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 FAs to ensure that quality health commodities are procured efficiently. MTaPS facilitated a learning session on quantification of health commodities and quantification systems, processes, and tools. The estimated quantities and budgets will be used for the DOH's application of a multiyear contractual authority for FP and TB commodity procurement. This allows flexibility in the quantity of commodities, reducing the possibility of overstock or stock-out.

YEAR 6 ACHIEVEMENTS & RESULTS

In PY6, MTaPS has advanced work in medicines pricing in Nepal through the updated Drug and Health Product Bill (sub-objective 4.1). MTaPS has also advanced priority-setting mechanisms in the Philippines through the development of the HTA Clinical Equipment and Devices methods guide—the first specialized methods guide in the country; supported Indonesia's HTA advancement in installing the use of advance methods and improved topic selection processes; and worked with HTAsiaLink to improve the HTA ecosystem in Asia and disseminate HTA best practices through publications and conferences,

receiving a competitive award (sub-objective 4.2). MTaPS also strengthened capacity for costing and PE tracking in Bangladesh, Nepal, and Malawi (sub-objective 4.3)

QUARTER 4/Y6 ACHIEVEMENTS & 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

In **Asia**, MTaPS continues to work with HITAP and HIPER-NUS to improve the HTA ecosystem in Asia. Subcontracts are in place with HITAP focusing on work advancing the strategic plan of HTAsiaLink, improving the political economy for HTA in the region, and developing an HTA registry as a global public good

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

In supporting the **USAID COVID-19 global activity**, MTaPS submitted a peer-reviewed journal manuscript documenting the findings of the costing exercise in Malawi. A preprint (Ruisch et al, 2024. https://www.researchsquare.com/article/rs-4768736/v1) is available publicly to allow broader dissemination. MTaPS is also awaiting review of a submitted journal manuscript focusing on the third global survey with a focus on integrating COVID-19 vaccination into immunization programs and primary health care.

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

No further activities planned for PY6.

BEST PRACTICES/LESSONS LEARNED

- To improve uptake of work products, it is important to invest the time needed to develop a peer-reviewed journal article. The MSH/USAID HTA Roadmap (2020) and the systematic review (Suharlim et al, 2021) have not only guided HTA advancements in the countries where MTaPS has active HTA activities (Ethiopia, Indonesia, Philippines) but also influenced the thinking and trajectory of HTA advancements in at least seven other countries: Ukraine, Moldova, Kenya, Malawi, Zambia, Peru, and Egypt.

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 (Obj. 3) that address finances and the evidence-based selection of medicines and health technologies (Obj. 4) and stewardship to allocate resources efficiently (Obj. 1) and institutionalize best practices to improve pharmaceutical care (Obj. 2) and patient safety.

CUMULATIVE PERFORMANCE TO DATE

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

Bangladesh: In PY1, MTaPS supported the government in developing a long-term strategic procurement plan. In PY2, MTaPS developed a TOE—a prescribed standard of organization, staffing, and equipment for different units of HFs with 10- to 500-bed capacity—and in PY4 updated its reference prices. MTaPS updated the specifications of the MSR list in PY2 and assisted the MSR List Updating Committee in developing a strategy for regularly reviewing and updating standard reference prices in PY3. In PY4, with MTaPS' TA, the procurement oversight bodies of the MOHFW and DGHS started implementing a paper-based system to monitor procurement performance using standard key indicators through quarterly assessments. In PY6, MTaPS assisted the DGHS to develop a handbook to streamline public procurement for its personnel. MTaPS capacitated the DGHS on basic procurement practices (e-learning) and the e-GP system. MTaPS supported the DGFP to ensure uninterrupted availability of FP commodities at warehouses and maintained a stock-out rate below 1% at SDPs from May 2019 to September 2023, thereby saving financial resources. With MTaPS' TA, the DGHS' comprehensive eLMIS is functional in 33 HFs within four selected districts and at the CMSD. With MTaPS' support, Hospital Services Management/DGHS completed the scale-up of the eAMS in all 61 DHs. MTaPS supported the NTP in evaluating peripheral storage systems for TB medicines and developing a phased transition plan that culminated with 478 of 484 peripheral stores managed by IPs being integrated into the Upazila Health Complexes network.

Jordan: MTaPS played a pivotal role in advancing procurement reforms in Jordan, working closely with the GPD. These reforms involved legislative changes; developing policies, guidelines, and SOPs for FA implementation; and procurement negotiation, aimed at enhancing supplier market entry, competitiveness, and availability of health products. A comprehensive assessment of the pharmaceutical supply chain led to the formulation of the PSD Operational Plan 2023–2025. MTaPS also supported the development of six priority SCM policies, FA SOPs, and procurement negotiation SOPs that were approved by the MOH Secretary General. MTaPS collaborated with the GPD to automate FA SOPs within the Jordan Online E-Procurement System (JONEPS). Through a series of workshops, FA procurement workflows were developed and approved to improve efficiency, transparency, data availability, and governance in procurement processes.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

Rwanda: To improve pharmaceutical services, MTaPS collaborated with Rwanda's MOH, FDA, and NPC 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 HCWs (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 strengthened the DGDA's PV system by implementing PViMS in hospitals and Marketing Authorization Holders, providing training, scaling up PV efforts, and institutionalizing PV initiatives. It supported risk management, ADE data evaluation, and submission to the WHO Uppsala Monitoring Centre. The DGDA achieved the highest GBT score for PV, with MTaPS updating the PV organogram and assisting with risk management plans and PSURs. An abstract on strengthening PV was presented at the 23rd International Society of Pharmacovigilance meeting.

Jordan: MTaPS supported the MOH in establishing a targeted spontaneous reporting system for COVID-19 vaccine safety, analyzing data, and disseminating key messages through the national PV center to boost vaccine uptake.

Mozambique: MTaPS supported ANARME, IP in institutionalizing PV systems, including the use of PViMS for both active and passive surveillance. Key support for active surveillance included implementing ASM for TLD and TPT and training ANARME, IP staff on the surveillance protocol; data management and analyses in PViMS, including causality assessment; and report writing. Provincial and district PV focal persons were trained and cascaded these trainings to HCWs at the TLD and TPT implementation sites. MTaPS completed data cleaning for the TPT study, shared the preliminary report with key stakeholders, and facilitated the review of the findings with USAID representatives.

Nepal: MTaPS supported the DDA by conducting a situational analysis of the PV system. Following the analysis, PV regulations, guidelines, risk management plans, and SOPs were developed and a PV and drug information working group was established. MTaPS supported capacity strengthening through training on signal detection, analysis, and risk management and distributed IEC materials to HFs.

Philippines: MTaPS supported the implementation of PViMS for active TB medicine surveillance in all 199 TB facilities in the Philippines. The system has recorded 597 AEs to date, enabling causality assessment and interoperability with WHO VigiFlow. MTaPS also developed two versions of a PV e-learning course for the FDA.

Rwanda: MTaPS supported the Rwanda FDA to institutionalize PV by developing a PV national plan, strengthening the capacity of FDA personnel and NPAC and AEFI committee members, creating IEC materials, adopting PViMS, conducting active surveillance of DTG-based antiretroviral regimens and causality assessment, developing a costed multiyear national PV plan, and revising the draft communication strategy to address PV-related GBT sub-indicators. Focal PV members from the Rwanda FDA and Information Communication Technology (ICT) team were trained on the updated OpenRIMS-PV (PViMS).

Tanzania: MTaPS supported the revision of the TOR for the National PV Safety Advisory Committee, developed guidelines for the pediatric population, and trained Vigilance Technical Committee members. MTaPS strengthened the capacity of TMDA staff on the assessment of PSURs and 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 HFs. MTaPS helped launch a certified IPC training course and develop protocols, audit tools, and KPIs on RUA in ICU infections, surgical procedures, and UTI that were monitored using a CQI approach. The PCPD was supported to lead the first national IPC assessment in dental settings. To strengthen HR capacity for AMR containment, MTaPS collaborated with the national HCAC to develop a training curriculum on priority IPC needs identified by the MOH National ACIPC and train 200+ IPC focal points across MOH and RMS hospitals and MOH primary health care units. MTaPS extended its support to dental clinics by conducting a comprehensive IPC assessment in 600 public and private dental clinics and centers. Responding to an *Acinetobacter* outbreak in 2022, MTaPS collaborated with the MOH IPC department to facilitate the development of a national policy to combat multidrug-resistant organisms and institutionalize the AMR response. To raise awareness about AMR, MTaPS collaborated with the MOH SHD and Ministry of Education to develop and disseminate AMR awareness messages in schools. The MTaPS-supported CASS initiative was integrated into the NAP-AMR to raise AMR awareness.

***Rwanda*:** Following the first NAP-AMR (2020–2024), MTaPS collaborated with the MOH, Rwanda FDA, and stakeholders to develop a multisectoral communication strategy for AMR. MTaPS Rwanda also helped integrate the AWaRe categorization of antibiotics into the NEML and develop an MTC manual and accompanying training guide and job aids.

YEAR 6 ACHIEVEMENTS & RESULTS

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

Bangladesh: After the successful implementation of the eAMS in 61 DHs, the MIS Unit of the DGHS introduced the system at the National Institute of Cancer Research and Hospital with 358 assets entered in the system, further supporting the government's plan to roll out the eAMS in all tertiary-level hospitals. MTaPS supported the introduction of the eAMS in the National TB Reference Lab in Dhaka and four Regional TB Reference Labs to assist the NTP with management, maintenance, and procurement of TB laboratory assets. To date, information on 541 assets has been entered into the system and three repair tickets have been raised, with one resolved and the other two in progress following initiation of the repair process by the NTP. All 485 Upazila Health Complexes have adopted the TB eLMIS, with 99% submitting their quarterly requisition for TB drugs on time in the most recent quarter.

Jordan: MTaPS collaborated with the GPD to automate FA SOPs in JONEPS through workshops, resulting in the development and approval of FA procurement workflows to enhance efficiency, transparency, data availability, and governance. MTaPS also contributed to developing FA standard

bidding documents (SBDs) to standardize procurement processes and drafted a supplier evaluation policy to improve procurement decisions by identifying top suppliers.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

No achievements to report for PY6.

SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED

Bangladesh: MTaPS continued to support the implementation of PViMS, with 84 AE reports submitted this quarter. MTaPS also conducted a TOT on PViMS for 27 Marketing Authorization Holders, one hospital, and DGDA staff. In Q2, PViMS was customized based on user feedback. MTaPS also provided TA to the DGDA in updating the PV organogram with TOR, job descriptions, and competency assessments of PV personnel; screening RMPs; and generating PSURs to the DGDA. In Q3, 68 AE reports for drugs and vaccines were received through PViMS, 37 of which were reviewed. ADRAC recommended a boxed warning for atezolizumab due to the risk of aplastic anemia and proposed banning halothane due to the risk of death. As part of the CAPA plan, the DGDA developed 7 COVID-19 vaccine AE case summaries reviewed by the national expert committee and generated 35 safety recommendations through ADRAC for the identified risks associated with lenograstim, fluoroquinolones, and proton pump inhibitors. As part of the transition plan for sustainable implementation of the systems by the DGDA, MTaPS handed over documents and source codes for RIMS, PViMS, and the DGDA web portal to the DGDA.

Mozambique: ANARME, IP, in coordination with MTaPS, conducted the last round of site visits to the five study sites to close out active monitoring on 3HP for TPT, complete data collection and data quality checks to verify completeness of information on the forms, and collect study materials. MTaPS continued to provide guidance to the ANARME, IP and HIV team to manage the data in PViMS, including data cleaning, periodic review, analysis, and causality assessment. MTaPS completed the data cleaning process for the TPT study in Q2. The preliminary report was shared with key stakeholders. Representatives from USAID and the CDC provided feedback and requested clarifications. MTaPS supported the review process.

Nepal: MTaPS printed approved PV IEC materials in Nepali and distributed them to HFs. PV IEC materials are displayed at HFs to create public awareness, which plays a crucial role in ensuring the safe and effective use of medicines by monitoring, detecting, managing, and preventing ADEs.

Rwanda: MTaPS collaborated with the Rwanda FDA to revise the draft communication strategy for AE awareness and other regulatory functions. The revised strategy includes an implementation plan and recommendations to address GBT vigilance indicators and sub-indicators identified during a recent assessment. These indicators include ensuring documented procedures for stakeholder involvement and coordination (VL02.02); appropriately communicating vigilance activities to the public (VL06.01); establishing mechanisms for regular feedback and risk communication (VL06.02); and sharing vigilance data with relevant regional and international partners (VL06.03). MTaPS continued to support the Rwanda FDA to enhance the PV system. Updates were made to the OpenRIMS-PV user manual and other documentation. Focal PV members from the Rwanda FDA and the ICT team received training on the updated OpenRIMS-PV. MTaPS supported the interoperability of PViMS with VigiFlow and the Rwanda FDA in developing an abstract on PV that was accepted for presentation at the 2024

conferences of the International Society of Pharmacovigilance conferences chapters in Africa and Canada.

SUB-OBJECTIVE 5.4: ANTIMICROBIAL RESISTANCE CONTAINMENT SUPPORTED

Jordan: MTaPS assisted the MOH and RMS to institutionalize the use of antibiotic treatment and prophylaxis protocols through ongoing assessments to monitor and improve implementation in HFs. MTaPS further supported IPC training programs for neonatal ICU nursing staff and certified IPC focal points from hospitals and primary health care centers to improve infection control practices and health care quality. Moreover, MTaPS supported a national IPC assessment in dental settings, covering 600 clinics, to evaluate practices. MTaPS also supported the MOH HCAD to develop and disseminate AMR awareness messages through social media. Furthermore, MTaPS expanded AMR CASS activities to additional schools to foster responsible antimicrobial behavior among youth and broaden AMR awareness within communities.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

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

Bangladesh: MTaPS continued supporting Bangladesh's DGHS to ensure smooth implementation of the DGHS' comprehensive eLMIS, facilitating day-to-day tracking of transactions and stock status in 33 HFs across four districts and the CMSD, and aiding in informed decision making to minimize stock disruptions. All central and 23 regional DGFP warehouses, 85 sub-district FP stores, and 7 MCWCs are now using the online version of the DGFP eLMIS, ensuring real-time FP product data capture. Despite political challenges, MTaPS provided TA to maintain system functionality and prepared a rollout plan for the remaining 409 sub-district FP stores. Additionally, MTaPS supported eAMS implementation at the National Institute for Cancer Research and Hospital, including capacity strengthening and data collection, verification, and entry. As of September 2024, information on 359 assets was entered into to the system (211 in this quarter), with one repair ticket raised and the repair process ongoing. MTaPS also provided follow-up support to 61 DH and 5 TB reference labs that are using the eAMS, contributing to better procurement, equipment management, and overall health care service improvement.

Jordan: MTaPS supported the GPD in finalizing the FA SBDs and a supplier performance evaluation policy to establish a standardized, transparent procurement process and improve efficiency. The implementation of these will improve procurement processes and promote long-term compliance with and sustainable application of sound public procurement practices.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

No achievements to report this quarter.

SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED

Bangladesh: A total of 68 AE reports for drugs and vaccines were received through PViMS, with 37 reviewed. ADRAC recommended a boxed warning for atezolizumab due to the risk of aplastic anemia and proposed that the drug control committee ban halothane for its risk of death. As part of the CAPA plan, the DGDA developed 7 COVID-19 vaccine AE case summaries for review by the national expert

committee and issued 35 safety recommendations through ADRAC for risks associated with lenograstim, fluoroquinolones, and proton pump inhibitors.

Rwanda: MTaPS updated OpenRIMS-PV to comply with WHO's E2B R3 standard for electronic transmission of AE reports into VigiFlow, ensuring full interoperability. To support sustainability, MTaPS trained 10 Rwanda FDA staff, including ICT and PV teams, on the updated system. Additionally, MTaPS helped the Rwanda FDA develop an abstract on PV, which was accepted for presentation at the 2024 International Society of Pharmacovigilance conferences in Africa and Canada.

SUB-OBJECTIVE 5.4: ANTIMICROBIAL RESISTANCE CONTAINMENT SUPPORTED

No achievements to report this quarter.

BEST PRACTICES/LESSONS LEARNED

No best practices/lessons learned to report this quarter.

3. PROGRESS BY HEALTH AREA/FUNDING STREAM

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

OVERVIEW

MTaPS currently provides GHSA support focusing on AMR containment to eight partner countries: Burkina Faso, Cameroon, Côte d'Ivoire, DRC, Kenya, Mali, Nigeria, and Tanzania. MTaPS' GHSA approach is to help countries reach higher IHR capacity levels, as measured by JEE scores, in the three mandated areas of MSC-AMR, IPC, and AMS to enhance their ability to effectively implement their NAP-AMRs.

CUMULATIVE PERFORMANCE TO DATE

EFFECTIVE MSC-AMR: EXAMPLES FROM TWO COUNTRIES

Through program years 1–6 (by March 2024**)**, MTaPS supported **Kenya** to complete 50% (2/4) of capacity level 2 MSC-AMR actions, 50% (2/4) of capacity level 3 MSC-AMR actions, 100% (4/4) of capacity level 4 MSC-AMR actions, and 80% (4/5) of capacity level 5 MSC-AMR actions, as per the 2019 WHO IHR benchmarks tool. MTaPS' support has strengthened MSC-AMR at the national level but also in four focus counties**:** Nyeri, Kisumu, Murang'a, and Kilifi. At the national level, MTaPS supported the review and implementation of the 2017–2022 NAP-AMR, development of the new NAP-AMR (2023–2027) and its M&E framework, and development and dissemination of an AMR communiqué to facilitate long-term AMR containment interventions and counter AMR disinformation. In its four supported counties, MTaPS supported the establishment and functionalization of CASICs and their work plans, which contributed to the subnational expansion of MSC-AMR. MTaPS transitioned out of Nyeri and Kisumu counties in November and December 2023, respectively, and took up two new counties (Nairobi and Kiambu) in March 2024.

Nigeria completed 100% (4/4) of capacity level 4 MSC-AMR actions and 80% (4/5) of capacity level 5 MSC-AMR actions, with MTaPS' support, by March 2024. MTaPS supported Nigeria's implementation of the 2017–2022 NAP-AMR, and, following the review of implementation performance, MTaPS has worked with the national AMR Coordinating Committee and other partners to develop the new 2024–2028 NAP-AMR and sustain AMR containment efforts. To support implementation, MTaPS helped train four M&E officers and four M&E focal persons—one from each of the four OH ministries—in using the M&E tools developed with MTaPS' support. At the subnational level, MTaPS worked with the state-level AMR TWGs in Kebbi and Enugu States to oversee and strengthen IPC and AMS programs in seven facilities across these states.

IPC IMPROVED AND FUNCTIONAL

In **Cameroon**, MTaPS supported completion of 80% (4/5) of capacity level 2 IPC actions, 100% (6/6) of capacity level 3 IPC actions, 60% (3/5) of capacity level 4 IPC actions, and 100% (5/5) of capacity level 5 IPC actions, based on the 2019 IHR benchmarks tool, as of March 2024. Over six years, MTaPS aided national and baseline IPC assessments in 38 HFs and repeat assessments in 12 HFs, developed IPC

training curricula, established IPC committees and programs in 12 HFs, developed national IPC guidelines and an action plan, and built a pool of IPC experts through training and mentorship to ensure long-term implementation of IPC interventions and best practices. MTaPS supported the Directorate of Health Promotion (DPS) to evaluate the existing HCAI surveillance system and subsequently develop a national protocol that is crucial for establishing one of Africa's first comprehensive HCAI surveillance systems. MTaPS also supported the DPS to carry out a KAP survey on the hand hygiene of health care workers in the 13 MTaPS-supported HFs, establishing enablers and barriers to hand hygiene in HFs, which is critical for strategic and operational planning. To disseminate best practices and promote sustainability, MTaPS supported the DPS to lead and coordinate three regional meetings in the West, Littoral, and South regions, where IPC committees shared their experiences from IPC CQI implementation with HFs that MTaPS does not support.

MTaPS helped **Mali** complete 100% (5/5) of capacity level 2 IPC actions, 100% (6/6) of capacity level 3 IPC actions, and 80% (4/5) of capacity level 4 IPC actions, based on the 2019 IHR benchmarks tool, as of March 2024. MTaPS worked with the national IPC TWG and IPC committees at 16 HFs to monitor and evaluate IPC practices at national and facility levels using IPCAT2 and CQI techniques, respectively. Additionally, MTaPS facilitated the development and dissemination of IPC action plans and guidelines for both human and animal sectors, along with an IPC training toolkit and IEC materials, to guide the long-term implementation of best practices. To strengthen human resource capacity to sustain IPC, MTaPS helped develop and operationalize e-learning platforms at both the DGSHP and the Faculty of Medicine and Odontostomatology at the University of Sciences, Techniques and Technologies of Bamako, ensuring ongoing IPC training and education.

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED: EXAMPLES FROM TWO COUNTRIES

In **Tanzania**, MTaPS supported the completion of 100% (4/4) of capacity level 2 AMS actions, 67% (4/6) of capacity level 3 AMS actions, 43% (3/7) of capacity level 4 AMS actions, and 29% (2/7) of capacity level 5 AMS actions, based on the 2019 IHR benchmarks tool, as of March 2024. MTaPS supported the country to develop AMS policy guidelines consistent with the OH approach, which facilitated strategic, multisectoral local AMS approaches. MTaPS also helped the MOH standardize AMS practices and interventions by developing and disseminating STGs and the NEML, which incorporated the AWaRe classification of antibiotics, along with developing and disseminating MTC guidelines. MTaPS supported the MOH in developing an in-service AMS curriculum, which was used to train 116 (53 female) trainers from 14 hospitals, facilitating the rollout of AMS implementation at subnational and primary health care levels and within the private sector. To contribute to global data and monitor, guide, and evaluate AMS interventions, MTaPS collaborated with the MOH to conduct multiple national AMC analyses and PPS-AMU surveys across eight HFs, develop a national hospital formulary template for HFs to use in developing and/or revising localized hospital formularies, and facilitate the use of the Extension for Community Healthcare Outcomes program to mentor 69 health care workers countrywide.

As of March 2024, MTaPS helped **Burkina Faso** complete 50% (2/4) of capacity level 2 AMS actions, 50% (3/6) of capacity level 3 AMS actions, 29% (2/7) of capacity level 4 AMS actions, and 14% (1/7) of capacity level 5 AMS actions, based on the 2019 IHR benchmarks tool. MTaPS supported the DGSV to develop and disseminate guidelines and a ministerial order to regulate RUA in the animal sector, which is critical for improving AMU in agriculture production. The Direction de la Pharmacie Hospitalière (DPH) and DTC members from 10 MTaPS-supported HFs conducted antibiotic use audits and a

situational analysis on the causes of inappropriate antibiotic use in their facilities to establish barriers and enablers to AMS implementation and then used the results to guide targeted interventions. Subsequently, three regional hospitals developed lists of authorized prescribers, prescribing criteria, and a guide for regulating pharmaceutical promotion activities.

YEAR 6 ACHIEVEMENTS & RESULTS

Global activities: As of March 2024, 9 countries had made significant progress toward achieving demonstrated capacity in line with the WHO benchmarks, with MTaPS' support. Specifically, 54% of benchmark actions (294 out of 537) in the 9 collaborating countries have been partially or fully completed, thereby strengthening capacity for health security.

In PY6, MTaPS published eight peer-reviewed journal articles sharing new insights, experiences, lessons learned, and expert opinions on topics related to sustaining AMR training and education, IPC/WASH, NAP-AMR implementation, AMR research priorities, national AMC surveillance, and One Health. MTaPS also published nine technical briefs, one blog, five success stories, and four end-of-project reports highlighting best practices and experiences across the global health security agenda. MTaPS made 14 presentations at 4 international conferences to disseminate its work related to best practices for MSC-AMR, AMS, and IPC. Finally, MTaPS GHSA programs in **Ethiopia**, **Senegal**, and **Tanzania** ended during PY6, with end-of-project presentations made to USAID Missions and Washington.

Effective MSC-AMR: In **Burkina Faso**, MTaPS supported the TS/OHP to finalize and validate the drafted inter-ministerial order on the creation, composition, and functioning of the AMR-TCC, which was submitted to the government to officially institutionalize AMR-TC and MSC-AMR. MTaPS also supported the TS/OHP to develop its organogram and prepare for the upcoming JEE assessment by WHO. In **Cameroon**, MTaPS also supported IPC and AMS TWGs to organize meetings to monitor and evaluate national IPC and AMS programs and develop a strategy for scaling up IPC and AMS implementation countrywide to address the gaps identified during the 2023 JEE. In **Cote d'Ivoire**, the AMR TWG was supported by MTaPS to review progress made in the implementation of the NAP-AMR and update the AMR TWG governance manual. With the help of MTaPS, **Kenya** launched a new NAP-AMR (2023–2027) and its M&E framework, reviewed CASIC and CIPCAC workplans in four supported counties, and conducted various capacity-strengthening activities, including CPD sessions, in collaboration with various professional bodies. In **Mali**, MTaPS supported the GCMN-RAM to update its TORs, expanding its membership to include representatives from UHC, PHC, and health emergencies implementers to its governance body, and to draft a transition and sustainability plan. 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 to develop an annual integrated action plan for health security and decentralize MSC-AMR and OH. MTaPS **Tanzania** helped develop, disseminate, and operationalize the M&E framework for the NAP-AMR 2023–2028.

IPC improved and functional: MTaPS collaborated with the IPC TWG in **Côte d'Ivoire** to launch an e-learning platform for IPC and AMS to facilitate long-term training for health care workers. Guidelines for national HCAI surveillance, HCWM, and revised IPC guidelines were launched in **Kenya**. MTaPS also supported the evaluation of IPC interventions in supported HFs to guide sustainable IPC

interventions and helped conduct IPC baseline assessments in two additional counties to inform interventions. In **Nigeria**, seven supported HFs demonstrated better hand hygiene on repeat HHSAF assessments; furthermore, using a competency-based, in-person training approach, 59 IPC experts (38 female) were trained who subsequently conducted step-down training sessions that reached 1,967 HCWs (1,131 female), ensuring the local continuity of IPC training. To operationalize **Mali's** national IPC Strategic Plan (2023–2027), MTaPS supported the IPC/WASH group to develop an annual, costed IPC operational plan based on priority activities. In **Senegal**, MTaPS supported the targeted level 3 hospitals in Dakar to begin collecting IPC monitoring data to evaluate and inform interventions. MTaPS conducted onsite IPC mentorship at eight MTaPS-supported HFs in **Tanzania** to monitor IPC and improve practices. Additionally, MTaPS supported IPC data quality assessments and mentored health care workers on accurately completing SSI surveillance forms. This initiative helped identify SSI cases accurately and improved their reporting into DHIS2, thereby informing national-level planning and decision-making.

Use of antimicrobial medicines optimized: In **Burkina Faso,** MTaPS supported the development of a formative supervision tool for the MOH to standardize AMS monitoring in HFs. MTaPS supported the multisectoral technical committee 5 (MTC5, also known as the AMS TWG) in **Cote d'Ivoire** to organize PPS-AMU in the 20 supported health facilities. To foster the institutionalization of AMU surveillance in health facilities, MTaPS supported MTC5 to develop PPS-AMU survey protocols, finalize the data collection tools, establish an online platform for data collection, and train data collectors. To advance the institutionalization of AMC surveillance in **Kenya** in accordance with WHO recommendations, MTaPS helped pilot the AMC surveillance tool, which has been successfully integrated into the PPB website and is ready for rollout. In **Nigeria**, the laboratories at HFs in Enugu State and Federal Medical Center Birnin-Kebbi have begun developing hospital antibiograms to guide appropriate antibiotic prescription. Furthermore, MTaPS supported the country's AMR TWG to develop a national OH AMS policy and strategy to provide strategic direction for AMS activities in the country.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

EFFECTIVE MSC-AMR

Strengthening MSC governance structures and functions: In **Burkina Faso**, MTaPS supported the TS/OHP to hold workshops to draft and validate the TS/OHP organogram, which has been submitted to the MOH for official endorsement.

Holding multisectoral meetings or activities: MTaPS **Cameroon** continued to work with the National Zoonoses Program, which currently serves as the national OHP, to organize a series of meetings to evaluate the progress in implementing the NAP-AMR and determine potential barriers and opportunities. Similarly in **Cote d'Ivoire**, MTaPS supported the AMR TWG to organize a coordination workshop for 27 participants (7 female) to review progress made in the implementation of the NAP-AMR (2021–2025). Furthermore, in **Kenya**, MTaPS facilitated NASIC meetings to evaluate the previous year's progress in AMR containment efforts and identify gaps and opportunities for improvement. As part of ongoing efforts to establish an e-learning platform in **DRC**, MTaPS collaborated with the ACOREP to organize a workshop to identify the learning modules to integrate into the platform.

Capacity building for implementing AMR containment activities: In partnership with the DAP in **Cote d'Ivoire**, MTaPS facilitated the AMS and IPC TWGs in conducting a second e-learning session for HCWs in July 2024. The AMS session was attended by 163 HCWs (45 female), while 110 HCWs (60 female) participated in the IPC session. By the end of the sessions, 71 participants (25 female) completed the AMS course, and 52 participants (26 female) completed the IPC course.

Drafting or updating multisectoral policies, plans, or guidelines: In the **DRC**, MTaPS supported the NC-AMR to organize an eight-day workshop to develop a new NAP-AMR, M&E framework, and operational plan. In **Kenya**, Four CASIC work plans were finalized and are now awaiting approval, while MTaPS helped the HCWM TWG to develop a roadmap for improving HCWM in the country. MTaPS **Mali** supported the National Institute of Public Health (INSP), DGSHP, and DPM to develop the OH strategy for scaling up IPC and AMS activities that was validated and submitted to the MOH for official endorsement. MTaPS **Nigeria** helped finalize the new NAP-AMR (2024–2028), which is now poised for launch.

IPC IMPROVED AND FUNCTIONAL

Strengthening facility IPC governance structures and functions: In **Kenya,** MTaPS supported facilities to review their implementation of CQI action plans and supported facility-led activities to celebrate World Patient Safety Day 2024 in four HFs. MTaPS **Nigeria** mentored two M&E focal persons and two IPC focal persons (one M&E and one IPC focal person each from Kebbi and Enugu states) to enhance the ongoing monitoring of state-level IPC activities.

Developing and implementing IPC policy and guidance documents: MTaPS supported the **DRC** MOH's Directorate of Hygiene and Sanitation to disseminate five standardized guidance documents on IPC and WASH in HFs, thereby standardizing IPC approaches and practices. In **Kenya,** MTaPS helped draft three SOPs on wound management, wound assessment, and management of diabetic foot ulcers to promote best practices in wound care and reduce the spread of HCAIs.

Developing individual and local training capacities: MTaPS oriented USAID SDPs on IPC guidelines and resources in **Kenya** to equip them with essential information for supporting HFs. Additionally, MTaPS facilitated a refresher training on IPC CQI for the Maragua Sub-County Hospital's IPC committee.

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Developing and implementing AMS policies, plans, and guidance documents, including AWaRe classification: In **DRC**, the National Guidelines for the Use of Antibiotics in Healthcare Services and Facilities that the National Pharmaceutical Regulatory Authority (ACOREP) developed with MTaPS' support were endorsed by the National Medicines Commission for launch and implementation, providing standardized local guidance for improving AMU in HFs. **Kenya's** national AMC tool was finalized and now awaits launch, and **Nigeria**'s NEML—incorporating AWaRe classification—was finalized. These are critical steps in institutionalizing AMC surveillance in both countries.

Assessing AMS capacity at the national and local levels and developing action plans: MTaPS **Cameroon** supported the Directorate of Disease Control and Pandemics (*Direction de Lutte Contre les Maladies, les Épidémies et des Pandémies*) to conduct field visits to 17 HFs across five regions to assess their laboratory capacities and analyze data on antimicrobial susceptibility testing. This information will

be used to prepare for the upcoming sensitization workshop on multidrug-resistant organisms. With MTaPS' support, the AMR TWG and MTC5 in **Cote d'Ivoire** conducted a series of preparatory meetings and workshops for the PPS, which included reviewing the Kobocollect platform for data collection. They also trained 18 investigators (1 female) and 48 data collectors (15 female) from targeted health facilities on the PPS protocol. In **Mali**, MTaPS supported the DPM to organize a meeting of 40 DTC members (3 female) from 16 supported HFs to review and monitor AMS practices using the WHO AMS practical toolkit. The results indicated considerable progress, with facilities improving their average score from 48% in 2023 to 65% in 2024.

Strengthening individual and local capacity: In collaboration with the NASIC AMS TWG, MTaPS **Kenya** facilitated a meeting of 150 participants to review an AMS clinical case. Additionally, MTaPS helped Kiambu County establish its County Medicines and Therapeutics Committee (CMTC) and later conducted an induction session for the members. MTaPS conducted several other training sessions in other facilities focusing on sustainable AMS practices. AMS training modules and an AMS mentorship toolkit developed in collaboration with MTaPS were validated. Furthermore, the program supported the drafting of three manuscripts, two of which were submitted for peer-reviewed publication.

BEST PRACTICES/LESSONS LEARNED

- MTaPS has observed increased participation from various sectors and subnational stakeholders in MSC-AMR across multiple countries, which is a result of sustained support and effective demonstration of key outcomes over the years and further fostered buy-in and commitment to the initiative.
- When planning activities in collaboration with partners, it is important to ensure that all activities are sufficiently budgeted and prioritized in all partners' work plans to promote alignment and ensure the efficient use of resources.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

	Activity and Description
Global	▪ Facilitate the USAID GHSA quarterly meeting ▪ Submit the GHSA semiannual reports to USAID, including USAID's GHSA indicators that relate to MTaPS GHSA work
MSC	▪ Support MSC meeting (BF, CD, CM, KE, ML) ▪ Support MSC bodies to develop a scale up plan and/or a sustainability plan (BF) ▪ Support evaluation of the status of implementation of the NAP-AMR using the NAP-AMR monitoring framework (CD, CM) ▪ Support the JEE self-assessment, dissemination, and validation of results (CM) ▪ Support WAAW celebrations (All) ▪ Cost the NAP-AMR (CD) ▪ Support inauguration of the reconstituted NASIC and support TWG meetings (KE) ▪ Launch Nairobi and Kiambu CASIC workplans (KE) ▪ Conduct end-term assessments for Kilifi and Murang'a Counties (KE) ▪ Pilot NAP-AMR M&E tools (NG) ▪ Organize EOP learning events (NG) ▪ Conduct lessons-learned and experience-sharing workshop (CI)
IPC	▪ Continue training for health care workers and facility mentorships (BF, CM, KE, ML) ▪ Continue to support IPC committee activities (BF) ▪ Develop the national antibiotic prescription audit data collection and analysis tool, protocol, and user guideline (BF) ▪ Draft and validate minimum IPC standards (CM) ▪ Finalize, launch, and disseminate the AMR mobile App and SOPs on wound management (KE) ▪ Conduct end-term assessments for Kilifi and Murang'a and hold dissemination workshops (KE)

AMS	▪ Continue to support DTC activities (BF, CM, KE, ML) ▪ Print and disseminate STGs (CM) ▪ Continue to support health care worker training (CM, KE) ▪ Adapt antimicrobial monitoring tools (CD)
BF – Burkina Faso; CD – Democratic Republic of the Congo; CI – Cote d'Ivoire; CM – Cameroon; KE – Kenya; ML – Mali; NG – Nigeria; SN – Senegal; TZ – Tanzania	

B. COVID-19

COVID-19 RESPONSE AND VACCINE INTRODUCTION

In May 2023, the 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 learned from the pandemic response, building on the OHP. The countries that completed and closed COVID-19 activities before the start of Quarter 4, 2024, include Bangladesh, Burkina Faso, Cameroon, Mali, Madagascar, Mozambique, Nigeria, the Philippines, Senegal, and Tanzania. Three MTaPS countries—Côte d'Ivoire, Kenya, and Rwanda—continued activities in Quarter 4 of PY6. In these countries, MTaPS supports the integration of COVID-19 experiences into national pandemic preparedness programs and supports national medicines regulatory authorities to attain higher maturity levels and enhance PV systems for vaccine safety, active safety monitoring, and investigation of reported adverse events.

CUMULATIVE PERFORMANCE TO DATE: KEY HIGHLIGHTS FROM THE COUNTRIES PRIOR TO QUARTER 4/Y6

In **Bangladesh:**

- 5,101 (1,679 female) health care workers from 1,275 HFs learned how to protect themselves and patients and to mitigate the spread of COVID-19 through IPC and WASH training.
- MTaPS supported the development and deployment of a COVID-19 vaccine logistic management information system (vLMIS) to manage COVID-19 vaccine inventory and distribution, ensuring uninterrupted access to vaccines and an impressive 82% COVID-19 vaccine coverage (as of December 2023). The vLMIS will be expanded by the DGHS for managing all vaccines of the national immunization program.
- Evaluation of more than 4,500+ COVID-19 AEFI reports submitted via an online AEFI reporting system generated 18 regulatory recommendations, including a post-vaccination waiting period and pre-vaccination blood pressure and diabetes screenings to prevent adverse events.

In **Burkina Faso:**

- To mitigate COVID-19 transmission and improve pandemic response, MTaPS and the MOH focused on rapid COVID-19 IPC and waste management training for 888 HCWs and on updating and disseminating SOPs, training materials, and informational IPC and waste management posters.
- An e-learning course on IPC has been developed and is available online to enhance pandemic preparedness.
- COVID-19 vaccination was successfully rolled out, with MTaPS supporting the development of 85 micro-plans and the training of 585 (80 female) vaccination agents in vaccine administration and AEFI reporting and management.

In **Cameroon**:

- Just-in-time trainings of 1,288 health workers were conducted on IPC, including waste management, to limit the spread of COVID-19 in HFs.

- COVID-19 IPC training package, SOPs, and job aids developed and disseminated to improve IPC and case management practices in HFs; 12 MTaPS-supported HFs improved IPC compliance scores from basic to intermediate, as measured by WHO IPC scorecards.
- With MTaPS support, 683,589 doses of the COVID-19 vaccine were administered in hard-to-reach areas supported by MTaPS in the Center, Littoral, and West regions.
- 140 health professionals from 37 private and faith-based private health facilities were trained on vaccination practices, including COVID-19 vaccine administration, to increase COVID-19 vaccination service provision.

In **Cote d'Ivoire**:

- In response to the COVID-19 pandemic, MTaPS trained 12 master trainers and 36 regional trainers on COVID-19 IPC capacity strengthening; as a result, 1,254 HCWs (418 females) improved their knowledge and practices in COVID-19 IPC and 17 Regional Hospital Centers (RHCs) and one University teaching hospital improved their medical waste management.
- Supported 7 COVID-19 national vaccination campaigns in 2022 and 2023, including microplanning in low-performing districts and training 2,786 (725 female) vaccinators on IPC, injection safety, and medical waste management in 113 health districts.
- To expand equitable access to COVID-19 vaccination services, MTaPS facilitated the introduction of the vaccine in private clinics and pharmacies by supporting a charter between the MOH and private-sector players and by training 323 health care professionals (123 female) from 50 private clinics and 94 pharmacies on safe vaccination services. As of December 31, 2023, 4,088 individuals were vaccinated in private clinics (3,163) and in community pharmacies (925).

In **Ethiopia**:

- National Preparedness and Response Plan and 24 guidelines and SOPs for COVID-19 were developed to improve country preparedness and response at the national and health facility levels.
- MTaPS developed a local solution to produce alcohol-based hand rub and eliminate the shortages in the supply of this crucial IPC product in health facilities.
- MTaPS, in collaboration with the EPHI, developed COVID-19 IPC training materials for HCWs and trained 447 trainers, who in turn strengthened the IPC capacity of nearly 2,500 health professionals working in 122 isolation, quarantine, and treatment facilities.

In **Kenya**:

- COVID-19 IPC training packages and IEC materials were implemented. MTaPS trained 5,099 workers, including trainers of trainers, in 33 counties on COVID-19 topics related to IPC, HCWM, and WASH to promote compliance with IPC practices. These trainers were used by MTaPS and various partners to cascade training of HCWs and for supervision in their respective counties.
- PPB's Emergency Use and Compassionate Use Guidelines assisted in expediting market authorization of COVID-19 vaccines, critical for rapid deployment and effective COVID-19 pandemic response.
- Under the PPB and MOH initiative, development of a mobile application and a short messaging service for reporting AEFIs related to COVID-19 and other vaccines and health products

significantly improved the monitoring of vaccine safety and response to AEs. The reported AEFIs increased from an annual total of 861 in 2021 to 3,251 in 2023.

In **Madagascar**:

- Central and peripheral medical laboratories of Madagascar (LA2M) personnel, trained on the roles of the National Reference Laboratory (NRL) and the implementation of QMS through the Leadership Development Program Plus (LDP+), have improved laboratory performance and ensured compliance with national and international standards.
- Standardized supply chain management processes for integrated procurement of laboratory commodities at the MOPH have been adopted, thereby preventing shortages and overstocking.
- MTaPS-supported guidelines on laboratory data management and integration into the national DHIS2 software harmonized reporting mechanisms for malaria, HIV/AIDS, TB, and COVID-19.

In **Mali**:

- An e-Learning platform with 10 standard IPC and 6 COVID-19 IPC modules launched, increasing access to IPC training in a sustainable way. The training of 30 master trainers (3 female) was cascaded to 326 health staff (59 female) nationwide.
- Enhanced waste management systems implemented nationwide, reducing the risk of infection transmission and ensuring safer handling and disposal of COVID-19-related waste, thereby contributing to overall public health safety.
- COVID-19 vaccination successfully rolled out, with vaccine safety ensured through the development and implementation of an AEFI surveillance manual and reporting tools and training of 383 (96 female) HCW on the use of AEFI emergency kits.

In **Mozambique**:

- More than 6,600 HCWs received training on COVID-19-related IPC and WASH; COVID-19 e-Learning modules were developed to support ongoing education, skills enhancement, and preparedness to effectively manage and mitigate the spread of COVID-19.
- COVID-19 IPC emergency supply chain management strategy developed, which was crucial for ensuring the timely distribution of essential medical supplies.
- IPC strengthened for a safe COVID-19 vaccination campaign by developing training materials and conducting cascade trainings for 130 HCWs (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**:

- A comprehensive mechanism for involving private community pharmacies and other private health care providers in mass COVID-19 vaccination established, setting a model for regulated participation, engagement, and integration into national programs.
- COVID-19 vaccine information management improved through SOP development and integration of private health provider data with the national management information system on the DHIS2 platform. This facilitates data analyses to assess the performance of private facilities or vaccination

teams to make evidence-based decisions, e.g., to increase immunization coverage, reduce vaccine wastage, and evaluate effectiveness of strategies.
- 123,143 doses of COVID-19 vaccines administered through 213 community pharmacies and 114 private hospitals.

In the **Philippines**:

- A tracking system for mechanical ventilators and medical devices from hospitals established and transitioned to the DOH Supply Chain Management Service, which will monitor the equipment and devices annually.
- COVID-19 vaccine management was integrated into eLMIS to produce logistics data consistency and COVID-19 vaccine supply chain efficiency.
- Over 15,600 learners completed COVID-19-related IPC, HCWM, and emergency supply chain courses developed by MTaPS through the DOH Academy's eLearning platform to strengthen the frontline response to COVID-19 and ensure standard practices in responding to the pandemic.
- 14,076 health workers and military personnel trained on IPC, HCWM, and supply chain management for COVID-19 through direct MTaPS support.

In **Rwanda**:

- National PV guidelines and SOPs updated to include COVID-19 vaccines; PViMS updated to incorporate COVID-19 AEFI reporting, enhancing safety surveillance for COVID-19 vaccines.
- 23 regulators and 159 health workers trained in COVID-19 vaccine PV, resulting in 1,708 COVID-19 vaccine AEFI reports submitted to national PV from June 2021 to December 2023, with MTaPS support, to help ensure safety, timely regulatory response, and trust in the vaccination program.
- The competency of the Rwanda FDA to assure quality of clinical trials was enhanced when 2 inspectors received training and mentorship in Good Clinical Practices and conducted the inspections of 10 clinical trial sites, including 1site administering COVID-19 vaccines to adolescents and adults.

In **Senegal**:

- Capacity of the MOH HEOC strengthened, allowing it to implement IPC for COVID-19 containment in 48 treatment centers in the 3 most affected regions—Dakar, Thiès, and Diourbel—and in 8 health facilities in 4 additional regions.
- SOPs updated on case management, IPC, surveillance, behavior change, communication, logistics, and vaccination for EVD and other hemorrhagic diseases.
- Needs assessment conducted at 18 land border entry points to provide EVD incident manager and other stakeholders with information on operating temporary care sites in accordance with EVD and hemorrhagic fever disease SOPs.

In **Tanzania**:

- Compliance with COVID-19 IPC standards improved among HCWs, enhancing the safety of both staff and patients during the pandemic through the effective use of standardized SOPs.

- Trained 1,373 (733 female) HCWs in 193 HFs countrywide as part of COVID-19 response to minimize the spread of the virus and protect HCWs and patients; mentored HCWs on the use of the SOPs to improve compliance and safe provision of services.
- Trained 1,022 HCWs, including 94 regional and district health management team specialists, in COVID-19 vaccine PV.
- 910 COVID-19 vaccine AEFIs (including 6 severe cases) were reported to the Tanzania Medicines and Medical Devices Authority, who then followed up with MTaPS' support (September 2022–July 2023), thereby helping to assure safety and trust in COVID-19 vaccines.
- The AEFI reporting system was enhanced to address the immediate needs of the COVID-19 vaccination program, which in the process also improved the AEFI and ADE reporting for other vaccines and medicines, thus increasing the safety of pharmaceutical services.

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 in turn 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 4/YEAR 6 HIGHLIGHTS FROM THE MTAPS COUNTRIES THAT CONTINUED TO IMPLEMENT ACTIVITIES THIS QUARTER

In **Cote d'Ivoire**, MTaPS, with CN240 funding, continued to support the national OHP. In Q4, MTaPS provided technical support to the workshop on "Multisectoral surveillance of Ebola, Marburg, and Lassa virus diseases at the human-animal-environment interface" in the Mountain region attended by 43 participants (9 female) representing the OHP secretariat and relevant partners and organizations. The workshop strengthened coordination of the multi-sector surveillance system for hemorrhagic fever diseases, and its participants drafted the roadmap for event-based surveillance and active surveillance in the Mountain region.

MTaPS also supported the OHP and partners to conduct a workshop on the harmonization of surveillance data collection tools and indicators and strengthening the prevention, detection, and control of priority zoonoses and collective food toxi-infections. The workshop was attended by 46 participants (10 female) representing OHP, Directorate of Veterinary Services, Directorate of Health, National Institute of Public Hygiene, Institute of Pasteur of Cote d'Ivoire, National Agricultural Laboratory, Directorate of Digital Health, Department of Wildlife and Hunting Resources, and financial partners such as CDC, USAID, WHO, HISP-CI, MTaPS, AFROHUN, Country Health Information Systems and Data Use (CHISU), FAO, IFRC. The workshop approved a list of key indicators for monitoring diseases such as rabies, TB, avian influenza, Marburg, Lassa, brucellosis, Ebola, COV MERS/SARS, and Dengue fever, among others.

In **Kenya**, MTaPS supported the PPB to validate, align, and pilot-test the National Pharmacovigilance Risk Communication and Response Plan and the SOP for risk management of PV activities; a validation and alignment workshop was held July 8–12, 2024, at which a PV risk scoring matrix was validated and 9

PV SOPs were reviewed for alignment. Additionally, MTaPS supported the PPB to review the technical report on the post-intervention assessment of selected health facilities, marketing authorization holders, and public health programs to ascertain the implementation status of PV interventions. Upon request by the PPB, a comparative analysis was done for the assessments conducted in 2017, 2020, and 2024. Dissemination of the final report is planned for early October 2024.

In **Rwanda**, MTaPS further updated OpenRIMS-PV to meet the WHO requirements for the electronic transmission of an individual case safety report, E2B R3 standard, to ensure its full interoperability with the WHO VigiFlow. To ensure sustainability, MTaPS trained 10 Rwanda FDA staff, including 6 ICT team members (4 female) and 4 PV staff (2 female), on the updated version of OpenRIMS-PV. Also, in conjunction with the good clinical practices lead inspector, MTaPS developed 4 tools for the evaluation of different stages of clinical trial studies, including an evaluation form for serious adverse events, investigations brochures, development safety update reports, and periodic safety update reports. These tools will improve the compliance monitoring of clinical trial sites by the regulatory authority.

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

Table 1. MTaPS COVID-19 Quarter 4, FY24, indicators (breakdown can be found in annex 3)

Indicator and Disaggregation		Q4 FY24[3]	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		10	1,491	12,827
Sex	Male	4	744	6,870
	Female	6	575	5,765
	Unknown sex	0	172	192
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		4	23	9,410
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.2.6-22 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		13	44	166
One Health Indicators[4]				
COV 24 Number of technical documents developed or updated with MTaPS support that contribute to the One Health Platform				
Number of technical documents		0	3	3
COV 25 Number of workshops that MTaPS participated in to conduct a risk analysis of the human-environment-animal interface using the IHR States Parties Self-Assessment Annual Report (SPAR) Organisation Mondial de la Sante (OMS) tool				
Number of workshops		0	1	1
COV 26 Number of One Health-related meetings or workshops organized with MTaPS support				
Number of meeting or workshops		2	50	50

[3] The following countries have approved COVID-19 work plans and completed activities during PY6 quarter 4: Côte d'Ivoire, Kenya, and Rwanda.

[4] Cote d'Ivoire received COVID-19 funding via CN240 to implement One Health-related activities in FY24. These indicators were created in FY24 to capture results from these activities.

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, just 37% of Africa's population had completed their primary vaccination series as of June 2023, compared with a coverage of 70% at the global level.

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 data, 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 they remain grounded in the realities faced by LMICs.

Some resources exist, such as tools and guidance developed by WHO and its partners, that 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 a protocol 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 20 facility-level secondary data collection. After MTaPS received IRB approval from the National Health Sciences Research Committee (NHSRC) of Malawi, a team of experts immediately started the data collection 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 carried out and completed by the end of June 2023.

Although the global COVAX model was a powerful tool for estimating 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 our 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 that 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, supplies availability, cold chain capacity, 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. 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.

Additional work

Findings from both the country studies and the global surveys were presented at the Immunization Economics Special Interest Group Pre-Congress Session of the International Health Economics Association 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 three 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 an 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 for major stakeholders at the USAID-UNICEF-led Funders Forum and the USAID COVID-19 Task Force Leadership.

YEAR 6 ACHIEVEMENTS & RESULTS

In year 6, MTaPS disseminated the global surveys and costing work in Malawi with presentations to the USAID Malawi mission and the Ministry of Health in Malawi and submitted publications to the Vaccine and Cost Effectiveness and Resource Allocation journals. This work has contributed to gathering real-time COVID-19 vaccine delivery data throughout the changing dynamics of the pandemic. Though the global COVAX model was a powerful tool for estimating the cost to deliver COVID-19 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 amount of time health workers had to dedicate to the vaccination efforts.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

Findings from the costing work in Malawi were submitted as a manuscript to Springer Nature's Journal of Cost Effectiveness and Resource Allocation and available as a preprint.

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 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 on key messages and action points for 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 the 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. MTaPS supported SADC/ZAZIBONA to hold a special joint review of MNCH medicines in Tanzania in October 2023. MTaPS has developed an advocacy document for NRAs to prioritize the registration of MNCH medicines in their countries.

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 the AMDF. MTaPS then 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 assessors from 10 African countries. The participants appreciated the opportunity to review the technical files for three MNCH medical devices, to learn from the process, and to apply the specific guidance that the AMDF published, with MTaPS' support. Building on this work, MTaPS provided additional support to the TMDA to improve the regulation of medical devices, with a focus on MNCH devices, to position it to be potentially considered as a regional center of excellence once the criteria are established by the AMDF. This included an exchange visit in February 2024 by two TMDA staff to the Saudi Food and Drug Authority (SFDA), which is a WHO collaborating center for medical device regulation. MTaPS also supported the TMDA in hosting three regulators from Africa—from Burkina Faso, Burundi, and Togo—selected by the AMRH for a twinning visit to build both the TMDA's capacity to mentor and the visitors' capacity to regulate.

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 the inclusion in the GFF annual report of a section on managing medicines. 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 the 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 GHSC-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 in including nonmalaria commodities at the community level in their GF funding requests, MTaPS developed tools for estimating their needs and facilitating completion of the commodities gap analysis table required for GF funding requests. MTaPS participated in the mock Technical Review Panel for malaria in Senegal and Ethiopia, engaging with countries submitting funding requests in windows 2 and 3. MTaPS worked with seven countries (Angola, Ethiopia, Gambia, Kenya, Liberia, Madagascar, and Rwanda) to consider including nonmalaria iCCM commodities in their GF funding request—three countries ultimately included nonmalaria commodities. Also, MTaPS presented at a webinar on supply chain for community health workers hosted by the commodities and iCCM subgroups of the CHTF with GHSC-PSM.

After identifying a gap in support for countries to ensure quality of medical oxygen, MTaPS developed, through a consultative process, a technical resource document for the quality assurance of medical oxygen, from the source through the distribution chain to delivery to the patient. The document was disseminated in a well-attended virtual event featuring panelists and oxygen champions from across Africa, and it was also used in a workshop on quality assurance (QA) of oxygen in Rwanda, cohosted with the RBC, to reflect on how QA practices for medical oxygen can be modified and/or improved. The workshop resulted in a draft QA framework for medical oxygen systems in Rwanda. Kate Kikule and Jane Briggs from MTaPS then participated in the WHO meeting, "National Oxygen Scale-Up Framework: Road to Oxygen Access," in Dakar, Senegal, in May 2024, presenting a poster on the QA resource document and the work supported 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 (the 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 at the 2nd Global Pneumonia Forum in Madrid in April 2023, during webinars for USAID missions, and with the CHTF to spark action at the country level. MTaPS drew on the call-to-action development to collaborate with Madagascar's Directorate of Family Health in August 2024 to define actions to improve access to and use of amoxicillin, gentamicin, and other child health products in the country.

YEAR 6 ACHIEVEMENTS & RESULTS

MTaPS continued its work to strengthen the regulation of MNCH medical devices this year and, building on the previously developed guideline on specific considerations for regulating MNCH medical devices, MTaPS and AMDF collaborated to hold an in-person capacity-building workshop in Tanzania, hosted by the TMDA, for assessors from 10 African countries. MTaPS also supported a study visit by two TMDA assessors to the SFDA, a WHO collaborating center for medical device regulation, that established cooperation between the TMDA and the SFDA for future consultations and information exchange. MTaPS then supported the TMDA in hosting three regulators from Africa—from Burkina Faso, Burundi, and Togo—selected by the AMRH for a twinning visit to build both TMDA's capacity to mentor and the visiting regulators' capacity in regulating medical devices, with a specific focus on MNCH medical devices.

As part of efforts to streamline the registration of MNCH medicines, MTaPS supported SADC/ZAZIBONA to hold a special joint review of MNCH medicines in Tanzania, facilitated by MTaPS, WHO, and the ZAZIBONA coordinators, in October 2023. 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 following review of the technical files.

During the 6th Biennial Scientific Conference on Medical Products Regulation in Africa (SCoMRA) in Egypt in December, AUDA-NEPAD and MTaPS successfully cohosted a side meeting on the prioritization of registration of MNCH medicines. The meeting was well attended, with approximately 60 attendees. MTaPS presented the document to help NRAs advocate for the prioritization of registration of MNCH medicines, which stimulated rich discussion. The advocacy document has been finalized, reflecting stakeholder feedback, and will be disseminated jointly with the AMRH.

In 2023, MTaPS made an oral presentation on optimizing MNCH products registration at the Reproductive Health Supplies Coalition general members meeting in Ghana, a poster presentation at SCoMRA, Egypt, and additional poster presentations on subnational procurement of MNCH medicines and social accountability for improved access to MNCH medicines at the Global Health Supply Chain Summit in Kenya.

MTaPS also built on its QA of oxygen technical resource to support Rwanda to improve its systems for managing and administering quality medical oxygen. MTaPS and the RBC collaborated to hold a workshop on QA of oxygen in November 2023. Workshop participants reviewed the status of QA practices for medical oxygen in the country, used the MTaPS QA of oxygen technical resource, visited health facilities to observe medical oxygen systems practices, and reflected on how those practices can be modified and/or improved. Participants, who spanned all applicable sectors and cadres, developed a draft QA framework for medical oxygen systems in Rwanda.

QUARTER 4/Y6 ACHIEVEMENTS & 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 worked with the TMDA to finalize the report on the twinning visit it hosted in March for three regulators from the African continent to both gain capacity to mentor and build capacity of the visitors to regulate medical devices. The report has been submitted to USAID. The TMDA continues to follow up on the country action plans developed by the three regulators and has formed a WhatsApp group to facilitate follow-up and mentorship. MTaPS also developed and is finalizing a technical highlight on its work on the regulation of MNCH medical devices.

Supporting the streamlining of registration of MNCH medicines at the continental level: MTaPS finalized the document to help NRAs advocate for the prioritization of the registration of MNCH medicines. The advocacy document is co-branded with the AMRH, and MTaPS and the AMRH are preparing for its dissemination, targeting the AMRH Week scheduled for the end of October 2024 and other avenues. MTaPS also developed a technical highlight on its work on registration of MNCH medicines. The document is under finalization prior to sharing with USAID.

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 had exchanges with the Clinton Health Access Initiative (CHAI) team in Kenya regarding the introduction of caffeine citrate for treating apnea of prematurity in the country. MTaPS and CHAI are collaborating to develop a caffeine implementation guide and will integrate country learning from Kenya and other relevant countries, such as Ethiopia and Nigeria.

Supporting countries in defining actions to improve uptake of amoxicillin and gentamicin: MTaPS supported Madagascar's Directorate of Family Health (DSFa) to facilitate a workshop on August 21–22 to define actions to improve access to and use of amoxicillin for childhood pneumonia and the treatment of possible serious bacterial infection in newborns. The 1.5-day workshop was organized within a broader four-day reproductive, maternal, newborn, child, and adolescent health plus nutrition (RMNCAH-N) stakeholder coordination meeting that aimed to validate the 2025–2029 RMNCAH-N investment case and develop the first draft of its implementation plan. MTaPS worked closely with the DSFa's service for child and adolescent health (Service de la Santé de l'Enfant, des Adolescents et des Jeunes, or SSEAJ) and other in-country partners from the USAID-funded Improving Market Partnerships and Access to Commodities Together (IMPACT), Accessible Continuum of Care and Essential Services Sustained (ACCESS), and MOMENTUM Country and Global Leadership (MCGL) projects to develop the agenda and content for the 1.5-day workshop. Although the workshop focused on amoxicillin and gentamicin, it included an additional focus on oral rehydration salts (ORS)/zinc and child health products more broadly at the request of the SSEAJ.

The workshop included a situation analysis focusing on key aspects of access to and use of amoxicillin, gentamicin, and ORS/zinc, including national treatment guidelines and product registration, availability, and affordability. Jane Briggs of MTaPS introduced the previously developed call-to-action document, touching on each of the four key bottlenecks (quantification, financing, quality, and use) and a range of

possible interventions to address them. Participants then identified weaknesses and possible interventions to address the four bottlenecks. Priority actions are being integrated into the implementation plan for the DSFa's 2025–2029 RMNCAH-N investment case. MTaPS is developing a case study on the defined country actions to improve access to and use of amoxicillin and establish next steps.

Dr. Fetrarivo Navalona Rakotomahefa (DSFa, Madagascar) starting the workshop on access to and appropriate use of amoxicillin and other child health medicines, August 2024. Photo credit: Jane Briggs, MTaPS

Group discussing challenges of quantification and distribution at the workshop on access to and appropriate use of amoxicillin and other child health medicines, August 2024. Photo credit: Jane Briggs, MTaPS

Promoting improvement in QA of oxygen: While in Dakar, Senegal, in May for the WHO meeting, "National Oxygen Scale-Up Framework: Road to Oxygen Access," Kate Kikule of MTaPS was invited to join a technical working group on the regulation of oxygen established by WHO. She has been engaging with the technical working group through virtual meetings and working to review a draft document on regulatory considerations for medical oxygen and submitting recommended changes, together with other experts invited to review the document.

BEST PRACTICES/LESSONS LEARNED

- Collaboration with a more advanced regional national regulatory authority for transfer of knowledge and information as well as skills enables sustainable gains in improving the regulation of medical products, including those for MNCH.
- Engagement of all stakeholders is critical to address the bottlenecks of access and appropriate use of medicines for child health—not just the central medical stores or the MNCH program. Targeted interventions need to be multi-faceted.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Building capacity for regulating medical devices in a region, with a focus on MNCH medical devices: ▪ Finalize technical highlight on regulation of MNCH medical devices	October 2024
Supporting the streamlining of registration of MNCH medicines at the continental level: ▪ Finalize technical highlight on the registration of MNCH medicines ▪ Disseminate the advocacy document on the prioritization of registration of MNCH medical products	October 2024 October–December 2024

Supporting countries in defining actions to improve uptake of amoxicillin and gentamicin: ▪ Finalize case study on the defined country actions to improve access to and use of amoxicillin and next steps	October–November 2024
Improving access to new and essential maternal and newborn commodities ▪ Develop the caffeine implementation guide	October–December 2024

D. OFFICE OF POPULATION & REPRODUCTIVE HEALTH, COMMODITY SECURITY AND LOGISTICS

OVERVIEW

USAID's CSL division promotes the continuous availability of a range of high-quality contraceptives, condoms, and other essential RH supplies by strengthening global and country systems, from manufacturers to SDPs. With funding from CSL, MTaPS supports this mission by analyzing the context and recommending strategies to improve the financing, supply, and logistics services for family planning and RH commodities, ensuring their consistent and optimal availability and accessibility. 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 TA, government financing of FP/RH commodities will increase. This will contribute to stronger supply and logistics services and result in the improved availability of, and access to, these commodities at SDPs.

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 the 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, 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 Government of Uganda 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 project, and the policy brief and methods module were referred to in a USAID LHSS primer, "The Importance of Political Economy Analysis for Strengthening Health Commodity Supply Chains."

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 into 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) as well as 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 CONSUMPTION TRACKING AND WORKFLOW MANAGEMENT TOOL TO DECREASE UNMET DEMAND AND FROSTER CONTINUOUS CONTRACEPTIVE USE AT LAST-MILE POINT OF CARE

MTaPS completed an impact evaluation of the 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 people of childbearing potential at the last mile. 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 of childbearing potential at the last mile
- Understand the impact of the intervention on the FP stock management of and dispensing by community-based distributors (CBDs)
- 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 HFs 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: short phone surveys with people of childbearing potential in the community; existing stock management records (eLMIS and paper records, depending on study arm); and in-depth interviews with CBDs and health systems staff. The endline report is complete and a manuscript for peer review is being finalized.

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 that was 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. Although 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.

ENGAGING 3PLS/4PLS TO SUPPORT THE PUBLIC HEALTH SUPPLY CHAIN TO INCREASE ACCESSIBILITY AND AVAILABILITY OF FP COMMODITIES

In 2021, MTaPS, in collaboration with government counterparts, initiated the first phase of a project to leverage the capabilities of best practice 3PLs and lead logistics service providers. This phase included 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 both countries, describing the 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 to help public-sector decision-makers evaluate key factors and steps to determine whether engaging private-sector service providers to support the public health supply chain is beneficial for their specific context.

In 2022 and 2023, MTaPS focused on implementing key recommendations from the first phase of the activity in Nigeria. In close collaboration with the National Products Supply Chain Management Program (NPSCMP), state health supply chain management teams, and development partners, MTaPS produced an implementation guide entitled, "Operationalizing a Third-Party Logistics Service Provider (3PL) or a Lead Logistics Service Provider (LLP) Supply Chain Model." This guide is intended to be incorporated into a larger government document to support operationalizing of the federal MOH's policy on engaging private-sector service providers for strengthening the public health product logistics systems.

Kaduna State in Nigeria 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 of best practice 3PL and LLP engagement for outsourcing health commodity distribution, including FP products, in Kaduna State. Although these documents focus on Kaduna State, the approaches can easily be adapted for use in any state or for any element of the supply chain. 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, state officials, and development partners. The workshops raised awareness, strengthened local capacity, and advocated for more effective private-sector engagement in public-sector health commodity logistics management. The resources developed for national- and state-level use were also validated during the workshops. They are available online and were shared with Nigerian government counterparts at federal and state levels as well as the Africa Resource Centre Nigeria.

YEAR 6 ACHIEVEMENTS & RESULTS

During year 6, MTaPS collected endline data on the OpenSRP intervention in Zambia. Following data analysis, the team developed the endline report, which is now complete. A manuscript on the evaluation design and findings is ready for submission. Overall, with respect to the primary outcome of FP resupply, the intervention had little effect on FP access to preferred methods that require a resupply from CBDs. At endline, clients in both the control and intervention arms found it easy to obtain the FP products (96%) and they reported high levels (97.5%) of satisfaction with the counseling they received. Clients in the intervention arm reported significantly higher ease of use of FP and higher satisfaction compared to those in the control arm. Regarding the secondary outcome of stock management, there was a statistically significant and programmatically meaningful improvement in CBD stock levels of the intervention group, especially in the availability of injectable FP products. The findings suggest that the OpenSRP application supports CBDs in their supply management and enhances the quality of the client service delivery. While HF and district staff emphasized the application's utility for quality of service delivery and better stock management and planning, CBDs emphasized the improvement in their recordkeeping and workflow efficiency.

The team also showcased the OpenSRP work in various forums this year, including as a poster at the Global Health Supply Chain Summit (November 2023 in Nairobi, Kenya), the American Public Health Association Meeting (November 2023 in Atlanta, Georgia), and the 2023 Global Digital Health Forum (December 2023 in Washington, DC), as well as an oral presentation at the People that Deliver Global Indaba (March 2024 in Bangkok, Thailand).

MTaPS completed the 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 documentation is under finalization, and MTaPS presented the work as an oral presentation at the Global Health Supply Chain Summit in Nairobi, Kenya in November 2023 and as a poster at the People that Deliver Global Indaba in Bangkok, Thailand in March.

This year, MTaPS finalized the guidance document on operationalizing a 3PL supply chain model, service specifications, performance management plan for outsourcing last mile distribution of health products, and training report. To facilitate adaptation and wider application across other states of Nigeria and countries, MTaPS created generic versions of the service specifications and performance management plan, which were originally tailored for Kaduna State. MTaPS shared final versions of all resources with Nigeria government counterparts, including NPSCMP and the Kaduna State Health Supplies Management Agency, for use and broader dissemination. In turn, NPSCMP distributed the resources to all states via email. MTaPS also shared the resources with the Africa Resource Centre, which plans to use them in Kaduna and other states, as appropriate. All resources developed during both phases of the 3PL/4PL activity are available on a dedicated webpage for further dissemination and use by stakeholders.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

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

MTaPS revised the endline evaluation report to address USAID comments and submitted the finalized report in August. MTaPS also finalized the manuscript on the evaluation findings, which is ready for peer review submission. The team held a debrief meeting with the USAID Mission in Zambia in August. Attempts to schedule a debrief with the Ministry of Health have been unsuccessful, initially due to staff availability.

MTaPS is currently finalizing a poster entitled, *The impact of a digital stock and service management tool on family planning commodity distribution in rural Zambia*, which was accepted for the Global Health Supply Chain Summit scheduled for November 2024 in Lagos, Nigeria.

ACTIVITY 2: DISABILITY INCLUSION IN THE HEALTH SUPPLY CHAIN WORKFORCE

MTaPS is finalizing the case study on Ethiopia and the manuscript. The team will then submit the manuscript for peer review, pending final approval from USAID.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
OpenSRP: Submit manuscript for peer review	October 2024
Disability inclusion in the health supply chain workforce: Finalize manuscript for submission	October 2024
Disability inclusion in the health supply chain workforce: Finalize case study	October 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 NRAs. 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 (TC). MTaPS has also worked with the AMRH Secretariat to develop a continental reliance framework and strategy for digitalization of the regulatory IMS for the AMA's consideration. MTaPS has worked with various AMRH TCs, such as the African Medical Devices Forum, Evaluation of Medicinal 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 9,554 certificates between October 2022 and September 2024 to participants across the globe for completing PSS 101 (1,698 certificates); Good Governance in the Management of Medicines (1,087 certificates); Antimicrobial Resistance (Part 1) (4,546 certificates); and Antimicrobial Resistance (Part 2) (2,223 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 175 global conference abstracts and has published 27 peer-reviewed manuscripts since the start of the project.

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

MTaPS developed and 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 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.

YEAR 6 ACHIEVEMENTS & RESULTS

This year, MTaPS contributed to advancing the PSS global learning agenda through a range of Cross Bureau activities. MTaPS hosted a PSS learning series from January to April 2024 featuring webinars on four PSS topics. The series saw 516 participants across the series (47.3% female), which included 414 unique participants. Throughout the series, speakers provided key examples and insights that underscored the value of PSS for advancing program health goals and outcomes, stimulating rich exchanges with participants. MTaPS also developed and released two new PSS advocacy animations in English and French highlighting key pharmaceutical challenges in LMICs and the comprehensive approach required to strengthen pharmaceutical systems.

MTaPS showcased its work at 18 global and regional conferences this year through a variety of posters, oral presentations, and panels, demonstrating the program's technical leadership. MTaPS also conducted PSS workshops at the PtD Global Indaba 2024, SAPICS 2024, and PharmaConnect 2024, disseminating a wide range of PSS-related tools and materials.

MTaPS successfully engaged local institutions from francophone Africa and Haiti through a three-day, French-language PSS skills exchange with more than 140 participants each day. There was great interest and engagement from participants, underscoring the importance of French-language PSS resources for francophone professionals. MTaPS now has a French-language PSS resources page available to complement the previously developed English-language page.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

ACTIVITY 3.3.1_6A: PSS 101 COURSE

Following extensive direct and email-based marketing of the October course to potential USAID participants by MTaPS, MSH, and PQM+ staff, the needed critical mass of participants was not reached and the decision was made with USAID to defer delivery to January 2025. With more than 100 USAID staff having taken this course in recent years, the consensus is that we are moving toward saturation. Preparations are ongoing for the January 2025 delivery, taking into account USAID feedback from the March 2024 delivery. MTaPS also continued to explore options for hosting its various PSS-related courses. OpenWHO is undergoing a platform transition that precludes it from adding PSS 101 at this time. MTaPS is in ongoing conversations with the World Continuing Education Alliance, which provides access to CPD/CME education for health professionals, regarding the possibility of hosting PSS 101.

MTaPS continues to promote GHeL e-learning courses, with 168 and 84 certificates issued this quarter for the completion of the GHeL PSS 101 and Good Governance courses, respectively. The GHeL AMR (Part 1) and AMR (Part 2) courses saw 412 and 234 certificates earned this quarter, respectively.

ACTIVITY 3.3.2: MTAPS CLOSEOUT ACTIVITIES

Sub-activity 3.3.2.1: Journal special issue

MTaPS submitted six manuscripts to the *Journal of Pharmaceutical Policy and Practice* (JoPPP) this quarter, and they are currently under review:

- 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
- Costs of the Supervision, Performance Assessment, and Recognition Strategy (SPARS) for medicines management in Nepal: evidence from a pilot study
- Inter-rater reliability and validity of Supervision, Performance Assessment, and Recognition (SPARS) indicators to assess medicines management in public health facilities in Nepal
- An exploratory study of the mandate and functions of National Pharmaceutical Services Units: Global trends and the case of Côte d'Ivoire, Kenya, and Nepal
- The registration status of maternal, newborn, and child health medical products: evidence from nine countries

We are on track to submit 12 to 14 manuscripts on a rolling basis through December 2024.

Sub-activity 3.3.2.2: Francophone PSS Skills Exchange

MTaPS submitted the final report on the April 2024 francophone PSS skills exchange delivery to USAID in July. We also organized a mentoring program for interested francophone PSS skills exchange participants, modeled after the mentoring program developed in 2023 that was offered to participants of the East Africa and Southeast Asia PSS skills exchanges. Francophone PSS skills exchange participants had the opportunity to submit an expression of interest for the program, and we selected participants based on pre-established criteria (local organizations, range of countries, alignment of priorities). We offered coaching in PSCM (six participants) and PV (seven participants), with two sessions offered for each group led by subject-matter experts. Sessions highlighted approaches and tools, innovations, new resources, and country case studies with a focus on how participants could apply them in their area of work. Beyond the group sessions, participants were eager to maintain contact with each other for more effective networking and to continue to exchange experiences and best practices with francophone colleagues.

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

Based on exchanges during the previous quarter, MTaPS developed and shared a technical brief with the Global Fund proposing a technical exchange on several PSS topics. MTaPS is awaiting a response to the most recent outreach to the Global Fund team.

Sub-activity 3.3.2.4: Global event participation

MTaPS participated in the ISoP Africa Meeting and PharmaConnect Africa Conference this quarter. At ISoP Africa in Kampala, Uganda, in July, MTaPS' participation included seven presentations (two oral, five poster) and co-chairing a session. MTaPS received an award for best posters at the conference based on technical content and design. At PharmaConnect in Lusaka, Zambia, in August, MTaPS delivered five presentations (two oral, three poster) and hosted three workshops: a PSS skills building workshop, a career development workshop for pharmacy students, and a capacity development workshop for academics.

MTaPS also undertook preparations for participation at the ISoP Annual Meeting in Montreal, Canada, in October, where the team had five abstracts accepted as posters. Preparations are underway for the Global Health Supply Chain Summit, planned for November in Lagos, Nigeria, where MTaPS will deliver five presentations (two oral, three poster) and the 8th Global Symposium on Health Systems Research, scheduled for November in Nagasaki, Japan, where MTaPS will deliver one oral presentation.

EXTENDED YEAR 5 ACTIVITIES

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

The AMRH Secretariat held internal discussions regarding the previously developed Continental Reliance Framework in preparation for submission to the AMRH SC, which is scheduled for October 2024. MTaPS is planning for its participation in the Evaluation of Medicinal Products (EMP) TC meeting and AMRH week in Mozambique to discuss and prepare for approval of the Continental Reliance Framework. Leveraging the work previously supported to develop the overarching standard procedure for the continental registration process by the AMRH EMP TC, MTaPS also provided TA to the EMP TC

to conduct the first continental joint assessment session July 22–26, 2024, in Durban, South Africa. The EMP TC received more than 46 expressions of interest from targeted manufacturers and compiled a list of priority products for joint review, including innovator products and vaccines. The joint assessment session involved the evaluation of 10 product applications using the continental evaluation procedure. MTaPS facilitated the participation of two experts from Cameroon and Egypt in the session, and MTaPS Senior Technical Advisor Nereah Kisera participated as an AMRH technical partner, providing technical support during the technical file review session.

MTaPS and PQM+ conducted a final technical review of the digitalization strategy. The document is undergoing final copyediting in preparation for handover to the AMRH Secretariat/IMS TC for processing through the AMRH SC for approval and subsequent implementation.

ACTIVITY 3.3.1: MEASURING PSS, INCLUDING ACCESS TO MEDICINE

MTaPS arranged a demo of the PSS Insight website for USAID in July. The privacy impact assessment is in progress, and MTaPS is finalizing its internal technical review of the website. MTaPS is revising the draft manuscript on PSS Insight tool development and piloting, which will be submitted as part of the JoPPP series.

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

After receiving all necessary approvals and a supporting letter from Tanzania's government, MTaPS began data collection in Tanzania in September. Data collection is expected to be completed in mid-October.

Political uncertainty in Bangladesh impeded progress on the dissemination of the HPHC tool assessment findings. The Mission advised MTaPS in August 2024 to close the activity in the country.

EXTENDED YEAR 4 ACTIVITIES

ACTIVITY 2.2.1: DEVELOPING A METHODOLOGY FOR ASSESSING THE ROLES OF NATIONAL PHARMACEUTICAL SERVICES UNITS (NPSUS) AND THEIR CAPACITY TO FULFILL THEIR MANDATE

The team submitted the manuscript reporting the findings for review as part of the PSS special series in JoPPP.

ACTIVITY 5.4.1: TESTING BEHAVIORAL NUDGES FOR AMS

The team received feedback from USAID on the draft manuscript. After addressing the feedback, the team finalized the manuscript and submitted it to a peer-reviewed journal.

BEST PRACTICES/LESSONS LEARNED

- Increasing global exposure to MTaPS' learnings and tools requires adapting to changing environments and contexts. This has included exploring new platforms for hosting MTaPS' e-learning courses, such as WCEA, and piloting new workshop approaches at PharmaConnect and other conferences.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
PSS 101: ▪ Undertake preparations for January course delivery	October–December 2024
Journal special series: ▪ Continue work on articles and submit on rolling basis	October–December 2024
Support AUDA-NEPAD in the ongoing creation and operationalization of AMA: ▪ Participate in the EMP TC meeting and AMRH week ▪ Hand over the digitalization strategy to the AMRH Secretariat/IMS TC	October 2024 October–December 2024
PSS Insight: ▪ Pending approval, transfer website to its permanent domain and initiate dissemination plan ▪ Submit manuscript ▪ Complete review of PSS Insight guide for stakeholders	October–December 2024 November–December 2024 October 2024
HPHC tool implementation: ▪ Complete data collection in Tanzania	October 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 improve outcomes for all sexes and genders.

These outputs support the broader cross-cutting 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 to discuss 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. Although 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.

Three 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 input 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. It provided context-specific examples of how gender-inclusive policies fit across MTaPS' five program objectives.

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, MTaPS' partner Overseas Strategic Consulting, with input from the SMT, developed and launched a survey to assess the use and usefulness of the gender integration guide (developed in Year 2) for Year 3 work planning. The survey was distributed to all staff. In brief, only 1/3 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 1/3 of respondents used the guide, and only 25–30% 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-focused 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 the 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/

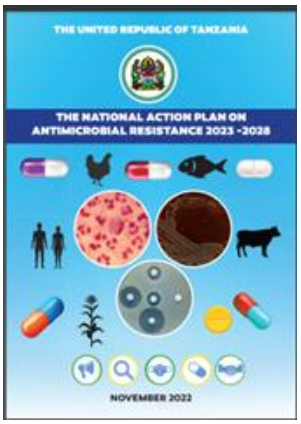
To reinforce the necessity of sex and gender integration in PSS, a MTaPS knowledge exchange series and staff meeting presentations were given to the COR and MTaPS staff.

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 cross-cutting 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," country teams participated in one-on-one meetings for education, mentoring, and assistance 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 continued 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 e-Learning 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 gave knowledge exchange and webinar presentations to staff, the COR, and partners and presented a module in PSS 101 for USAID staff. The gender advisor gave 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" at the 2022 Global Health Security Conference in June/July 2022 in Singapore. MTaPS published a Gender Gist blog following the conference 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 e-Learning modules developed in Quarter 3 required additional knowledge checks and pre-/post-test questions.

In Year 5, the portfolio capitalized on normalizing sex and gender impacts as a cross-cutting 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.mtapsprogram.org/news-blog/where-the-wild-things-are-missing-the-forest-for-the-trees/
- 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 such as the MIS guidance and Philippines workforce development plan written during Quarter 1. Finalizing the animation of the e-Learning 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 e-Learning 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, as 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

PY6 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 e-Learning modules. This presentation was a summary of the e-Learning materials and a primer for adult learning as a means for follow-up after learners utilized the e-Learning modules. The gender advisor reviewed and edited a survey for GAD and the Philippines technical brief on the e-Learning module process. PSS 101 was implemented during this quarter; a sex, gender, and PSS module was included in the course.

YEAR 6 ACHIEVEMENTS & RESULTS

In PY6, the sex and gender slides for the Philippines Department of Health e-Learning module were finalized and a presentation to the Philippines GAD meeting was held to launch the e-Learning materials and a primer for adult learning as a means for follow-up after learners utilized the modules. A survey for GAD and a Philippines Technical Brief on the e-Learning module process was also reviewed and finalized.

The PSS 101 course was implemented during quarter 2 which included a finalized sex, gender, and PSS module.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

The gender portfolio concluded at the end of PY6 Quarter 3.

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, effective, 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 SCM system.

CUMULATIVE PERFORMANCE TO DATE

In PY1, MTaPS supported the government in developing a long-term strategic procurement plan. In PY2, MTaPS developed a TOE—a prescribed standard of organization, staffing, and equipment for different units of HFs with 10- to 500-bed capacity—and in PY4 updated its reference prices. MTaPS updated the specifications of the MSR list in PY2 and assisted the MSR List Updating Committee in developing a strategy for regularly reviewing and updating standard reference prices in PY3. In PY4, with MTaPS' TA, the procurement oversight bodies of the MOHFW and DGHS started implementing a paper-based system to monitor procurement performance using standard key indicators through quarterly assessments. In PY6, MTaPS assisted DGHS to develop a handbook to streamline public procurement for their personnel. MTaPS capacitated the DGHS on basic procurement practices (through e-Learning) and the electronic government procurement system. Enhanced offline versions of the UIMS and WIMS were integrated into the DGFP eLMIS in PY1, streamlining inventory management functionalities, ensuring real-time logistics transactional data, and improving SCM. MTaPS supported DGFP to ensure uninterrupted availability of FP commodities at the warehouses and maintained a stockout rate below 1% at SDPs from May 2019 to September 2023, thereby saving financial resources. With MTaPS' TA, the DGHS comprehensive eLMIS is functional in 33 HFs within 4 selected districts (Nilphamari, Feni, Gopalaganj, and Moulvibazar) and at the CMSD. With MTaPS' support, Hospital Services Management (HSM)/DGHS completed the scale-up of the eAMS in all 61 DHs in PY2. MTaPS supported the NTP in evaluating peripheral storage systems for TB medicines and developing a phased transition plan, culminating with 478 out of 484 peripheral stores managed by IPs integrated into the Upazila Health Complexes network. In collaboration with MTaPS, NTP rolled out the eLMIS for TB commodities in all 64 districts and 485 sub-districts (upazilas) countrywide. With MTaPS' support, NTP ensured that all 868 TB sites nationwide adopted e-TB Manager for case management and report generation in January 2023, significantly bolstering TB data management capabilities in the country.

In PY3, e-TB Manager enhancements enabled electronic reporting of aDSM to allow patient active safety monitoring and interoperability with the Janao app to capture TB data from the private sector. By PY5, the system was further refined with a dashboard featuring selected indicators to facilitate analysis and enable data use for decision-making. In PY6, NTP incorporated a reporting format in e-TB Manager to facilitate enrollment and monitor outcomes of patients on TPT. For improved patient safety, MTaPS

supported the DGDA PV bodies to evaluate 4,500+ AEs, including aDSM reports, received manually through e-TB Manager and the digital OpenRIMS-PV (formerly PViMS introduced in PY5), resulting in more than 35 regulatory decisions since PY1. MTaPS also assisted the DGDA in developing a pharmacy inspection strategy to help ensure GPP in PY2. In collaboration with the Better Health in Bangladesh project, DGDA launched an electronic inspection and licensing system in PY3. In PY4, MTaPS supported the DGDA in achieving the highest GBT score for PV function as documented in the WHO assessment report, developed the "Good Pharmacovigilance Practices (GVP) Guidelines" for marketing authorization holders (MAHs), and updated the "National Guideline on the Pharmacovigilance System in Bangladesh" for all the PV stakeholders, which the MOHFW endorsed in PY5. In the same period, MTaPS supported the DGDA in developing a five-year strategic plan (2022–2026) and addressing WHO GBT assessment gaps, including establishing an effective QMS and employing regulatory convergence and good review practices. In PY5, MTaPS supported the DGDA to lead training and dissemination of the DGDA's strategic plan and implementation of the DGDA Regulatory Information Management System (RIMS) for online registration of vaccines and biosimilars and the OpenRIMS-PV for online AE reporting. In PY6, the DGDA approved the registration of 18 biosimilar products using the DGDA RIMS, and both OpenRIMS-PV and DGDA RIMS were successfully transitioned to the DGDA.

In PY1, MTaPS conducted a situational analysis to identify potential gaps, interventions, and areas of collaboration to improve efficiency in resource allocation, utilization of essential health services, and pharmaceutical financing in coordination with the MOHFW and other stakeholders. In PY4, the HEU of MOHFW developed standard processes for tracking pharmaceutical expenditure (PE) and conducted PE tracking for selected MNCH commodities. In PY5, MTaPS facilitated the creation of customized procedures and training modules for PE tracking of MNCH commodities. This led to training sessions in PY6 for government staff, including the HEU, using these customized modules. Additionally, a PE tracking institutionalization plan, featuring a list of local champions, was developed as part of the National Health Accounts.

YEAR 6 ACHIEVEMENTS & RESULTS

- The DGHS Procurement Monitoring and Evaluation Cell (DPMEC) was established at the DGHS to oversee compliance with procurement policies and enforce accountability among government procuring entities. A functional linkage was established between the Procurement and Logistics Management Cell (PLMC) housed at the MOHFW and DPMEC, ensuring representation of DPMEC in PLMC meetings.
- The procurement handbook as a reference guideline for public procurement processes was developed in collaboration with the DGHS and approved by the government.
- The eAMS became functional at the tertiary-level National Institute of Cancer Research and Hospital (NICRH) with information on 359 assets successfully entered into the system, which is part of the government's plan to roll out the eAMS in all tertiary-level hospitals. Additionally, the eAMS was introduced in the National TB Reference Lab in Dhaka and 4 Regional TB Reference Labs to assist the NTP with the management, maintenance, and procurement of TB laboratory assets. To date, information on 541 assets has been entered into the system and 3 repair tickets have been raised—with 1 resolved and the other 2 currently in progress—following the initiation of the repair process by the NTP.
- DGFP eLMIS was introduced at 7 MCWCs of Nilphamari and Gaibandha districts to align with the DGFP plan to roll out the system in all MCWCs countrywide.

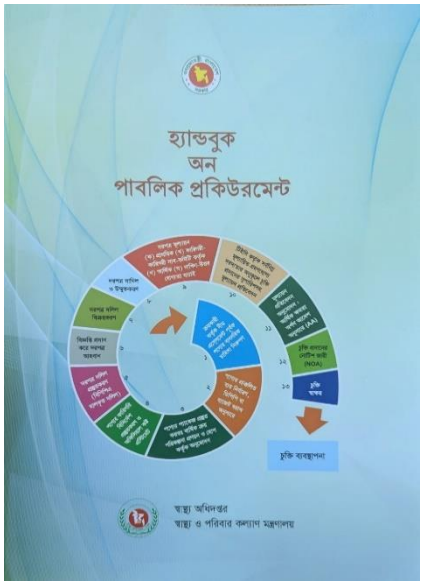
- With MTaPS' support, DGHS has successfully implemented the comprehensive eLMIS at all 33 HFs in the 4 selected districts abovementioned. This eLMIS is tracking 1,381 health products to date. Once rolled out nationwide, the system will contribute to improved management of health commodities and evidence-based decision-making, thereby ensuring the availability of medical products and equipment.
- All 485 UHCs have adopted the TB eLMIS, with 99% submitting their quarterly requisition on time for TB medicines in the most recent quarter.
- The DGDA-RIMS received 42 applications for online registration of vaccines and biosimilars with 18 approved for marketing authorization. OpenRIMS-PV was used to review 360 out of 401 AE reports received with 2 regulatory decisions taken to address patient safety, including a boxed warning for atezolizumab due to the risk of aplastic anemia, and a banning proposal to the drug control committee for halothane due to the risk of irreversible unconsciousness and death.
- Since PY1, MTaPS developed and scaled up 9 digital information systems: eTB Manager, TB eLMIS, DGDA RIMS, OpenRIMS-PV, DGDA Portal, DGFP eLMIS, DGHS Comprehensive eLMIS, STG app, and AMR Portal. They were handed over to the relevant government entities along with complete system documentation, including training manuals, user guidelines, system design documents, and source codes. The handover packages also contain credentials needed to access the systems for maintenance as part of the pathway to sustainability.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

OBJECTIVE 1: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED

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

MTaPS assisted the DGHS in completing printing and distribution of the DGHS Procurement Handbook to field offices—such as civil surgeons, Upazila Health Complexes, medical college hospitals, specialized hospitals, and DHs. An orientation session on the handbook is planned to be organized by DGHS next quarter. This handbook will be a reference guideline for procurement desk officers of different procuring entities of the DGHS contributing to improving procurement practices and product availability.



DGHS Procurement Handbook cover page

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

The DGHS comprehensive eLMIS is being used to facilitate the day-to-day tracking of transactions and stock status of health commodities in the 33 HFs of 4 selected districts and in the CMSD, thereby contributing to informed decision-making to minimize stock disruption. This activity has been completed.

Activity 1.2.2: Assist the DGFP in implementing the DGFP eLMIS in selected MCWCs as part of the transition plan

The DGFP's central and 23 regional warehouses of DGFP, 85 (out of 494) sub-district FP stores, and 7 (out of 96) MCWCs are using the online version of the DGFP eLMIS, having transitioned from the offline version to ensure real-time FP product data capturing at the sub-district level. DGFP eLMIS rollout in MCWCs has been completed. Despite the country's political situation during the quarter, MTaPS continued TA to ensure uninterrupted system functionality and prepared the rollout plan for DGFP to shift to the online system in the remaining 409 sub-district FP stores countrywide during the PY6 extended period (September 20, 2024–March 19, 2025) to minimize reliance on a single device, simplify troubleshooting, and to prevent the need for repeated installations.

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

MTaPS continued TA for the smooth functioning of the eAMS at the NICRH, including capacity building and the collection, verification, and entry of asset information into the system. As of September 30, 359 assets have been entered into the hospital system (211 assets recorded this quarter), with 1 repair ticket raised and the repair process currently in progress initiated by NICRH and the National Electoral Medical Equipment Maintenance Workshop (NEMEMW). MTaPS also continued follow-up and provided the necessary TA to the 61 DHs and the 5 TB reference laboratories where the system is functional. These efforts contribute to improving the procurement processes and enhancing the tracking and management of medical and non-medical equipment, thus contributing to improved health care services. The eAMS rollout in the selected tertiary-level hospital has been completed.

Activity 1.2.4: Assist the NTP in ensuring the functioning of the quantification and Early Warning System (EWS) technical sub-group as part of the PSM coordination mechanism

MTaPS assisted the NTP in revising all 18 SOPs for PSM (including 3 related to the quantification of first-line, second-line, and TPT drugs) and handed them to the NTP. These efforts will allow NTP and partners to follow updated SOPs in performing streamlined PSM activities after MTaPS closeout. This activity has been completed and the revised SOPs will be incorporated into the TB eLMIS in the PY6 extension period.

Activity 1.3.1: Strengthen the use of the e-Learning courses in collaboration with a2i of ICT division

MTaPS developed four eLearning courses hosted at the Muktopaath platform, which is managed by the government's a2i program. Due to the changes in the government, the a2i program has been terminated; the Muktopaath platform is still active despite the uncertainty. Additionally, recent transitions in government-impacted operations of the DGHS MIS unit have meant that MTaPS was unable to hand over the e-Learning courses as planned. The handover is expected to be completed by next quarter once the situation is normalized at the MIS/DGHS. The enrollment rate slowed this quarter due to countrywide internet connectivity issues during the social-political unrest.

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

DGDA-RIMS received 6 applications for registration of biosimilars, with 3 reviewed. The process of integrating OpenRIMS-PV with WHO UMC VigiFlow for AE data sharing was successfully tested and an access key was received from WHO UMC to activate the interoperability in the live server. MTaPS supported DGDA in developing SOPs for RIMS and OpenRIMS-PV and identified master trainers for both systems, which will contribute to the sustainability of systems' operations after MTaPS closes out.

Under the CAPA plan, MTaPS guided DGDA to review 3 registration dossiers and evaluate a risk management plan for the typhoid vaccine. This quarter, MTaPS also guided the ADRM Cell in assessing the completeness, seriousness, and causality of 286 AE reports received from May to July 2024; 221 were done manually and 65 via OpenRIMS-PV with 48 complete including 4 serious and 17 incomplete. In August and September 2024, a total of 86 AE reports (58 male, 26 female, 2 unknown) were received in the OpenRIMS-PV, with assessments tentatively scheduled for October 2024. DGDA drafted guidelines for GRP aligned with the Drugs and Cosmetics Act 2023. A review of DGDA's 5-year strategic plan showed progress in regulatory framework improvements, QMS implementation, internal audits, digitization (RIMS and OpenRIMS-PV), and stakeholder engagement. These efforts will contribute to enhancing DGDA's efficiency and increase its WHO GBT score toward achieving ML3. The formal benchmarking exercise to determine the official maturity of DGDA is slated for 2025. This activity has been completed.

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

MTaPS provided facilitation support to the NTP-organized orientation sessions on the Janao app and on e-TB Manager for users in three districts of Dhaka Division, with support from the USAID-funded ACTB of ICDDR,B. This orientation equipped users to understand the new features of e-TB Manager and manage TB patients referred from the Janao app. MTaPS participated in the bi-annual TB partners' coordination meeting, providing updates on e-TB Manager and TB eLMIS systems which helped central and regional supervisors monitor the progress of the TB program and take necessary actions to ensure better TB care for the population. This activity has been completed.

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

MTaPS hands over the eAMS documentation to the Line Director, HSM, DGHS on July 8, 2024, at the HSM DGHS. Photo credit: Mahmudul Karim Majumder, MTaPS

MTaPS officially handed over the comprehensive DGHS eLMIS to the CMSD and the eAMS to the DGHS' HSM. The process involved providing handover packages, including operational guidelines, training manuals, user guides, database schemes documents, and source codes. MTaPS continued TA to the relevant stakeholders for implementation of the transition plans of all MTaPS-developed digital systems, although progress slowed down due to instability in the MOHFW directorates. This activity has been completed with the handover of all MTaPS-developed information technology (IT) systems. However, MTaPS will continue

supporting the different government entities through interventions of other activities planned in the PY6 extension period.

OBJECTIVE 4: PHARMACEUTICAL SERVICES THAT PROMOTE APPROPRIATE MEDICINES USE AND AMR CONTAINMENT IMPROVED

No activities were planned for this objective under the field support work plan in PY6.

OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED

Activity 5.1.1: Assist the HEU to increase capability on PE tracking toward institutionalization.

The activity was completed in the second quarter of PY6 and will be followed up by developing a policy brief using the MNCH PE data in collaboration with the HEU in the PY6 extension period.

BEST PRACTICES/LESSONS LEARNED

- Development of transition plans from the beginning of any system implementation, by considering the readiness of the operating units and securing adequate funds, is essential to the pathway for sustainable system functioning.
- Comprehensive system documentation is important to ensure transition, particularly at times when there are changes in government structures.
- The stability of government entities is crucial to ensure the smooth implementation of partners' activities, leading to the programs' strong finish and ensuring sustainability.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1a: Assist DGHS in the sustainable operation of the DPMEC. *Organize one batch of training on e-GP and an orientation on the procurement handbook for procurement personnel of DGHS. Provide TA to the DPMEC members as on-the-job training and organize DPMEC meetings. Initiate the TOR for the DPMEC.*	October–December 2024
Activity 1.2.1a: Assist DGHS in demonstrating the comprehensive eLMIS at the union health sub-centers and the community clinics of one selected Upazila. *Conduct mapping, organize user acceptance testing, customize the eLMIS, and roll-out the comprehensive eLMIS at the union health sub-centers and the community clinics of one Upazila (Sub-district).*	October–December 2024
Activity 1.2.2a: Provide TA to DGFP to roll out the online DGFP eLMIS in all districts as part of the sustainable implementation. *Customize and roll out the online DGFP eLMIS in all districts (54 remaining).*	October–December 2024
Activity 1.2.3a: Assist DGHS in the sustainable operation of the eAMS for evidence-based decision-making. *Organize a preliminary meeting with govt. stakeholders to share the implementation plan. Conduct a data audit on eAMS use at the DHs and UHCs. Organize a meeting to share the audit findings and develop an action plan for implementation.*	October–December 2024
Activity 1.2.4a: Assist the NTP to incorporate the revised PSM SOP in the TB eLMIS. *Assist NTP in orienting the TB expert group (national and sub-national representatives) on the revised SOP and updated TB eLMIS features.*	October–December 2024
Activity 1.2.5: Conduct situation analysis of HCWM in selected HFs of Bangladesh. Hire lead consultant and consulting firm and *conduct situation analysis (data collection and analysis) of HCWM in selected facilities of Bangladesh.*	October–December 2024
Activity 1.3.1: Strengthen the use of the e-Learning courses in collaboration with a2i of the ICT division. *All e-Learning courses will be handed over to the MIS/DGHS along with an orientation session.*	October–December 2024
Activity 2.1.1a: Assist DGDA in implementing the CAPA plan including optimization of DGDA RIMS and PViMS toward attaining the DGDA's ML3. *PViMS integration with VigiFlow, AE assessment. Workflow configuration for the vaccine in DGDA RIMS and dossier review through issuing Marketing Authorization Certificates.*	October–December 2024

Activity and Description	Date
Activity 3.1.1a: Assist NTP in the sustainable operation of TB eLMIS and e-TB Manager. *Assist NTP in structuring divisional meetings to review and analyze data. Identify underperforming TB e-LMIS users and enhance their skills through refresher training. MTaPS will facilitate TB e-LMIS training for urban sites.*	October–December 2024
Activity 5.1.1a: Assist HEU to develop a policy brief on PE of MNCH commodities. *Develop the policy brief using the MNCH PE data in collaboration with the HEU.*	October–December 2024

Table 2. Quarter 4, FY24, Activity Progress, Bangladesh—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Provide TA 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 assisted the DGHS in completing printing and distribution of the DGHS Procurement Handbook to the field offices of government stakeholders as instructed by the Director (Planning and Research), DGHS. This handbook will be a reference guideline for procurement desk officers of different procuring entities of the DGHS and will contribute to improving procurement practices and availability of products to the population.
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 to initiate the use of the eLMIS in selected districts to ensure equitable availability of medical products in HFs for quality service delivery.	1.2	After training on the DGHS comprehensive eLMIS held in April 2024, HFs in 4 selected districts started using the system for inventory management. The system tracks transactions and stock status of health commodities in the facilities, thereby contributing to informed decision-making to minimize stock disruption. As of September 30, 2024, over 1,400 commodities have been tracked, 236 package information entered, 281 "Receive Invoices" updated, and 4,386 "Issue Vouchers" updated in the system for commodity transaction purposes.
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 to initiate the use of the eLMIS in selected districts to help ensure equitable availability of FP and MNCH commodities and micronutrients in health centers for quality service delivery.	1.2	After training on the DGFP eLMIS held in May 2024, 7 MCWCs in Gaibandha and Nilphamari districts started using the system. Use of the system enables more efficient entry of regular dispense records and generation and submission of monthly logistics reports than the manual preparation and submission of hard copies to the upazila level. As of September 30, 2024, 94 pieces of medical equipment have been tracked through the system with the functional status of the assets available, enabling real-time equipment status capturing at the facility level.
Activity 1.2.3: Assist the DGHS to roll out eAMS in a 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 HSD will start rolling out the system to other tertiary hospitals as part of the provisions in the upcoming fifth Health Sector Program.	1.2	MTaPS provided TA for the rollout of the eAMS at the NICRH. As of September 30, 2024, 359 assets have been recorded in the system with 1 repair ticket raised and in the process of being resolved. To ensure the sustainability of the eAMS at the NICRH, the director issued 2 memos on August 12, 2024, to the 24 departmental heads, instructing them to regularly update asset information in the Master Register for Medical Equipment (MRME) and submit maintenance and repair requests using the NEMEMW prescribed format. Before entering the asset information into the eAMS, the storekeeper must first register the asset details (18 points of required information for medical equipment) in the MRME manual.

<table>
<tr><th>Activity</th><th>MTaPS Objective(s)</th><th>Activity Progress</th></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 PSCM of TB commodities with a special focus on quantification and EWS of TB medicines.</td><td>1.2</td><td>MTaPS actively reviewed 18 PSM SOPs in collaboration with the NTP and other IPs. MTaPS is also working with CMSD and NTP to streamline the port clearance process for TB drugs and commodities. Additionally, MTaPS provided TA to the NTP for quantification of TPT and second-line TB drugs to be procured for 2025.</td></tr>
<tr><td>Activity 1.3.1: Strengthen the use of the e-Learning courses in collaboration with a2i of ICT division

Activity description: MTaPS will collaborate with stakeholders to analyze the data generated by the Muktopaath e-Learning platform for all MTaPS-supported courses to monitor user enrollment trends, course completion rates, and attainment of certificates.</td><td>1.3</td><td>The numbers of participants enrolled and certificates issued for the four e-Learning courses as of September 30, 2024, are:
<table>
<tr><th>e-Learning course</th><th>Participants enrolled</th><th>Certificates issued</th></tr>
<tr><td>Basic logistics management training</td><td>4,012 (M-2,799, F-1,181, other-32)</td><td>1,039 (M-708, F-327, other-4)</td></tr>
<tr><td>e-TB Manager basics</td><td>1,301 (M-1,098, F-196, other-7)</td><td>311 (M-273, F-37, other-1)</td></tr>
<tr><td>Procurement basics</td><td>2,130 (M-1,687, F-425, other-18)</td><td>640 (M-532, F-104, other-4)</td></tr>
<tr><td>Infection prevention and control</td><td>3,472 (M-2,170, F-1,291, other-11)</td><td>904 (M-649, F-253, other-2)</td></tr>
</table></td></tr>
<tr><td>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 offer TA to the DGDA in executing the remaining actions in the CAPA plan and fulfilling GBT requirements, focusing particularly on regulatory systems, MA, and PV. Additionally, the DGDA will address feedback from the implementation of DGDA RIMS and PViMS.</td><td>2.1</td><td>As of September 30, 2024, 11 MAHs have submitted 51 registration applications (6 in this reporting period), with 18 receiving approvals. Workflows for introduced new vaccines, renewal, and variation are undergoing DGDA testing. OpenRIMS-PV captured 64 AE reports in this quarter and is currently being used by 21 PV stakeholders. Integration of OpenRIMS-PV with WHO-UMC's VigiFlow has been successfully tested. The CAPA plan addressing WHO’s 2021 GBT assessment of regulatory systems, MA, and PV is being executed, with progress made in QMS implementation and GRP guidelines consistent with the Drugs and Cosmetics Act 2023, and in stakeholder engagement, risk management, and ongoing automation efforts.</td></tr>
<tr><td>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 use in decision-making.</td><td>3.1</td><td>From August 27 to September 12, 2024, the NTP organized and MTaPS co-facilitated orientation sessions for users on the step-by-step registration process of TB patients in e-TB Manager imported from Janao app in three districts of Dhaka Division with support from ACTB.

On September 4, 2024, MTaPS provided the NTP with all relevant documents, including participant lists, user credentials, presentations, program schedules, and practice exercises for the TB eLMIS training. NTP started the training and completed 3 batches with the participation of 78 users from 74 urban TB sites.</td></tr>
</table>

Activity	MTaPS Objective(s)	Activity Progress
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 as stated in the transition plans for MTaPS-developed systems.	3.2	On July 8, 2024, MTaPS handed over the eAMS—including the operational guidelines, training manuals, user guide, source code, and database scheme—to the Line Director of HSM at the DGHS office. The Line Director assured MTaPS of the continuity of HSM's efforts to sustain the activity and the eAMS operation countrywide. On July 9, 2024, MTaPS handed over the comprehensive DGHS eLMIS, which was implemented at the CMSD and in four selected districts, to the CMSD Director, in the presence of the CMSD Deputy Director and the HSD Deputy Secretary. The Director emphasized the importance of continued TA for implementation of the eLMIS within the perspective of the next sector program initiation. MTaPS discussed the sustainability aspects of system functionality and the objectives behind the document handover, emphasizing the need for coordination among the units of DGHS.
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	The activity was completed in the second quarter.

B. BURKINA FASO

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

Burkina Faso has a clear strategy 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 of and monitor compliance with 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 existing ones to provide supportive supervision in their facilities and promote AMS practices. In FY24, in addition to activities to strengthen facility-level DTCs, MTaPS is supporting the TS-OHP 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-commission. 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.

In collaboration with the FAO and other partners, MTaPS 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 ceremony at the MARAH to hand over the guidelines to regulate RUA in livestock in Burkina Faso. Following this, MTaPS supported the DGSV to organize two workshops in Koudougou and Bobo-Dioulasso to inform participants of the decree enforcing RUA in the animal sector and to disseminate the guidelines regulating the use of antimicrobials within the livestock sector. MTaPS also supported the MARAH to sign ministerial order 2023- 316/MARAH/SG/DGSV/DSPVL establishing a PV system in Burkina Faso.

MTaPS supported the Directorate of Hospital Pharmacy (DPH) to train 250 DTC members (60 female) in 10 HCFs on AMS. Each DTC developed an action plan to implement and oversee AMS activities in its facility. 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 diseases STGs and trained 350

health professionals (158 female) in the 10 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 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*, which were disseminated to the HCFs. 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 antibiotic prescribing and 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* of Ouahigouya to draft and validate the administrative note that restricts the prescription of antibiotics, taking into consideration the AWaRe classification. MTaPS also supported the DPH to conduct a PPS on the use of antibiotics at the CHR of Banfora.

These efforts allowed the country to score a 3 in MSC and a 2 in AMS during the July 2024 JEE.

YEAR 6 ACHIEVEMENTS & RESULTS

MTaPS supported the TS-OHP to finalize and validate the drafted inter-ministerial order on the creation, composition, and functioning of the AMR-TC. The TS-OHP submitted the draft inter-ministerial order to the government for official endorsement. MTaPS provided logistical and technical support to the TS to hold one AMR-TC meeting and collaborated with WHO and the TS-OHP to obtain the endorsement for the 2024–2026 NAP-AMR.

The *Direction de la Protection de la Santé de la Population* (DPSP) organized the JEE of the IHR in July 2024. In preparation for the JEE, MTaPS and the OHP provided technical support to the DPSP to prepare for technical participation in the self-assessment related to AMR and to the JEE itself.

MTaPS provided logistical and technical support to the TS-OHP to develop its organogram. This activity engaged the MOH; MARAH; Ministry of Environment, Water, and Sanitation; Ministry of Higher Education and Innovation; private-sector partners; civil society; sectoral focal points from the OHP and AMR-TC; and TS-OHP staff to develop a comprehensive organogram defining the role and responsibilities of each department and their lines of collaboration and hierarchy. In addition, this activity enhanced collaboration among the TS-OHP and the other partners involved in the OHP. This activity strengthened the TS-OHP's operational capacity to ensure that it executes its mission. The TS-OHP submitted the draft organogram to the MOH for official endorsement. MTaPS assisted the TS-OHP to support the functioning of the AMR-TC and RUA sub-commission in organizing the first semi-annual meeting for the AMR-TC and two quarterly RUA sub-commission meetings. These meetings are valuable in tracking activity progress, providing updates, and keeping collaborators on course. Participants in the semi-annual meeting include representatives from ECTAD/FAO; CDC; DQSS; *Direction de l'Information Pharmaceutique et de l'Usage Rationnel des produits de santé* (DIPUR); DGSV; *Direction des Laboratoires et de Biologie Médicale*; NMRA; the ministries of environment and agriculture;

and the professional orders of midwives, nurses, and pharmacists. During the semi-annual meeting, participants developed a sustainability plan that outlines activities and a timeline and identified the government entity in charge of implementation and the potential NGO partner.

MTaPS also paid for five additional participants to attend the *Antibiologie et Antibiothérapie en Afrique Sub-Saharienne* course. This is the second group to be supported in taking this course.

Finally, MTaPS, the AMR-TC, and its sub-commissions supported the TS to organize the celebration of WAAW. MTaPS supported the organization of a symposium on AMR with *Le Réseau Burkinabè de Recherche et Lutte contre la Résistance Antimicrobienne et Actions des Jeunes contre la Résistance aux Antimicrobiens*. The theme of the forum was "AMR Pandemic Response in Burkina Faso: Key Stakeholder Roles and Responsibilities", and 450 participants, including experts, practitioners, students, and scientists from research centers attended.

To strengthen RUA and the use of the Good Antibiotic Prescribing Practices, MTaPS supported the DPH to organize a five-day formative supervision visit to one targeted hospital to discuss issues related to RUA. A team of eight supervisors comprising three infectiologists, the Chief Officer in charge of Standardization of Hospital Pharmacy Practices, the President of the DTC, the Chief Biologist, the Chief Pharmacist, and the Director of Nursing and Midwifery at CHR Banfora and two MTaPS representatives conducted the RUA formative supervision at CHR Banfora. Prior to the supervision, the infectiologists developed a formative supervision tool to monitor and provide feedback on antibiotic prescriptions in surgery, emergency medicine, pediatrics, and maternity. Following the formative supervision at CHR Banfora, MTaPS supported the DPH to facilitate and conduct supervision visits to the nine remaining supported facilities with two supervisors from the DPH and a consultant. Supervisors made the following recommendations: formally designate antibiotic therapy referents in each HCF; continue to sensitize health care professionals to adhere to the recommended infectious disease STG; ensure procurement and availability of first- and second-generation cephalosporins for surgical prophylactic; strengthen communication among clinical services, laboratory, and pharmacy; and enforce proper management of microbiology test samples. During the supervision visits, CQI plans were updated to reflect findings and enforce RUA.

MTaPS supported the DPH and DIPUR to conduct a second PPS of antibiotic use at CHR Banfora to measure progress since the July 2022 survey. The PPS showed that in 74.62% of cases, antibiotic prescriptions did not comply with the antibiotic prescribing guide and the internal therapeutic protocols of the clinical services. There are several reasons for the lack of compliance with antibiotic prescribing guides and protocols, including constant turnover of staff, the absence of a DTC sub-committee dedicated to RUA, the lack of knowledge on RUA, the low number of staff trained on RUA, the low demand for microbiological data to conduct initial treatments or their adjustment within 72 hours, the lack of monitoring of compliance with the guide or therapeutic protocols, the scarcity of studies to evaluate the quality of prescriptions with feedback to prescribers, and the influence of medical representatives. It was recommended to strengthen the functioning of the DTCs by establishing a DTC sub-commission for RUA and raise awareness among the public and health workers on RUA.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Strengthen the functionality of the Technical Secretariat of the One Health Platform (TS-OHP)

MTaPS supported the TS-OHP to hold workshops at Koudougou August 12–14, 2024, and Ouagadougou August 29–30, 2024, to draft and validate the TS-OHP organigram. The Koudougou workshop had 23 participants (18 male, 5 female) and the Ouagadougou workshop had 22 participants (18 male, 4 female) from the human health, livestock, agriculture, environment, and research sectors; the TS-OHP; and technical and financial partners, including the Country Health Information System and Data Use project.

The workshop outcomes included a draft ministerial order defining the organization and the roles and responsibilities within each department of the TS-OHP and highlights the hierarchy between departments and appropriate channels of collaboration. This activity enhanced collaboration among the TS-OHP and other partners involved in the OHP. It also strengthened the TS-OHP's operational capacity to ensure that it executes its mission. The TS-OHP submitted the draft organogram to the MOH for official endorsement by the end of October 2024.

BEST PRACTICES/LESSONS LEARNED

There are no best practices/lessons learned to report.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Strengthen the functionality of the Technical Secretariat of the One Health Platform (TS-OHP) **Description**: MTaPS will support the TS-OHP and AMR-TC to conduct a three-day sensitization and advocacy workshop on AMR at the national level.	October 2024
Activity 1.1.2: Improve the Institutional Sustainability of the AMR-TC and the Rationale Use of Antimicrobials (RUA) sub-commission **Description**: MTaPS will support the TS-OHP, AMR-TC, and RUA sub-commission to organize quarterly meetings of the RUA sub-commission to track activity progress, provide updates, and keep collaborators on course.	October 2024
Activity 3.5.1: Strengthen the capacity of the DPH, AMR-TC, and DTCs to monitor the implementation of AMS interventions in selected health facilities **Description**: MTaPS will support the DGAP in developing a scale-up plan.	October 2024
Activity 3.5.1: Strengthen the capacity of the DPH, AMR-TC, and DTCs to monitor the implementation of AMS interventions in selected health facilities **Description**: In collaboration with the AMR-TC and RUA sub-commission, MTaPS will support the DPH to conduct training on infection management and best practices.	November 2024
Activity 3.5.1: Strengthen the capacity of the DPH, AMR-TC, and DTCs to monitor the implementation of AMS interventions in selected health facilities **Description**: MTaPS will support the DPH to establish two new DTCs in two district hospitals.	November 2024
Activity 3.5.1: Strengthen the capacity of the DPH, AMR-TC, and DTCs to monitor the implementation of AMS interventions in selected health facilities **Description**: MTaPS will support the DPH to organize a five-day workshop to develop the national antibiotic prescription audit data collection and analysis tool, protocol, and user guidelines.	December 2024

Table 3. Quarter 4, FY24, Activity Progress, Burkina Faso—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Strengthen the functionality of the Technical Secretariat of the One Health Platform (TS-OHP) **Activity description:** MTaPS supported the TS-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.	5.4	1.1	The ministerial order was drafted and submitted to the MOH for official endorsement.

PHARMACOVIGILANCE

OVERVIEW

Burkina Faso has a clear strategy 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 of and monitor compliance with 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 existing ones to provide supportive supervision in their facilities and promote AMS practices. In FY24, in addition to activities to strengthen facility-level DTCs, MTaPS is supporting the TS-OHP and the OHP's AMR-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

In October 2021, Burkina Faso officially adopted pyramax for the treatment of malaria. After this adoption, Burkina Faso decided to deploy pyramax in only the Centre-Ouest region for the treatment of non-complicated malaria cases. MTaPS held a meeting with the focal points of the NMRA and *Secrétariat Permanent pour l'élimination du Paludisme*/Permanent Secretariat for the elimination of Malaria (SP-Palu) to discuss next steps, including development and approval of the surveillance protocol by the national ethics committee. SP-Palu, NMRA, *Direction du Système d'Information*/Directorate of the Information System (DSI), Centre-Ouest Regional Health and Public Hygiene Directorate, President's Malaria Initiative, WHO, and MTaPS met to agree on the timeline for active surveillance of pyramax and address potential challenges. The protocol was adopted on March 18, 2024. MTaPS also presented the data collection tool, PViMS, to DSI and other local stakeholders and obtained formal authorization to install PViMS on DSI's platform.

YEAR 6 ACHIEVEMENTS & RESULTS

Building on the protocol that was adopted in March 2024, MTaPS supported SP-Palu and the National Agency of Pharmaceutical Regulation (ANRP) to conduct a TOT September 9–13, 2024, in Ouagadougou for 16 participants (3 female) from SP-Palu, ANRP, DSI, the Regional Health Directorates of Centre-Ouest, and the health district of Koudogou. The trainees were trained in general aspects of PV, including study design, PViMS, and data collection tools and materials. In addition, participants agreed on the details of the organization of the study site agent training and the design of the study site to allow staff to integrate this as part of their routine responsibilities.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

RESULT AREA 1: INCREASED KNOWLEDGE ON THE SAFETY OF PYRAMAX WITH ITS RECENT INTRODUCTION INTO THE NATIONAL MALARIA TREATMENT GUIDELINES.

Activity 5.3.1: Conduct active monitoring of safety of Pyramax (Artesunate-Pyronaridine) in four public health facilities

MTaPS supported SP-Palu and ANRP to conduct a TOT September 9–13, 2024, in Ouagadougou for 16 participants (3 female) from SP-Palu, ANRP, DSI, the Regional Health Directorates of Centre-Ouest, and the health district of Koudogou. The trainees were trained in general aspects of PV, including study design, PViMS, and data collection tools and materials. In addition, participants agreed on the details of the organization of the study site agent training and the design of the study site to allow staff to integrate this as part of their routine responsibilities.

BEST PRACTICES/LESSONS LEARNED

- The team is making an effort to be inclusive in the design and implementation of this activity. All stakeholders have been involved in each step of the activity. This allows for better buy-in and ownership of the activity.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity & Description	Date
Activity 5.3.1: Conduct active monitoring of safety of Pyramax (Artesunate-Pyronaridine) in four public health facilities **Activity Description:** Training of the four study site agents	September and October 2024
Activity 5.3.1: Conduct active monitoring of safety of Pyramax (Artesunate-Pyronaridine) in four public health facilities **Activity Description:** Supervision visits	October 2024

Table 4. Quarter 4, FY24, Activity Progress, Burkina Faso—PHARMACOVIGILANCE

Activity	MTaPS Objective(s)	Activity Progress
Activity 5.3.1: Conduct active monitoring of safety of Pyramax (Artesunate-Pyronaridine) in four public health facilities **Activity description:** Document adverse events of pyramax intake in four health facilities	5.3	TOT completed. The country will continue with site training and patient enrollment.

C. CAMEROON

US PRESIDENT'S MALARIA INITIATIVE (PMI) ACTIVITIES

OVERVIEW

The Ministry of Public Health has adopted artemisinin-based combination therapy as the first-line treatment for malaria, due to the development of resistance to previously extensively used antimalarial combination therapy. 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 underscored the essential responsibility of the General Inspectorate of Pharmaceutical Services and the National Pharmaceutical Regulatory Authority. Legislators in Cameroon have adopted several 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 Quality Medicine 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), PMI allocated funding to the MTaPS program to support the MOPH to strengthen the registration process for antimalarial commodities.

CUMULATIVE PERFORMANCE TO DATE

In FY23, 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 variation 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. MTaPS equally supported the recruitment of a national and an international consultant to provide technical support to the MOH for the development of a curriculum and training modules in SCM. In addition to the above, MTaPS collaborated with the DPML to recruit a national consultant to support the digitalization of the registration of health care products. After receiving an orientation from MTaPS technical subject matter experts, the consultant configured the OpenRIMS software platform at the DPML.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

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

MTaPS supported the DPML to organize a workshop from July 4 to 6, 2024, in Ebolowa to review and validate the training curriculum for pharmaceutical SCM. This workshop brought together 28 participants (17 male, 11 female) from the MOPH central level, including the DPML, Directorate of Disease Control and Pandemics (*Direction de lutte contre les maladies, les épidémies et des pandémies* [DLMEP]), Directorate of Family Health (*Direction de santé familiale* [DSF]), National AIDS Control Committee (*Comité national de lutte contre le sida* [CNLS]), and National Program for the Fight against Schistosomiases (*Programme national de lutte contre les schistosomiases* [PNLSc]); the regional level (SCM focal points of Adamawa, Center, Littoral, and West regions); health facilities (Yaoundé Central Hospital, Ebolowa Regional Hospital, and Sangmelima District Hospital); and the Faculty of Medicine and Biomedical Sciences of the Yaoundé University.

MTaPS also supported the DPML to organize a workshop from August 26 to 30, 2024, in Ebolowa to review and edit the SCM training modules developed based on the validated curriculum. 24 participants (12 male, 12 female) attended the workshop and reviewed the SCM training modules. The modules were then validated during a workshop September 11–14, 2024, for 26 participants (14 male, 12 female) from the DPML, DLMEP, DSF, CNLS, PNLSc, Faculty of Pharmaceutical Sciences of the University of Dschang (UDs), Regional Fund for the Promotion of Health of the Far North, and Abong-Mbang District Hospital.

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 DPML to organize a follow-up meeting on the OpenRIMS tool configuration in Yaoundé from August 8 to 9, 2024. A total of 11 participants (4 male, 7 female) from the DPML attended the meeting. The purpose of the meeting was to present the progress made in setting up the OpenRIMS tool. The MTaPS-recruited consultant performed a demonstration of account creation, submission of a registration application, and follow-up of registration files. Participants proposed amendments to the configuration of the OpenRIMS tool and recommended that mandatory fields should be defined, indications should be provided on documents to be downloaded, and access levels should be defined for each category of users.

From September 2 to 6, 2024, MTaPS supported the DPML to organize an OpenRIMS user training and testing workshop in Ebolowa. A total of 31 participants (17 male, 14 female) from the DPML, the Health Information Unit (*Centre d'information sanitaire* [CIS]), and the Information Technology Unit (*Centre informatique* [CI]) of the MOPH attended the workshop. The aim of this workshop was to train users on the OpenRIMS tool and validate the user manual. Participants were trained on how to create an account, submit an MA request, generate an MA decision, and follow up on files from the dashboard and defined indicators. Participants were also taught on the user guide, which takes into account the

procedures for MA applications and for processing MA requests. During this workshop, the following 2 recommendations were formulated:

- The DPML should sign a service note to inform MA applicants that MA will now be filed in physical and electronic copies.
- The "account creation" and "submission of MA requests" functionalities of the OpenRIMS tool should be adopted.

BEST PRACTICES/LESSONS LEARNED

- During the elaboration of the SCM training modules, MTaPS realized that it was important beforehand to conduct a situational analysis of the training needs of supply chain actors at all levels of the health pyramid.

ACTIVITIES & EVENTS FOR NEXT QUARTER

Activity & Description	Date
Activity 3.1.1. Support the Council of the National Pharmaceutical Society of Cameroon (CNPSC) to update the law n°90/035 of August 10, 1990, on the practice and organization of the profession of pharmacists.	October 2024

Table 5. Quarter 4, FY24, Activity Progress, Cameroon—GHSA

Activity	PMI Objective(s)	Activity Progress
Activity 1.4.1: Support the development of continuous professional development training curricula, including e-Learning modules in SCM	2.4	▪ SCM training curriculum developed and validated. ▪ SCM training modules developed and validated.
Activity 2.1.1: Support the MOPH to implement OpenRIMS for the electronic submission and evaluation of pharmaceutical product registration applications	2.4	▪ Consultant configured OpenRIMS tool. ▪ Users trained on the OpenRIMS tool.

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. 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 TOR 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 TOR 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 2024, 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 by 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 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 plan, the training of 174 health staff (95 male, 79 female) in IPC, CQI of IPC practices in 12 HFs, and the development of a national surveillance protocol to monitor HCAIs. MTaPS also supported the Directorate of Health Promotion (DPS) to evaluate key surveillance attributes and some performance indicators of the HCAI surveillance system. MTaPS also supported the DPS to carry out a KAP survey on hand hygiene of health care workers in 13 MTaPS-supported HFs.

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 (105 male, 134 female) in AMS, to conduct CQI of AMS activities in supported HFs, and to classify antibiotics in Cameroon's national essential medicines list according to the WHO AWaRe categorization. MTaPS also supported the development of draft STGs based on Cameroon's previously developed list of antibiotics according to the WHO AWaRe categorization.

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 NAP-AMR 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.

MTaPS 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 DPS to evaluate selected surveillance attributes and performance indicators of the HCAI surveillance system in the CQI process. MTaPS also supported the revision of HCAI surveillance tools. 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 carry out 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 update the national and facility IPC action plans. In addition to the above, MTaPS supported the DPS to lead and organize three regional meetings in the West, Littoral, and South regions to share experience from CQI of IPC committees with other non–MTaPS-supported HFs.

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, followed by a workshop for the DTCs to present their progress on self-initiated activities.

QUARTER 4/YEAR 6 ACHIEVEMENTS & 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 National Zoonoses Program (currently serving as the OHP for Cameroon) and the National Public Health Laboratory (NPHL) from July 11 to 12, 2024, in Ebolowa to organize the second of a series of meetings to evaluate the implementation of activities in the NAP-AMR. A total of 14 participants (9 male, 5 female) from the key sectors involved with AMR activities (MOPH, Ministry of Livestock, Fisheries and Animal Husbandry [MINEPIA], Ministry of Agriculture and Rural Development [MINADER], Ministry of Environment, Nature Protection and Sustainable Development [MINEPDED]), *Centre Pasteur du Cameroun* (CPC), USAID, FAO, CODEX (Ministry of Mines, Technology and Industrial Development [MINMIDT]), and the National Zoonoses Program attended this meeting. The aim of this meeting was to monitor the implementation of activities in the NAP-AMR and other AMR-related activities implemented between January and June 2024 by the different sectors of the OHP, identify potential barriers and challenges to implementing the NAP-AMR, identify and propose strategies to address these challenges, and define next steps. Each OHP sector involved (MINEPIA, MINEPDED, MINADER, the National Veterinary Laboratory [LANAVET], CPC) presented the activities carried out and challenges encountered. Although each of these sectors had implemented AMR related activities during the assessed period, none of these activities had been included in the NAP-AMR.

NAP-AMR evaluation meeting participants July 11, 2024. Photo credit: National Zoonoses Control Program

Recommendations from the meeting included the following:

- Participants (AMR focal persons) should identify NAP-AMR activities that can be implemented during the second half of 2024 and send them to the National Zoonoses Control Program so that it can mobilize funds for their implementation.

- AMR focal persons should conduct a sensitization of Heads of Ministerial Departments to encourage them to budget AMR activities in their work plans.
- The OHP should organize an awareness-raising meeting for decision-makers from the sectors involved.

YEAR 7 ACTIVITIES

Activity 2 Year 7: Support the JEE of IHR capacities

MTaPS supported the National Public Health Observatory (NPHO) from August 27 to 30, 2024 in Ebolowa to organize an orientation workshop on the JEE self-assessment of IHR core capacities. This workshop brought together 60 participants (31 male, 29 female) from the key sectors involved with IHR activities (MOPH, MINEPIA, MINADER, MINEPDED, Ministry of Defense [MINDEF], National Agency for Radiation Protection [ANRP], Ministry of Forestry and Wildlife [MINFOF], Ministry of Territorial Administration [MINAT], MINMIDT, Zoonoses Program, Public Health Emergency Operations Center [PHEOC]), WHO, USAID, CDC and Health and Development in Action (HEADA) to attend the workshop. Facilitated by NPHO and WHO representatives, the workshop aimed to orient national stakeholders on the 19 technical areas of the JEE tool, the JEE process, and how to conduct a self-assessment of the IHR core capacities. Presentations included objectives and expected outcomes of the workshop, a brief overview of the IHR and its M&E framework, an overview of IHR capacity in Cameroon, the JEE process and tools, and the JEE tool (self-assessment workbook, the GHSA, mapping of data sources/stakeholders, the roles and responsibilities of focal points for each technical area). The workshop methodology consisted of group work exercises followed by presentation of results and plenary discussions. Participants were tasked with carefully reading the questions for each technical area of the IHR core capacities (JEE tool); providing answers with supporting documents if applicable; selecting the country level for each indicator (level 1–5); identifying strengths, best practices, and challenges; and providing answers to technical questions. Each group presented their level of progress by technical area, difficulties encountered, a list of centralized documents, and a list of documents to be searched as well.

On September 26, 2024, MTaPS supported the NPHO in organizing a 1-day meeting in Yaoundé to follow up on preparatory activities in advance of the second WHO-led JEE. A total of 41 participants (19 male, 22 female) representing the key sectors implementing IHR core capacities activities attended this meeting. During this meeting, participants were sensitized on their roles and responsibilities in the JEE process, reviewed the IHR self-assessment, and reviewed previous recommendations and defined next steps prior to the IHR self-assessment workshop scheduled for October 2024. At the end of the meeting, participants recommended that all pending documents be collected and centralized in the NPHO Google Drive, and all focal points should fill out the designated Excel spreadsheet before the upcoming workshop.

Activity 5 Year 7: Improve awareness of priority multidrug-resistant organisms (MDRO) at some HFs (including both public- and private-sector facilities and laboratories) and in community settings and provide training on MDRO prevention for relevant officials at the national level

From September 11 to 13, MTaPS supported the DLMEP to organize field visits to selected HFs from 5 regions (Center, East, Littoral, West, and South) to assess their laboratory capacities. The aim of this

supervision visit was to support the health facilities to analyze their data on antimicrobial susceptibility testing from January through August 2024 in preparation for the upcoming sensitization workshop on MDROs. A total of 19 HFs were visited in 5 regions (consisting of 5 private HFs and 14 public HFs). Laboratories were assessed in the following areas: availability of national guidelines and protocols, personnel, quality assurance and control system, stock management system, and management of data. The supervision team presented monitoring indicators related to the surveillance of MDROs followed by the template for the staff awareness workshop on MDROs scheduled for the month of October. The team also took the opportunity to share some updated guidelines and protocols with the laboratory staff. The following challenges were observed during this supervision: harmonization of antibiotic susceptibility testing techniques, absence of a standardized method for germ susceptibility testing (tracer antibiotics for certain organisms are not always tested), unavailability of sufficient qualified staff in the HFs, and digitalization of data for database decision-making at the HF, regional, and national levels.

BEST PRACTICES/LESSONS LEARNED

- No best practices/lessons learned to report this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
PY6 Activities	
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 print 200 copies of the validated STGs.	October 2024
PY7 Activities	
Activity 1: Review implementation progress of the NAP-AMR through regular meetings of the national AMR coordination committee, and provide reports aligned with the annual tracking AMR country self-assessment survey (TrACSS) ▪ Support the TS-MCC and the OHP to organize a two-day meeting to evaluate the status of implementation of the NAP-AMR using the NAP-AMR monitoring framework.	December 2024
Activity 2: Support the JEE of IHR capacities ▪ Support the NPHO to organize a five-day self-assessment workshop on IHR implementation. ▪ Support the NPHO to organize a three-day workshop to validate the self-assessment report on IHR implementation.	October–November 2024
Activity 3: Conduct sensitization and advocacy workshops on AMR and MSC-AMR targeting political leaders and government officials as a step towards political commitment towards and ownership of the implementation of AMR NAP activities and the development of the One Health Policy ▪ Support the OHP to organize a one-day advocacy meeting to seek the commitment of political leaders and AMR stakeholders to support the implementation of AMR-NAP activities.	November 2024
Activity 4: Support the celebration of WAAW	November 2024
Activity 5: Improve awareness of priority MDRO at some health facilities (including both public- and private-sector facilities and laboratories) and in community settings and provide training on MDRO prevention for relevant officials at the national level ▪ Support the DLMEP and DPS to organize two four-day workshops	October–November 2024
Activity 6: Define standards for IPC and WASH in both hospital and community (primary) health care settings. ▪ Support the recruitment of a national consultant for 15 days to develop a draft minimum IPC standards document. ▪ Support a 3-day workshop to review and finalize the IPC standards document. ▪ Support a 2-day workshop to validate the IPC standards document.	October–November 2024

Table 6. Quarter 4, FY24, Activity Progress, Cameroon—GHSA

Activity	MTaPS Objective(s)	GHSA Results(s)	Activity Progress
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	5.4	1.1	Second NAP-AMR evaluation meeting organized, challenges identified, and recommendations formulated.

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 FY24 were built on the work done during the previous five 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 HFs, and develop and implement systems to monitor antimicrobial use and consumption nationally and at HFs. In addition, following the results of the JEE 2 conducted in December 2019, MTaPS since 2023 has provided technical and financial support to the One Health platform for its operation and for the implementation of the National Action Plan for Health Security (NAPHS).

CUMULATIVE PERFORMANCE TO DATE

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 an April 2019 decree, 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 (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, the national AMR policy, the 2019–2020 multisectoral NAP-AMR, the 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 interministerial 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 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 TORs and capacity-building plans. MTaPS also supported the AMS TWG to develop and finalize a list of antibiotics based on the AWaRe classification. 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. Additionally, 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. MTaPS supported the AMR TWG to establish 20 centers of excellence 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.

In November and December 2023, MTaPS, through the AMR TWG, supported the OHP to organize activities for the 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 (18 female) in IPCAF minimum requirements (MR) tools and routine data collection tools to improve data quality. Furthermore, MTaPS trained 62 people (7 female) 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, for optimizing the use of antimicrobial agents, and for improving IPC practices in human health contributed to the country achieving a score of 3 for both MSC and AMS and a score of 2 for IPC during the December 2023 JEE.

MTaPS supported the MTC4 and MTC5, in collaboration with the Directorate of the Pharmaceutical Activity (DAP), to develop and make available e-Learning courses for HCPs. As of August 2024, 260 individuals had registered and 164 learners had completed the course in IPC—117 (including 46 females) of whom had obtained their diplomas. With respect to AMS, 313 learners had registered for the course, with 146 having completed it and 116 (including 34 females) obtaining their diplomas. MTaPS has also supported MTC4 to strengthen the capacity of twenty (20) health facilities to implement IPC activities through regional IPC supervision.

MTaPS supported the OHP in strengthening public health emergency coordination, including for COVID-19, by delegating three staff members and a consultant to the OHP to support the implementation of the NAPHS.

YEAR 6 ACHIEVEMENTS & RESULTS

During this year, MTaPS continued to support the AMR TWG through the MTC4 and the MTC5. This support involved effective MSC on AMR and IPC and the optimized use of antimicrobial medicines in human and animal health and agriculture. Regarding effective MSC on AMR, MTaPS supported the OHP to organize activities for One Health Day and WAAW, which took place in mid-November 2023. MTaPS supported the MTC4 and MTC5 to organize bi-monthly coordination meetings to monitor the national stewardship plan and supported the AMR TWG to organize a coordination workshop to review progress made in the implementation of the NAP-AMR. MTaPS supported the AMR TWG to update the AMR TWG governance manual.

Also, MTaPS supported the OHP in strengthening public health emergency coordination, including for COVID-19. MTaPS provided technical and financial support to the NAPHS implementation. During this

period, MTaPS delegated three staff members to the OHP to support the implementation of the NAPHS. MTaPS supported the 6th National One Health Day, which was held on November 3, 2023, at the Institut Nationale de Santé Publique. MTaPS supported the OHP in carrying out a workshop, followed by internal and external evaluations of IHR (2005) capacities using the JEE version 3 tool. MTaPS supported the update of the national strategic plan of the OHP, development of the operational action plan for the multisector secretariat of OH, and organization and facilitation of the OHP monitoring committee meeting. MTaPS provided technical and logistical support to the OHP to conduct monitoring and evaluation activities in line with the M&E plan of the NAPHS. MTaPS supported technical meetings attended by specialists representing human health, animal health, environmental health, and technical and financial partners such as USAID, MTaPS, FAO, and the CDC. MTaPS, in collaboration with WHO, provided technical and financial support to conduct a national workshop to revise the 2024–2028 NAPHS. MTaPS also continued to provide financial and technical support to the OHP with three deliverables: the annual 2024 operational action plan of the OHP, the report of the monitoring committee meeting, and the OH strategic plan. MTaPS supported the One Health Platform to organize the meeting of the watch committee.

Regarding optimizing the use of antimicrobial medicines in human and animal health and agriculture, MTaPS' support enabled 62 people (7 female) to be trained 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 the MTC5 and MTC4 for the digitization of these data collection tools. MTaPS supported the MTC4 and MTC5 to establish an e-learning platform and to train 146 individuals in AMS. 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 (11 female) took part in the meeting. The overall score for this assessment was 52%. MTaPS supported the AMR TWG, through the MTC5, to organize a supervision visit to 18 supported health facilities. The aim of the visit was to monitor AMS activity implementation. MTaPS supported the MTC5 to organize the PPS in the 20 health facilities supported by MTaPS. This support involved drawing up the survey protocol, finalizing the data collection tools, establishing the online platform for data collection, and training the interviewers.

Regarding IPC, MTaPS supported the MTC4 to train 106 people (18 female) in IPCAF-MR tools and routine data collection tools to improve data quality. MTaPS supported the MTC4 to establish an e-learning platform and train 164 learners in IPC. MTaPS supported the MTC4 to conduct the second IPC assessment at the central level using the WHO IPCAT-MR tool, which is derived from the IPCAT-2 and allows countries to assess implementation of IPC minimum requirements. At the facility level, MTaPS supported the regional IPC focal points and trainers to conduct the IPCAF-MR assessment in these health facilities using the WHO IPCAF-MR tool for secondary and tertiary levels. In October 2023, this evaluation validated the results of the self-assessment carried out by the health facilities.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

RESULTS AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Enhance capacity of MCG to monitor implementation of the approved national multisectoral action plan to combat AMR (NAP-AMR)

On August 22–23, 2024, MTaPS supported the AMR TWG to organize the Quarterly Coordination workshop at the WHO office in Abidjan. To prepare for this workshop, MTaPS helped the TWG

organize four preparatory meetings, during which presentations were made and working documents were drawn up for the workshop. Also, MTaPS supported the AMR TWG to organize the coordination workshop to review progress made in the implementation of the NAP-AMR. The workshop was attended by 27 people (7 female). The participants came from the following organizations: AMR TWG, Direction des Ressources Humaines de la Santé (DRHS), Direction des Services Vétérinaires (DSV), Autorité Ivoirienne de Régulation Pharmaceutique (Authority IRP), Cantre Ivoirien Antipollution (CIAPOL), Laboratoire National d'Appui au Développement Agricole (LANADA), DAP, Direction des Affaires Juridiques et du Contentieux (DAJC), and MTaPS.

The aim of the workshop was to coordinate the implementation of the 2021–2025 national plan to combat AMR. Specifically, it was intended to (i) mobilize stakeholders in the fight against AMR to discuss issues relating to AMR; (ii) present the results of the JEE of December 2023; (iii) take stock of the implementation of NAP-AMR activities; (iv) propose to the public authorities and national stakeholders complementary actions to be carried out in line with the recommendations; (v) update the national plan to combat AMR on the basis of the immediate priorities identified by the MCC, in line with the recommendations of the JEE; and (vi) present the proposed organization of the 2024 WAAW. The participants drafted a progress report and an updated AMR plan incorporating the JEE 3 recommendations.

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

MTaPS, in collaboration with the DAP, supported the AMS and IPC TWGs to hold a second set of eLearning sessions for health workers in Cote d'Ivoire, which were launched on July 17, 2024. The AMS session was attended by 163 (45 female) health care professionals, and 110 (60 female) health care professionals attended the IPC session. Only 71 participants (25 female) and 52 participants (26 female) were able to complete the AMS and IPC training courses, respectively.

RESULTS AREA 2: IPC

Activity 2.5.1: Strengthen the functionality of IPC committees in the human health sector and the capacity of health care providers to implement guidelines using multimodal strategies

MTaPS supported the IPC committee members in the 20 targeted health care facilities for the supervision of health care providers in the maternity, medicine, surgery, and laboratory departments. The IPC committees conducted the supervisions using the digitalized version of the DMHP supervision tool (called Kobocollect platform). Data collected for this exercise are currently being analyzed.

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

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.

Through the MTC5, MTaPS supported the AMR TWG to conduct three preparatory meetings for the PPS. Participants came from the AMR TWG as well as the MTC2 (focused on training), MTC3 (focused on communication), MTC4, and MTC5. The meetings focused on reviewing the Kobocollect platform. Then, MTaPS supported the AMR TWG in organizing a two-day workshop to train 18 (1 female) investigators from targeted health facilities on the PPS protocol. The training included three modules

and case studies. Participants were trained in the use of the Kobocollect platform, which will be used to capture the data collected. MTaPS also supported the AMR TWG through the MTC5 to train 48 data collectors (15 female) in the survey protocol, the data collection tools, and the Kobocollect tool. Both trainings ended with a simulation of data collection from patient records.

BEST PRACTICES/LESSONS LEARNED

- Digitalization of data collection tools, such as the IPCAF-MR and the DMHP's supervision tool, can result in a higher rate of data completeness for review by multisectoral coordinating bodies such as the MTC4. MTaPS observed an increase in data completeness among its supported facilities, from 10% (2/20 HFs) to 40% (8/20 HFs), after using the digitalized versions of the IPCAF-MR and the DMHP's supervision tool instead of the physical versions of the tools. Digitalization allows for increased availability of data to use for decision-making, and therefore more informed supervision can be conducted at selected HFs.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.2.2: Support the **AMR TWG to share lessons learned and experiences in the implementation of the NAP-AMR (program year (PY) 5 activity to be carried over into PY6).** MTaPS will support the AMR TWG in organizing a 5-day lessons-learned and experience-sharing workshop.	November 2024

Table 7. Quarter 4, 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 national multisectoral action plan to combat AMR (NAP-AMR) **Activity description:** Provide technical assistance to the AMR TWG to organize a coordination meeting to review progress made in the implementation of the NAP-AMR.	5.4	1.1	MTaPS supported the AMR TWG to organize the quarterly meetings to monitor the NAP-AMR implementation.
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, to facilitate online learning on AMS (150 participants) and IPC (150 participants).	5.4	1.2	IPC and AMS e-Learning courses available for training of HCPs. 110 IPC committee members and 163 DTC members took the online courses.
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**: IPC committee members to supervise HCPs in maternity, medicine, surgery, and laboratory services in 20 targeted HFs.	5.4	2.5	MTaPS supported IPC committee members to supervise health care providers from maternity, medicine, surgery, and laboratory services in 20 targeted health facilities.
Activity 3.5.1: Support the AMR TWG and its MTC5 to establish and improve a governance and oversight system for AMS in HFs, including monitoring the implementation of related policies, guidelines, and standards. **Activity description:** 1) Support the AMR TWG to conduct the PPS in the 20 MTaPS-supported HFs. 2) Support the AMR TWG to supervise the DTCs.	5.4	3.5	MTaPS supported the AMR TWG and its MTC5 to conduct a PPS in the 20 remaining facilities.

E. DRC

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The goal of MTaPS' work on AMR in the DRC is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. To achieve this, MTaPS focuses on strengthening the capacity of in-country stakeholders through a systems strengthening approach. The MTaPS GHSA portfolio targets three specific result areas: strengthening MSC on AMR, improving IPC, and enhancing AMS.

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 on AMR, 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; collaborate with appropriate partners at the global, regional, and country levels; and 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 the MSC on AMR, IPC, and AMS technical areas.

CUMULATIVE PERFORMANCE TO DATE

Since MTaPS' inception in 2019, the program has supported the DRC government in making significant progress in the fight against AMR. This has included the establishment of the NC-AMR and the development of an NAP-AMR. MTaPS supported the NC-AMR in establishing three thematic TWGs for IPC, RUA, and AMR detection and surveillance. MTaPS supported the NC-AMR and related TWGs to implement the NAP-AMR and achieve progress in the MSC on AMR, AMS, and IPC technical areas.

The first AMR plan for DRC, developed in 2018, expired in December 2022, so MTaPS, in collaboration with WHO, supported the revision of the NAP-AMR.

As part of a pilot initiative, MTaPS established 12 DTCs in five provinces to oversee AMS interventions at the health care facility level and promote the rational and appropriate use of medicines, including antimicrobials, to prevent AMR. To achieve this, MTaPS supported the DTCs in implementing CQI activities for AMS by systematically collecting data on antibiotic prescription patterns and assessing patients' knowledge of antibiotic prescriptions as part of the CQI effort. MTaPS collaborated with WHO to support the National Pharmaceutical Regulatory Authority (*Autorité Congolaise de Réglementation Pharmaceutique* [ACOREP]) in revising the NEML and integrating the WHO AWaRe categorization of antibiotics. In collaboration with WHO, MTaPS supported ACOREP to conduct a national survey on the aggregate consumption of antimicrobials in DRC using the atomical, therapeutic, and 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 the 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 and Sanitation conducted assessments at four farms and four animal health clinics. Based on the results, each facility developed an improvement plan aimed at reducing HCAIs and inappropriate AMU.

MTaPS also assisted the Directorate of Hygiene and Sanitation in utilizing the WHO IPCAT2 to evaluate hygiene conditions in the human health sector at the central level and to create an improvement plan, which is currently being implemented. Additionally, MTaPS supported the MOH's Directorate of Hygiene and Sanitation and the Provincial Health Divisions of Ituri, Nord Kivu, and Kinshasa in IPC practices at seven MTaPS-supported health care facilities and in developing remedial action plans.

The IPCAF scores for these seven facilities increased significantly, from a range of 159 (inadequate) to 667 (advanced) in 2023, and from 425 (intermediate) to 736 (advanced) in 2024, indicating improved compliance with IPC standards.

Finally, MTaPS supported ACOREP, in collaboration with the *Cliniques Universitaires de Kinshasa*, *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.

YEAR 6 ACHIEVEMENTS & RESULTS

During PY6, MTaPS collaborated with ACOREP and the National Essential Medicines Supply Program (*Programme National d'Approvisionnement en Médicaments Essentiels* [PNAM]) to advance AMS efforts in DRC. This included developing regulations, conducting trainings and evaluations on IPC, and promoting RUA through the establishment of DTCs. Additionally, MTaPS evaluated the performance of the DTCs while applying the WHO AWaRe categorization of antibiotics. Other achievements during PY6 included the provision of technical support to the NC-AMR in preparation for the country's second JEE, the development of the NAP-AMR, the adaptation of MTaPS AMR e-learning modules to the context of DRC, the official endorsement of the *National Guidelines for the Use of Antibiotics in Healthcare Facilities and Services in the Democratic Republic of the Congo*, the assessment of IPC practices at both the central and facility levels, and a review of DTC activities in the supported provinces to ascertain their performance and lessons learned and develop improvement plans.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Provide support to the National Coordination for antimicrobial resistance (NC-AMR) and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities

DRC's previous NAP-AMR expired at the end of 2022. To address this issue, in August 2024, MTaPS supported the NC-AMR to organize an eight-day workshop in Kisantu to develop an updated NAP-AMR, including a monitoring framework and operational action plan. Twenty-two participants (4 female)

took part in the workshop, including technical staff from the MOH; representatives from ACOREP; and representatives from NGOs, such as WHO and the FAO. The updated NAP-AMR aligns with the five objectives of the global AMR action plan. MTaPS plans to support the budgeting of activities in the NAP-AMR during the first quarter of FY25.

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

MTaPS continued its collaboration with the Faculty of Pharmaceutical Sciences to establish an e-learning platform aimed at providing continuous training for NC-AMR members and professionals on AMR topics. During a workshop that included professors from the University of Kinshasa, MTaPS supported the faculty in selecting modules for integration into the e-learning platform. The workshop was organized and facilitated by professors from the University of Kinshasa in collaboration with the ACOREP team. Seven professors participated in the one-week workshop in Kisantu.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

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

During Q4, MTaPS supported the Directorate of Hygiene and Sanitation of the MOH to disseminate five standard documents on IPC and WASH in HFs. Approximately 50 participants (15 female) from the MOH and the Ministry of Fisheries and Livestock attended the dissemination meeting, which was chaired by the General Secretary for Health. The following documents were disseminated:

- Practical manual of procedures for IPC in DRC
- Collection of standards and guidelines relating to basic WASH services in health care establishments in DRC
- Standards and directives relating to the organization and operation of the hygiene brigade in DRC
- Professional and skills reference for the hygiene brigade
- Training module for the hygiene brigade

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

Activity 3.5.2: Disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics

During PY6 Quarter 4, the National Medicines Commission held a meeting with 45 participants (16 female) to endorse the *National Guidelines for the Use of Antibiotics in Healthcare Facilities and Services in the Democratic Republic of the Congo*. The guidelines were developed in 2023 by ACOREP, with MTaPS' support, in collaboration with experts from universities (Kinshasa, Bukavu, and Kisangani) in the DRC.

AMS plan workshop, Maracuja Center, Kisantu Kongo Central DRC, Photo credit: Benjamin Byenda

BEST PRACTICES/LESSONS LEARNED

None to report for quarter 4.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1 Support the National Commission for Antimicrobial Resistance (NC-AMR) and the Antimicrobial Stewardship Technical Working Group (AMS-TWG) in overseeing the monitoring of the National Action Plan to combat AMR (NAP-AMR) implementation framework, including the execution of NAP-AMR activities through regular meetings of the NC-AMR Support the AMR TWG to monitor the implementation of the NAP-AMR. MTaPS will support the NC-AMR to hold its regular meetings. These meetings will focus on reviewing recommendations from the Tripartite AMR Country Self-Assessment Survey (TrACSS) evaluation to assess and improve sector-specific implementation, thereby supporting the enhancement of the country's IHR capacity. Additionally, these meetings will prepare for the next TrACSS evaluation and address weaknesses identified in 2024. Moreover, progress in relation to the monitoring framework will be assessed, and the organization of the NC-AMR secretariat will be strengthened to better monitor activities across subcommittees and sectors. Completing this activity will support the country's progress toward level 4 of the MSC pillar P4.1 (JEE – version 3).	October 2024

Activity and Description	Date
Activity 1.1.2 Support the endorsement of the NAP-AMR and the National Action Plan for AMS (NAP-AMS) MTaPS will collaborate with WHO and other donors to finalize the NAP-AMR costing plan and strengthen the capacity of 20 individuals, including ACOREP staff and key stakeholders, in costing methodologies. This will enable them to develop future costing plans independently. Additionally, MTaPS will collaborate with WHO and other stakeholders to organize a high-level meeting in Kinshasa to seek endorsement of the finalized NAP-AMR (including costing) and NAP-AMS.	October 2024
Activity 3.5.1 Support the National Center for Pharmacovigilance (CNPV) and the national pharmacist order to develop protocols and tools for monitoring antimicrobial use (AMU) in hospitals and targeted private pharmaceutical outlets (pharmacies) to inform AMS MTaPS will assist the CPNV in organizing a six-day workshop to adapt antimicrobial monitoring tools to the context of DRC using the International Network for Rational Use of Drugs indicators. MTaPS will support the CNPV and the national pharmacist order to conduct regular data collection that will help identify trends, measure progress, and highlight areas for improvement.	October 2024

Table 8. Quarter 4, FY24, Activity Progress, DRC—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1 Provide support to the National Coordination for antimicrobial resistance (NC-AMR) and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities		1.1	This activity has been completed.
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		1.2	MTaPS is working with national counterparts to develop the e-learning platform. Progress has been delayed due to procurement challenges, and the activity will be completed during the next quarter.
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		2.1	This activity has been completed.
Activity 3.5.2 Disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics		3.5	The official endorsement of the antibiotic use guidelines is completed, and a meeting is planned with the technical coordination committee to conduct the dissemination.

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 PY6 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 coordinating the various country programs and partners that are providing pharmaceutical system or supply chain support; implementing policies and practices that optimize the use of CDRs; strengthening technical and managerial capacity in pharmaceutical management in coordination with other partners (GHSC-TA, Integrated Health Program, and the new MIHR and MSSFPO projects in Eastern DRC); and strengthening 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 Nord 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], ASRAMES). The provincial medicines TWGs are now fully functional and have taken the lead in ensuring the effective redistribution of an estimated USD 179,740 in commodities at risk of expiry at CDR ASRAMES in Nord Kivu. They also took the lead to avoid wasting around a 95-month supply of oral rehydration salts. MTaPS and other partners recommended redeploying the stock in all 34 HZs in Nord 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 Nord Kivu. In addition, MTaPS supported PNAM and the Ituri and Nord Kivu DPSs in establishing Technical 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 the two provinces has improved from 40% to more than 85% on average.

YEAR 6 ACHIEVEMENTS & RESULTS

During PY6, MTaPS supported the functioning of medicines TWGs in DRC at both the national level and in the provinces of Ituri and Nord Kivu. The medicines TWGs met quarterly to review stock availability at the CDR and within HZs and plan for restocking or redistribution of medicines as needed in conjunction with the UTGL.

MTaPS also conducted assessments of the CDRs in Ituri and Nord Kivu using the Inventory Monitoring Assessment Tool (IMAT) to identify challenges related to the storage and distribution of medicines and allow for recommendations to optimize the functioning of the CDR.

MTaPS collaborated with PNAM to conduct quantification exercises and develop distribution plans for RH and FP commodities. Additionally, MTaPS supported PNAM to supervise the UTGL and the UTGL to supervise HFs, thereby ensuring the functionality of the supply chain system across provinces.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

Activity 1.1.1: Support ACOREP to develop its 2024 to 2028 Strategic Plan and to update the Directory of Registered Medicines in DRC

MTaPS supported ACOREP to organize a workshop to update the Directory of Registered Medicines in DRC July 21–31, 2024. This workshop was attended by 12 ACOREP members (6 female) and an MTaPS technical advisor. This directory will help to guide the importation of quality medicines and contribute to improving the health of the population.

MTaPS worked with ACOREP to develop a roadmap for the development of the 2024–2028 Strategic Plan. Due to scheduling conflicts, the development of the plan has been scheduled for the next quarter.

Activity 1.1.2: Support PNAM and DPS to strengthen the functionality of medicine TWGs at the central and provincial levels

MTaPS supported DPS Nord Kivu to hold a medicines TWG meeting. Twenty-three participants from various organizations, including the DPS, *Coordination provinciale de lutte contre la TB*, UTGL in Nord Kivu, *Programme national de lutte contre le sida* (PNLS), *Programme national de lutte contre le paludisme* (PNLP), *Programme national de lutte contre les maladies tropicales négligées*, *Bureau d'information stratégique, recherche et communication*, *Bureau inspection et contrôle*, *Bureau d'appui technique*, the provincial government, MTaPS, *Soins de Santé Primaires*, *Santé en milieu rural*, UNFPA, PPSSP, *Association des Gestionnaires en Chaine d'Approvisionnement et Logistique*, *Central de Distribution Régionale*, and *Association Régionale d'Approvisionnement en Médicaments Essentiels,* participated in the meeting.

Key takeaways from the agenda include:

Update of Q3 FY24 distributions by the CDR ASRAMES: Of 34 HZs in Nord Kivu, 21 received total stock replenishment and 13 received partial replenishments. The latter includes HZs in regions controlled by armed groups or in remote locations, such as Walikale and Kibua. Humanitarian organizations (ICRC and MSF) supported the delivery of health commodities using the humanitarian corridor. It was noted that LLINs were not among the commodities distributed, as their distribution depended on campaigns that were difficult to organize in a war zone.

Validation of distribution schedule and validation process: An external evaluation of DPS Nord Kivu recommended that a permanent schedule be developed to define responsibilities, actions, and timelines for stakeholders, ranging from the receipt orders from HZs by the DPS up to the execution of distribution by the CDR. A draft distribution schedule was presented by the UTGL, but this was not

validated in the meeting. Members of the medicines TWG recommended that the UTGL include a preorder process in the document and the roles of subcommittees in the development of distribution plans (HIV/AIDS, malaria, FP/RH, TB, COVID-19, and essential medicines) prior to their validation in plenary medicines TWG meetings.

Validation of distribution plans for Q4 FY24: Participants validated the distribution plans for HIV/AIDS, TB, malaria, and COVID-19 commodities. However, there was a low availability of rifampin, isoniazid, pyrazinamide, and ethambutol for the TB distribution plan (around 50%) and of nevirapine for the HIV distribution plan (around 30%). The medicines TWG recommended that PPSSP and SANRU, together with CDR ASRAMES, accelerate the process of importation/reception of these two commodities so that they may be included in the distribution according to the validated schedule (i.e., by July 14).

Presentation of LMIS data review organized by MTaPS: The presentation served as an opportunity for the UTGL and DPS Nord Kivu to advocate for resource mobilization so that other technical and financial partners may support the LMIS review. MTaPS supported participants from 5 of the 34 HZs of DPS Nord Kivu.

MTaPS supported DPS Nord Kivu to organize field supportive supervision visits in five HZs—Goma, Karisimbi, Kirotshe, Nyiragongo, and Rwanguba. Key findings were:

- Some pharmaceutical product management tools are not up to date, poorly completed, or absent
- Absence of data validation meetings on the management and use of medicines
- Low involvement of the HZ management team in analyzing or improving the quality of data on medication management
- An inconsistency of data from primary tools with those encoded in National Health Information System (SNIS) reports (negative and positive discrepancies)
- The presence of private health care establishments in the health system that do not generate income but are configured in InfoMED
- Low use of modern, long-acting contraceptive methods by clients
- Poor storage or arrangement conditions for medicines in pharmacies
- Difference between theoretical stocks on stock sheets and physical stock after physical counting
- Poor storage conditions for oxytocin (in log tag or temperature monitor)

To address the challenges, the supervisors coached the pharmacists and other HZ management teams to be able to conduct supervision at HFs to support head nurses. In addition, as a practical exercise HZ management teams, with the assistance of supervisors, coached the visited head nurses of health centers. The coaching consisted of:

- Supporting the Health Zone Teams (ECZs) in extracting and analyzing LMIS indicators, including reporting rate, completeness, and timeliness
- Supporting ECZs in addressing the causes of poor performance in LMIS indicators through deep analysis using InfoMED
- Briefing head nurses and ECZs on the correct completion of data collection (e.g., stock cards, Drug Use and Recipes Record, inventory forms) and reporting tools (e.g., HMIS monthly reports, SNIS)
- Ensuring appropriate storage of health commodities, especially the storage conditions for cold chain oxytocin with regular temperature monitoring

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

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

During this quarter, MTaPS supported the UTGL in Ituri to organize a Supply and Stock Management review for 25 participants (7 female), including 10 from the 5 HZs (Bunia, Gety, Lita, Nizi, Rwmpara); 1 from MTaPS; 1 from the Association of Supply Chain Managers and Logisticians (AGCAL); 2 from the Global Fund (Cordaid and SANRU); 1 from Engender Health (Momentum Project); 9 from DPS Ituri (including 2 Heads of Offices; 1 coordinator of the PNSR Program; 4 analysts and members of the UTGL 2 analysts at the Infosan and Technical Support offices); and 1 from CDR CADIMEBU (Technical Director). The objective of this activity was to contribute to the availability of health commodities through quality LMIS data. The data analysis enabled the identification of challenges related to the availability of medicines in the HZ, allowing for the planning of corrective actions.

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

Activity 5.1.2: Work with FTO, MIHR and MSSFPO to support CDRs ASRAMES and CAAMENIHU to manage and distribute essential medicines including MNCH and FP/RH commodities

During this quarter, MTaPS supported the DPS to assess the performance of two CDRs (ASRAMES and CADIMEBU) in good distribution and storage practices through semiannual spot checks using the IMAT at each CDR. Based on identified gaps, MTaPS supported the CDRs and other stakeholders to develop improvement plans.

Additionally, MTaPS supported FEDECAME and PNAM to organize a rapid assessment of ASRAMES and CAAMENIHU's capacity to store and distribute health commodities for other CDRs in line with the new functions of FEDECAME and to develop improvement plans based on the findings of the assessment.

BEST PRACTICES/LESSONS LEARNED

- Having local government representatives from Nord Kivu join the medicines TWG meeting demonstrated leadership and commitment to improving access to health commodities within a complex context. When possible, having a local government representative at higher-level meetings can be beneficial to show commitment and leadership. Having local government representatives from Nord Kivu join the medicines TWG meeting on July 5 was encouraging for DPS Nord Kivu.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1 Support ACOREP to develop its 2024 to 2028 Strategic Plan and to update the Directory of Registered Medicines in DRC. MTaPS plans to hire a consultant to assist in developing the ACOREP strategic plan. This will involve creating a clear roadmap with specific actions, including an assessment of ACOREP to identify policy and system gaps, as well as organizing a workshop for drafting and validating the strategic plan.	December 2024

Table 9. Quarter 4, FY24, Activity Progress, DRC—MNCH

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
Activity 1.1.1 Support ACOREP to develop its 2024 to 2028 Strategic Plan and to update the Directory of Registered Medicines in DRC As a newly established institution, ACOREP needs to be strengthened. MTaPS will support ACOREP to develop its 2024–2028 Strategic Plan in collaboration with other partners, including WHO, Global Health Supply Chain Technical Assistance – Francophone Task Order, and Village Reach.	1.1		This activity is in progress. MTaPS has completed the recruitment of a consultant to support the activity, which will be completed during the next quarter.

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, including 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 CSOs, including AGCAL, to implement interventions to contribute to good supply chain governance and support resource mobilization. In PY6, 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 SDPs. The project focused on strengthening the leadership and technical capacity 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 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 in enacting and promulgating 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—an executive manager, a provincial representative for Ituri, and a provincial representative for Nord Kivu. MTaPS organized training sessions to develop leadership and management competencies of key AGCAL staff, which resulted in the development of an AGCAL semiannual action plan and its M&E framework. AGCAL staff were capacitated on the annual quantification exercise, human resource management and implementation of service agreements, and contracts in procurement and logistics. MTaPS also supported AGCAL in obtaining the legal documentation required for its legal existence as an NGO in DRC. To this end, MTaPS assisted AGCAL in obtaining its MOH registration certificate; membership certificate for NGOs operating in the health sector; *personnalité juridique* (legal personality); and Ministry of Justice's F-92 identifier, which granted it full legal existence to operate in DRC. By the end of 2023, AGCAL had enrolled more than 200 members (128 female), mainly pharmacy and medicine students.

YEAR 6 ACHIEVEMENTS & RESULTS

During PY6, MTaPS supported the establishment of AGCAL by helping it to obtain documentation needed to legally exist in DRC, providing coaching on how to operate as a local NGO, and supporting it

to set its mission and goals. MTaPS facilitated international capacity strengthening trips for AGCAL's executive management and encouraged its participation in regional discussions on supply chain topics.

MTaPS supported the executive leadership of AGCAL to recruit new members in Nord Kivu and Ituri and support their participation in TWGs at both the national and provincial levels. Additionally, AGCAL worked alongside MTaPS technical advisors as counterparts, sharing office space and engaging in discussions on provincial supply chain-related topics.

MTaPS supported the supervision of AGCAL and collaborated with the provincial coordinators to advocate for ASRAMES and CADIMEBU to provide office space for AGCAL. Additionally, MTaPS assisted with the recruitment process for AGCAL's provincial coordinators and executive leadership. A weekly check-in was conducted between AGCAL and the USAID mission to assess progress and ensure effective collaboration.

Additionally, MTaPS supported ACOREP to develop a national AMS plan and obtain its official endorsement by the National Medicines Commission.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

OBJECTIVE 1: PHARMACEUTICAL SUPPLY CHAIN GOVERNANCE STRENGTHENED

Activity 3.2.1. Improve PNLS, PNAM and TLMU leadership, coordination and ownership of HIV supply chain and consumption data quality improvement

In collaboration with Global Health Supply Chain – Technical Assistance (GHSC-TA) Francophone Task Order (FTO), SANRU, and Integrated Health Program (IHP), MTaPS supported a TOT workshop in Matadi August 14–22, 2024, focused on HIV data analysis and cross-checking HIMS and LMIS data to support key HIV commodities consumption data quality improvement and report completeness. A total of 24 participants (4 female) from various organizations, including PNLS, PNAM, PNLT, PNLP, and the National Health Information System Division (DSNIS), attended this workshop.

After the TOT workshop, MTaPS supported the capacity strengthening of 18 executives from HZs in Kinshasa, 15 executives from urban HZs in the province of Haut Katanga, and 7 executives from urban and semi-urban HZs in the province of Lualaba. This capacity strengthening will empower trainees to be able to conduct HIV data analysis and cross-checking (HIMS and LMIS) to support key HIV commodities consumption data quality improvement and report completeness.

The data to be cross-referenced include LMIS data, which provides the consumption trend, and programmatic data—the number of active patients by sex or age group. The discrepancy observed when cross-referencing these data will guide technical and administrative decision making.

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

Activity 2.3.2: Support AGCAL and other CSOs' financial, operational, and administrative management competencies by developing SOPs and an action plan for the motivation of members

MTaPS supported the recruitment of a consultant to develop the SOPs for AGCAL. The consultant shared the draft SOPs with MTaPS and is working on integrating MTaPS' feedback into the final version of the SOPs.

Activity 2.3.3: Support the development of a national AMS plan

During this quarter, MTaPS, in collaboration with WHO, supported ACOREP in developing the DRC AMS Plan. ACOREP organized an eight-day workshop in July 2024 with 21 participants (6 female) to create the AMS plan. This plan encompasses three strategic axes and covers 2025–2028, with a total cost of USD 6,291,504. It was endorsed by the National Medicines Commission in August 2024.

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

Activity 5.3.1: Support ACOREP to strengthen the pharmacovigilance system, including for ARV commodities

MTaPS supported PNLS, ACOREP, PNAM, and CNPV to organize a training of trainers on pharmacovigilance in Kisantu July 25–31, 2024. This training was conducted by the National Centre for Pharmacovigilance. A total of 18 participants (6 female) from the organizations mentioned above attended the training, which covered:

- Adverse effects and factors influencing their classifications
- Drug-related pathologies
- Detection of adverse effects pre and post marketing authorization
- General information on reporting
- Notification support

The national-level participants trained in Kisantu went on to train provincial-level participants in Haut Katanga, Lualaba, and Kinshasa. Thirty-six HZs were trained, including 18 in Kinshasa, 11 in Haut Katanga, and 7 in Lualaba, with 2 DPS participants in each province.

Thirty-nine managers (11 female), including pharmacists and HIV nurse supervisors, were trained in the three provinces. The training covered:

- History of PV
- Organization of the PV system
- ARVs, their adverse effects, and the need for ARV PV
- General information on reporting
- Notification support
- Exercise on reporting

The HZ managers trained were advised to brief health care providers via monitoring meetings. Each serves as a PV focal point in their HZ, with a focus on ARVs.

Training of the HZ team in PV, Memling Hotel, Kinshasa, Photo credit: Guy Tshisuaka

BEST PRACTICES/LESSONS LEARNED

- Conducting a rigorous and transparent recruitment process for AGCAL executives with good experience in local and international associative movements has revitalized the association, which now includes not only individuals but also other organizations.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 5.1.1 Support the DRC government's Universal Health Coverage 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	October 2024
Activity 2.3.3 Enhance the competencies of AGCAL members in logistics, procurement, and the optimization of supply chain products	November 2024
Activity 3.2.1 Continue to support the UTGLs and AGCAL in Nord Kivu and Ituri Provinces to strengthen their data collection system to improve the availability, quality, visibility, and use of logistics data for decision making and support PNAM to strengthen the functionality of medicine TWGs at the central level of the health system	November 2024

Table 10. Quarter 4, FY24, Activity Progress, DRC—SUPPLY CHAIN

Activity	MTaPS Objective(s)	Activity Progress
Activity 2.3.3 Enhance the competencies of AGCAL members in logistics, procurement, and the optimization of supply chain products		This activity is planned for PY7.
Activity 3.2.1 Continue to support the UTGLs and AGCAL in Nord Kivu and Ituri Provinces to strengthen their data collection system to improve the availability, quality, visibility, and use of logistics data for decision making, and support PNAM to strengthen the functionality of medicine TWGs at the central level of the health system		This activity is planned for PY7.
Activity 5.1.1 Support the DRC government's Universal Health Coverage 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		This activity will be carried out specifically in Nord Kivu province after consultation with the DPS regarding progress in the targeted facilities in MTaPS-supported HZs.

F. JORDAN

FIELD SUPPORT ACTIVITIES

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

MTaPS played a pivotal role in advancing procurement reforms in Jordan, working closely with the GPD. Key regulatory achievements include legislative changes and institutional policy development for the JFDA and MOH. These reforms involved developing guidelines and SOPs for FA implementation and procurement negotiation, aimed at enhancing supplier market entry, competitiveness, and availability of health products. A comprehensive assessment of the pharmaceutical supply chain led to the formulation of the PSD Operational Plan 2023–2025. MTaPS also supported the development of six priority supply chain management policies, FA SOPs, and procurement negotiation SOPs that were approved by the MOH Secretary General. MTaPS collaborated with the GPD to automate FA SOPs within the Jordan Online E-Procurement System (JONEPS). Through a series of workshops, FA procurement workflows were developed and approved to improve efficiency, transparency, data availability, and governance in procurement processes. Additionally, MTaPS supported the development of FA standard bidding documents (SBDs) to create a consistent and transparent procurement process. These SBDs aim to promote fairness while reducing risks such as fraud, legal challenges, and higher costs. MTaPS is also supporting the development of a supplier evaluation policy that aims to improve contract management and procurement decisions. MTaPS assisted the MOH and RMS in strengthening their capacity to improve antibiotic use in clinical settings. Clinical protocols for antibiotic use were developed and disseminated within these two entities. The RMS AMR Central Committee developed empirical treatment protocols for common ICU infections, while the MOH developed prophylaxis and treatment protocols for surgical procedures and urinary tract infections. Both entities monitored their use through a CQI approach, which showed improved adherence to protocols at piloted hospitals. MTaPS collaborated with the national HCAC to develop a training curriculum to address priority IPC needs identified by the MOH National Advisory Committee for IPC and trained more than 200 IPC focal points across MOH and RMS hospitals and MOH primary health care (PHC) centers. MTaPS extended its support to dental clinics by conducting a comprehensive IPC assessment in a sample of 600 public and private dental clinics and centers. The SHD and HCAD incorporated an AMR awareness program initiated by MTaPS into the NAP- AMR 2023–2025 and developed digital health messages, which were disseminated through social media platforms.

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

YEAR 6 ACHIEVEMENTS & RESULTS

MTaPS collaborated with the GPD to automate FA SOPs in the JONEPS through a series of workshops, which led to the development and approval of FA procurement workflows. This integration aims to improve procurement efficiency, transparency, data availability, and governance. MTaPS contributed to the development of FA SBDs to streamline and standardize procurement processes and drafted a supplier evaluation policy that, once finalized, will enhance procurement decisions by identifying top suppliers and ensuring efficient, informed choices. MTaPS assisted the MOH and RMS in leading the institutionalization of antibiotic treatment and prophylaxis protocols. This initiative involved orientation workshops, M&E efforts, and CQI, contributing to better antibiotic stewardship and patient safety. MTaPS further supported IPC training programs for neonatal ICU nursing staff and certified IPC focal points across hospitals and PHC centers to improve infection control practices and health care quality. Moreover, MTaPS implemented an IPC assessment for dental settings, covering 600 clinics, to standardize practices and improve infection control. MTaPS also supported the MOH HCAD to develop and disseminate AMR awareness messages through social media. Lastly, MTaPS expanded AMR CASS activities to additional schools to foster responsible antimicrobial behavior and broaden AMR awareness within communities.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

MTaPS assisted the GPD to finalize the FA SBDs and a supplier performance evaluation policy, aiming to establish standardized and transparent procurement processes and enhance efficiency. This close engagement with the GPD ensures that all document approvals are streamlined within government processes, which will contribute to fostering long-term compliance and the sustainable application of proper public procurement practices. Collaborating with the MOH and AMS committees, MTaPS facilitated the implementation of antibiotic prophylaxis protocols in pilot hospitals. To ensure sustainability and expand protocol implementation in all MOH hospitals, MTaPS collaborated with the MOH and other stakeholders to help roll out the pilot initiative by organizing a workshop that aimed to share lessons learned, promote knowledge exchange, and build capacity among HCPs. Similarly, MTaPS supported the RMS in extending empirical treatment protocols for ICUs to all RMS hospitals through high-level meetings and official correspondence. MTaPS helped analyze data from a comprehensive IPC assessment of dental settings conducted during previous quarters, presented the data to the Dental IPC Assessment Oversight Committee, and supported a focus group discussion with dentists to refine recommendations for improving IPC in dental settings. MTaPS also facilitated a social media campaign to promote AMR awareness and developed digital signage for PHC centers. The 14 AMR-related health messages will be used in future campaigns, including WAAW in November 2024. The slideshow format enables ongoing dissemination through digital signage in PHC centers and hospitals, ensuring sustained AMR awareness activities across health care settings. These efforts aim to enhance procurement processes, health care practices, patient safety, and AMR awareness, ultimately contributing to better system efficiency and health outcomes in Jordan.

OBJECTIVE 1: STRENGTHEN PHARMACEUTICAL-SECTOR GOVERNANCE.

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

MTaPS facilitated the review of the draft FA SBDs by organizing meetings with selected department heads from the GPD. The review process is completed, and the draft was submitted to the GPD

Director for approval. Once approved, it will be forwarded to the National Procurement Policies Committee for final review, endorsement, and dissemination, which will ensure the sustainability of the SBDs' implementation. The FA SBDs will contribute to establishing a consistent and transparent procurement process; ensuring fairness; and reducing risks such as legal issues, increased costs, reputational harm, technical vulnerabilities, inefficiencies, and fraud.

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

The supplier performance evaluation policy has been finalized and submitted to the GPD Director for approval. Once approved, it will be forwarded to the National Procurement Policies Committee for final review and endorsement and then circulated to the public sector to ensure compliance and sustained application by all public entities. The policy aims to improve contract outcomes by identifying top suppliers and enhancing procurement efficiency through strategic decision making in supplier selection, contract management, and risk and performance evaluation.

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

In previous years, notable progress was made through a collaborative effort involving MTaPS, the MOH Pharmacy and Clinical Pharmacy Directorate, the Institutional Development and Quality Control Directorate (IDQCD), and AMS committees at MOH Al-Salt and Al-Mafraq pilot hospitals. This partnership led to the development and implementation of hospital antibiotic prophylaxis protocols, which were fully embraced and overseen by the MOH and AMS committees at the selected hospitals. To support wider institutionalization of this pilot initiative, MTaPS collaborated with the MOH, PCPD, IDQCD, and Hospital Affairs Administration to organize a workshop to share lessons with a larger number of stakeholders and encourage broader adoption of the protocols in additional health facilities. Hospital directors from 28 MOH hospitals participated in the event. During the workshop, the MOH central directorates played a key role by detailing the protocols' development and implementation using a CQI approach. They highlighted the protocols' importance in reducing AMR and improving patient safety and the crucial involvement of hospital leadership in their successful adoption.

Representatives from Al-Salt Hospital and Al-Mafraq Hospital shared their experiences implementing the protocols during the workshop. They discussed the challenges faced and the mitigation strategies used to overcome them. In addition, the representatives of the two pilot hospitals presented the results of all audit rounds (baseline through round seven), showcasing the progress made in improving antibiotic use.

Additionally, a panel discussion led by MTaPS addressed challenges, improvements, and success stories, with active input from MOH hospital managers.

To ensure sustainability, the MTaPS PY6 extension period will focus on supporting the MOH in leading and institutionalizing the roll out of these protocols to all MOH hospitals countrywide. The roll-out will

standardize clinical practices, enhance patient care, and aid national efforts against drug-resistant infections, thus protecting public health in the long term.

Dr. Abd Al-Aziz from Al Ramtha Hospital said, "I want to express my gratitude to the panel for their valuable insights and to the MOH and MTaPS program for supporting such workshops. Observing the successful implementation of protocols at other hospitals and learning from their experiences is very encouraging. I am enthusiastic about moving forward with the implementation of these protocols at Al Ramtha Hospital."

Workshop panel discussion including, from left, Dr. Ayat Banat, pharmacist at the MOH PCPD; Dr. Awad Al-Khazaleh, Al-Mafraq Hospital Director; Dr. Rami Abu Ruman, Al Salt Hospital Director; and Dr. Amal AL Shafiee, Pharmacist at the MOH IDQCD. Amman. August 28, 2024. Photo credit: MTaPS Jordan

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

MTaPS supported the RMS central Quality Directorate and central AMR committee in expanding the implementation of the 27 empirical treatment protocols for common infections in ICUs to all RMS hospitals. These protocols were developed with MTaPS' support. The central Quality Directorate issued an official letter requesting hospital-based AMR committees previously trained by MTaPS to implement these protocols within their ICUs, monitor the implementation compliance using the established indicators, and report compliance results to both the central Quality Directorate and the central IPC Directorate.

This process will promote sustainability by scaling up and institutionalizing the use of the protocols within RMS, enabling effective compliance monitoring, supporting decision making to address challenges, and developing mitigation plans. It will also contribute to AMR tracking, ensuring the long-term integration of AMS into RMS practices.

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

MTaPS, in collaboration with the Infection Prevention and Control Department (IPCD) and the Dental IPC Assessment Oversight Committee, analyzed the data and presented the preliminary findings of the national dental IPC assessment to the Dental IPC Assessment Oversight Committee. Additionally, MTaPS and the IPCD conducted a focus group discussion with dentists from the private and public sectors to deepen understanding of the data trends and gather opinions on enhancing IPC practices within dental settings.

MTaPS, in collaboration with the IPCD, drafted a comprehensive report detailing the assessment methodology, findings, and recommendations. This report is under review by a technical committee from the MOH and will be submitted to the Minister of Health for approval. Moreover, MTaPS plans to organize a national dissemination event to present the results of the assessment to multisectoral

stakeholders. This event will highlight the significance of the assessment and present opportunities for partnerships, further strengthening IPC practices in both dental and health care settings.

MTaPS presented key recommendations from this assessment at the monthly USAID IP meeting, which provided a tremendous opportunity to showcase MTaPS' efforts in strengthening IPC measures in Jordan.

Based on the findings and recommendations of the report, which shed light on IPC practices across health centers and clinics in Jordan, MTaPS and the MOH agreed to review and update the IPC policies and procedures manual for PHC centers 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 conducting a social media campaign (figure 1). The HCAD shared 14 health messages on AMR through its Facebook page. The campaign targeted HCPs and individuals from diverse educational backgrounds across urban and rural communities, reaching 575,700 people. More than 20,000 individuals ranging from 13 to 65 years old interacted with the posts through likes, shares, and comments. The campaign aimed to enhance community awareness of AMR and understanding of IPC principles while encouraging the appropriate use of antibiotics.

Figure 1: The first campaign post published on the HCAD Facebook page on September 1, 2024, with the message (translated) "Misusing antimicrobials can lead to harmful side effects. Consult a doctor for proper examination and treatment."

MTaPS developed a slideshow of the health messages posts, which was saved onto USB drives. These drives will be distributed by the HCAD to 200 PHCs, where they will be broadcast on digital signage screens at the facilities. The health campaign supported by MTaPS provides a sustainable foundation for future initiatives. The materials, which include the 14 AMR-related health messages, can be reused for future campaigns, such as WAAW in November 2024. The slideshow format ensures these messages continue to be disseminated through digital signage in PHCs and potentially hospitals, providing ongoing educational opportunities. By leveraging these resources, the HCAD can sustain its efforts to raise AMR awareness across health care settings in the long term.

BEST PRACTICES/LESSONS LEARNED

- Integrating a mixed method approach of qualitative and quantitative data collection and analysis into the IPC assessment in dental settings provided deeper insights, revealing challenges such as resource shortages and knowledge gaps. This mixed-method approach, which was adopted by MTaPS, enhanced overall understanding and offered more nuanced guidance for recommendations and interventions.
- Effective hospital leadership and commitment are crucial for the successful adoption and enforcement of priority antimicrobial prophylaxis and treatment protocols. The proceedings of the lessons learned workshop made it clear that the involvement and buy-in of the hospital managers is

essential for standardizing clinical practices and improving patient outcomes across all MOH hospitals. This approach ensures that protocols are well-integrated and adhered, ultimately enhancing overall health care quality and safety.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.2: Review the final draft of the FA SBDs with the National Procurement Policies Committee to expedite the approval process.	October 2024–January 2025
Activity 1.1.3: Review the final draft of the suppliers' performance evaluation policy with the National Procurement Policies Committee to expedite the approval process.	October 2024–January 2025
Activity 4.1.1: Assist the MOH in leading the expansion of the RUA protocols across all MOH hospitals	October 2024–January 2025
Activity 4.3.2: Collaborate with the MOH, ACIPC, and relevant stakeholders to draft a National IPC policies and procedures manual for PHC facilities.	October 2024–January 2025

Table 11. Quarter 4, 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 GPD counterparts in integrating the FA SOPs into JONEPS.	1	Completed in Q3.
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 final draft of the FA SBDs was completed through a thorough review process led by the GPD to ensure accuracy and compliance. The draft was submitted to the GPD Director for approval. Once approved, it will be forwarded to the National Procurement Policies Committee for final review, endorsement, and dissemination. The FA SBDs will create a sustainable, consistent, and transparent procurement process, ensuring fairness and minimizing risks such as legal issues, costs, and fraud.
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	The final draft of the supplier performance evaluation policy was completed by the GPD with MTaPS' support and is undergoing review by the GPD director. Once approved, it will be forwarded to the National Procurement Policies Committee for final review and endorsement and circulated to all public-sector entities to ensure compliance and sustainability. The policy improves contract outcomes by identifying top suppliers and boosting procurement efficiency through strategic decisions in supplier selection, contract management, and risk and performance evaluation.
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 orientation workshops for physicians (including medical residents), nurses, and pharmacists in Al-Mafraq and Al-Salt hospitals.	4	MTaPS, in collaboration with the MOH, PCPD, IDQCD, and Hospital Affairs Administration, organized a workshop to share lessons from the pilot phase of antibiotic protocol implementation in selected pilot hospitals. Hospital directors from 28 MOH hospitals participated, and representatives from the two pilot hospitals presented their experiences and audit results, highlighting progress, challenges, and mitigation actions. A panel discussion led by MTaPS covered successes and areas for improvement. The next steps involve expanding the protocols to all MOH hospitals to standardize practices and enhance public health protection.
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	MTaPS supported the RMS central Quality Directorate and the central AMR committee in implementing the 27 empirical treatment protocols for ICU infections across all RMS hospitals. An official letter was issued requesting that hospital-based AMR committees, previously trained by MTaPS, implement the protocols, monitor compliance with established indicators, and report results to the central Quality Directorate and central IPC Directorate. This approach aims to institutionalize the protocols, ensure effective compliance monitoring, support decision making, and track AMR for long-term integration into RMS practices.
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	4	Completed in Q3.

Activity description: Support the training of selected senior nursing staff from the NICUs of select MOH hospitals.		
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 focal points and create an enabling environment to implement of IPC interventions.	4	Completed in Q3.
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	Completed in Q3.
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 IPC assessments in dental clinics and centers across the country.	4	MTaPS, in collaboration with the IPCD and the Dental IPC Assessment Oversight Committee, analyzed quantitative data and shared preliminary findings. MTaPS and the IPCD also held a focus group with dentists to deepen their understanding of the data trends and gather opinions on enhancing IPC practices within dental settings. Insights will inform recommendations for policymakers to ensure safety in dental care. Moreover, MTaPS presented the salient details of the assessment at a USAID IP meeting and drafted a comprehensive report, which is currently under MOH review, to be followed by a national dissemination event to engage stakeholders and promote IPC improvements.
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 disseminating health messages digitally, targeting different community audiences, through MOH social media platforms.	4	MTaPS supported the HCAD's social media campaign on AMR, which ran September 1–14 on Facebook. The campaign, targeting a diverse audience from 13 to 65 years old, reached 575,700 people and garnered 20,212 interactions. It aimed to improve understanding of IPC and AMR and promote rational antibiotic use. MTaPS also created a slideshow of the health messages and provided it to HCAD with 200 USB drives for distribution to 200 PHCs for broadcasting on their digital screens.
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	Completed in Q3.

G. 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 PY 1–6 work plans, MTaPS helped Kenya counterparts improve Kenya's JEE scores by supporting 63% (39/62) of the total benchmark actions. In MSC, MTaPS supported 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 80% (4/5) of capacity level 5 actions by June 2024. MTaPS supported MSC activities at the national level and in four focus counties (Nyeri, Kisumu, Murang'a, and Kilifi). MTaPS transitioned out of Nyeri and Kisumu counties in November 2023 and December 2023, respectively, and took up two new counties (Nairobi and Kiambu) in March 2024. Key MTaPS activities have included strengthening the MSC structures at national (NASIC) and county (CASIC) levels, developing and disseminating a standardized AMR communique, CASIC orientation packages and bulletins to One Health stakeholders, and development and review of the NAP-AMR, its M&E framework, and CASIC work plans in MTaPS-supported counties.

As of June 2024, 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 60% (3/5) of capacity level 5 actions for IPC. MTaPS activities focused on strengthening IPC governance structures at national and county levels, developing and reviewing the national IPC guidelines, national HAI surveillance guideline development, applying IPC assessment tools, training HCWs, development of Kisumu County's HCWM Plan, revision of the national HCWM guidelines, development of a re-licensure-linked IPC CPD course, and monitoring implementation of IPC and WASH activities using a CQI approach in focus counties and HFs.

For AMS JEE scores, MTaPS supported 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 14% (1/7) of capacity level 5 actions, as of June 2024. MTaPS interventions focused 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; 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; and monitoring implementation of AMS activities using a CQI approach in the focus counties and HFs.

YEAR 6 ACHIEVEMENTS & RESULTS

Key achievements in PY6 include the successful launch of the revised NAP-AMR and its M&E framework, as well as the national HAI surveillance, HCWM guidelines, and the revised IPC guidelines. MTaPS supported the review of CASIC and CIPCAC work plans in Kisumu, Nyeri, Kilifi, and Murang'a, and helped to strengthen governance through end-term AMS and IPC assessments in the focus HCFs in Kisumu and Nyeri Counties, with the information used to inform further strengthening. Furthermore, MTaPS supported the launch of Kisumu County's HCWM plan and the piloting of the AMC surveillance tool in collaboration with the PPB. The pilot implementation demonstrated the willingness of the various players (e.g., manufacturers, distributors, and retail pharmacies) to implement the tool. With the tool already installed at the PPB, this will ensure sustainability as other stakeholders can learn from PPB as they roll out the tool.

MTaPS facilitated capacity building activities, including CPD AMS and IPC webinars with professional associations, i.e., the Pharmaceutical Society of Kenya (PSK) and the National Nurses Association of Kenya; county-led meetings (CASIC, CIPCAC, and county MTC); baseline assessments; and MTC, AMS, and IPC training in Ruiru Level 4 Hospital (Kiambu County) and Mater Misericordiae Hospital (Nairobi County) to address the gaps identified during the assessments. The program provided TA to Nairobi and Kiambu Counties with developing/revising their costed CASIC and CIPCAC work plans. Additionally, MTaPS finalized two manuscripts on antimicrobial use in Gertrude's Children's Hospital (GCH) and stewardship progress in Nyeri and Kisumu Counties.

QUARTER 4 /Y6 ACHIEVEMENTS & RESULTS

USAID MTaPS provided a high-level overview and orientation on IPC guidelines and resources, including waste management, to the USAID SDPs on July 24, 2024, to support the SDPs with critical IPC information and guidance to employ in their work within HCFs. The team also participated and presented on AMR and IPC during the 11th Infection Prevention and Control Network, Kenya (IPNET-K) conference. MTaPS also submitted two manuscripts highlighting MTaPS' contributions to AMS through antimicrobial use in GCH and Kisumu and Nyeri Counties' AMS program assessments. In addition, the team finalized the development of the USAID-supported Kenya Surveillance System for Antimicrobial Consumption, which is now ready for launch. MTaPS also supported the revision of the second editions of the CIPCAC and CASIC work plans for Kilifi and Kiambu Counties, and development of CASIC work plans for Nairobi and Kiambu Counties.

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

USAID MTaPS supported the NASIC with planning for the reconstitution and sensitization of the NASIC and TWGs through virtual sessions held on July 10 and August 21, 2024. In addition, the team supported the Kilifi CASIC work plan validation virtual meeting held on July 17, 2024 (15 participants; 8 females and 7 males). All CASIC work plans, i.e., for Murang'a, Kilifi, Kiambu, and Nairobi, are with county leadership for signing prior to launch. The team participated and provided TA in the NASIC and FAO workshop held on September 3–4, 2024, focused on the strengthening of MSC mechanisms in Kenya, as

well as a follow-up NASIC meeting held on September 5, 2024. The NASIC meeting aimed to assess the past year's progress of AMR containment efforts in the country, identify key achievements and gaps, and develop a roadmap for the WAAW 2024. MTaPS supported Nairobi and Kiambu One Health AMR focal persons to participate in the meeting and share their progress.

USAID MTaPS participated in a virtual planning meeting on August 28, 2024, to prepare for the JEE and contributed technical inputs for AMR presentations. The team then took part in the Kenya JEE from September 9 to 13, 2024, including a stakeholder workshop in Naivasha (September 9–11). Additionally, they participated in and presented on sub-national MSC and maternal AMS interventions at the USAID Health, Population, and Nutrition best practices conference held from September 25 to 27, 2024.

RESULTS AREA 2: IPC

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

USAID MTaPS provided TA during the National HCWM TWG meeting held on August 9, 2024, which saw the review of the TWG's TOR and development of an implementation roadmap for the HCWM program. In addition, the team provided TA and financial support with the finalization, design, and printing of the Kilifi and Kiambu second edition CIPCAC work plans, which are now ready for launch. In Nairobi County, MTaPS supported a virtual validation of their CIPCAC work plan (August 16, 2024). Furthermore, the team drafted three SOPs—principles of wound management, wound assessment, and management of diabetic foot ulcers—to guide HCWs with implementing best practice standards in wound assessment and management for better outcomes.

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

USAID MTaPS provided an overview and orientation on IPC guidelines and resources to the USAID SDPs on July 24, 2024, with the aim of supporting the SDPs with critical IPC information (IPC overview, coordination, core components, and requirements) to employ in their work within HCFs. A follow-up IPC TOT training is scheduled for October 2024. Additionally, the team, in collaboration with Murang'a County, trained 24 HCWs (18 females and 6 males) during a 2-day IPC CQI refresher training for the Maragua Sub-County Hospital (SCH) IPC committee on August 14–15, 2024. The training was organized based on an assessment that identified a gap in trained IPC HCWs and included practical sessions aimed at strengthening IPC governance, building capacity of IPC committee members and departmental IPC focal persons for successful implementation of the HCF's IPC CQI action plan. In addition, the team participated and presented on AMR and IPC during the 11th IPNET-K conference, where MTaPS county AMR champions from Kilifi and Malindi hospitals also presented on antimicrobial usage through targeted PPSs.

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

USAID MTaPS conducted IPC compliance tracking with Ruiru Level 4 Hospital and Mater Hospital IPC committee members on August 12, 2024, to review progress on their CQI action plans and provide mentorship for upcoming IPC activities. Both teams have cascaded IPC training to key HCWs, initiated SSI surveillance, and prioritized monthly IPC meetings. For World Patient Safety Day 2024, four HCFs (Kilifi and Murang'a County Referral Hospitals and Malindi and Maragua SCHs) held facility-led activities,

including a radio talk show (Murang'a), CME sessions (all 4 HCFs), SSI root cause analysis (Kilifi), and patient sensitization (Kilifi and Malindi).

RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

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

USAID MTaPS, in collaboration with the PPB, finalized the national AMC tool, now ready for launch. Discussions on implementation began with a joint workshop between PPB and the Fleming Fund (August 14–16, 2024), with MTaPS providing TA to coordinate AMC surveillance. The team is supporting the second phase of AMC tool implementation, including TA with implementation of an AMC training with NASIC AMS TWG and the University of Nairobi (September 23–24, 2024). A virtual meeting on September 20, 2024, between PPB and MTaPS, discussed the tool's launch.

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

USAID MTaPS, in collaboration with the NASIC AMS TWG, facilitated a Teach AMS session on September 25, 2024, with around 150 participants, providing TA on the AMS case study from the Mwai Kibaki Hospital (Nyeri County). The team also provided TA during the validation of the draft national antimicrobial use guidelines (September 23–24, 2024).

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

USAID MTaPS supported Kiambu County in establishing its County Medicines and Therapeutics Committee (CMTC), beginning with an inaugural meeting on August 14, 2024 (12 participants; 8 females, 4 males), at Thika Level 5 Hospital, and supported a subsequent virtual meeting on September 18, 2024 (15 participants; 10 females, 5 males), to review progress and induct new members. MTaPS also provided TA, to county and facility AMS focus persons, on implementation of their AMS CQI plans, coordinating AMR/AMS activities, and WAAW 2024 planning. Ruiru Level 4 Hospital held a CME on good prescribing practices (August 29), while Mater Hospital addressed irrational antimicrobial prescribing through sensitization efforts. MTaPS provided TA to GCH to finalize and submit a PPS manuscript and worked with Kilifi HCFs on PPS and rational drug use manuscripts. Furthermore, MTaPS submitted a manuscript on AMS program assessment of Nyeri and Kisumu Counties.

BEST PRACTICES/LESSONS LEARNED

- The finalized national AMC tool enables comprehensive data collection on antimicrobial use across the antimicrobial supply chain—from importers to local manufacturers, wholesalers, HCFs, and community pharmacies—in a routinized way, rather than as a survey. Various stakeholders supporting AMS are able to support various levels of the system to submit data to the PPB. This ability of multiple stakeholders to support the system establishes a standardized system for tracking AMC data, supporting evidence-based policymaking, and AMR containment. Following in-country discussions, a new partner has committed to build on the current gains to strengthen AMC data collection in their supported regions using the standardized tool, which is already domiciled at the PPB.

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 ▪ Support the inauguration of the reconstituted NASIC and support TWG meetings ▪ Launch Nairobi and Kiambu CASIC work plans and support the annual WAAW 2024 events ▪ Finalize the development of an SOP on CASIC set-up ▪ Initiate development of a CASIC reporting tool	October–December 2024
Activity 2.1.1: Institutionalize IPC governance at the national, county, and facility levels ▪ Finalize, launch, and disseminate the AMR mobile app and SOPs on wound management ▪ Conduct end-term assessments and dissemination workshops for Kilifi and Murang'a Counties ▪ Provide TA to NIPCAC, CIPCACs (Kiambu and Nairobi), and facility IPC committees	October–December 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 CPD trainings ▪ Conduct IPC training for the USAID SDPs and support the design of induction/continuing education programs for IPC in the two target HCFs ▪ Conduct targeted webinars and sensitization sessions to address identified implementation gaps	October–December 2024
Activity 2.5.1: Institutionalize county, sub-county, and facility-level IPC, OSH, and WASH activities for sustainable capacity ▪ Jointly with county IPC champions, monitor the implementation of IPC CQI work plans and track compliance ▪ Provide mentorship to address any implementation gaps identified	October–December 2024
Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels ▪ Launch the AMC tool and support the MTCs/AMS governance committees at the national level and in focus counties ▪ Conduct end-term assessments for Kilifi and Murang'a Counties	October–December 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 ▪ Initiate the planning for the training of internship preceptors on AMR ▪ Support the utilization of AMS champions to conduct PSK-targeted AMS CPD sessions	October–December 2024
Activity 3.5.1: Support institutionalization of county, sub-county, and facility-level AMS activities for sustainable capacity ▪ Monitor implementation of AMS CQI work plans, track compliance, and provide mentorship to the CHMT to conduct facility monitoring ▪ Provide TA to support the focus HCFs with documentation and dissemination of AMS best practices	October–December 2024

Table 12. Quarter 4, 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 national 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	▪ Held meetings with the NASIC on July 10 and August 21 to plan the reconstitution of the NASIC and sensitization of its new members and TWGs ▪ Provided TA during the Kilifi CASIC work plan validation held on July 17, 2024 ▪ Supported the finalization of all focus counties' CASIC work plans, i.e., for Murang'a, Kilifi, Kiambu, and Nairobi ▪ Participated in the Kenya JEE held from September 9 to 13, 2024
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 relevant 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	▪ Provided TA during the national HCWM TWG meeting held on August 9, 2024 ▪ Provided TA to Nairobi County CIPCAC during the validation for their second edition of the CIPCAC work plan ▪ Provided financial support for the design, layout, and printing of the Kilifi and Kiambu CIPCAC work plans ▪ Drafted three SOPs on wound management
Activity 2.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for IPC through pre-service, in-service, and CPD 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 in introduction of IPC agenda/courses for in-service training.	5.4		▪ Provided a high-level overview and orientation on IPC guidelines and resources, including waste management, to the USAID SDPs on July 24, 2024 ▪ Conducted an IPC refresher training for Maragua Hospital's IPC committee to bridge a gap resulting from attrition of IPC-trained HCWs ▪ Learned and shared knowledge during the 11th IPNET-Kenya conference ▪ Learned and shared knowledge during the USAID annual best practice conference
Activity 2.5.1: Institutionalize county, sub-county, 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 and report on key IPC indicators through the KHIS; disseminate and implement existing and newly prioritized IPC guidelines, SOPs, and job aids; document and share best practices and lessons learned.	5.4	2.5	▪ Monitored implementation of IPC CQI plans in the counties of Kilifi, Murang'a, Kiambu and Nairobi remotely through the county and facility IPC focal persons ▪ Provided TA during World Patient Safety Day celebrations to the county and facility IPC focal persons
Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels **Activity description:** Support 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	▪ Provided TA to the PPB with the finalization of the national AMC tool ▪ Provided TA during a joint workshop on August 14–16 to discuss collaborations with other partners on the implementation of the AMC tool ▪ Provided TA during an AMC training held on September 23–24, 2024

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 PPB, support routinization, strengthening, scale-up, and incorporation of AMR and AMS courses into 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; scale up patient-focused AMS interventions.	5.4	3.2	▪ Facilitated a Teach AMS session on September 25, 2024
Activity 3.5.1: Support institutionalization of county, sub-county, 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	▪ Provided TA and financial support to establish the Kiambu CMTC, with an inaugural meeting on August 14, 2024, and a follow-up virtual meeting on September 18, 2024 ▪ Provided TA through touch-base sessions with AMS focus persons for AMS CQI plan implementation, AMR/AMS coordination, WAAW 2024 planning, and supportive supervision ▪ Supported the finalization and submission of manuscripts, including GCH antimicrobial use, and an AMS program assessment for Nyeri and Kisumu Counties

H. 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 TORs for the GCMN-RAM, IPC, and AMS TWGs. With MTaPS' support, the GCMN-RAM has been able to organize 10 of the 12 initially planned coordination meetings to monitor progress in implementing the NAP-AMR. The 8th meeting was an opportunity to pause and reflect as well as develop a sustainability plan for MTaPS-supported activities. MTaPS also supported the IPC TWGs in organizing 8 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 2 components (including the IPC program and surveillance of HAIs) have improved since 2022. In 2024, IPCAT2 results indicated improvements in IPC programs and IPC guidelines core components. The AMS TWG also held 5 regular meetings to monitor and evaluate AMS practices in supported HFs. The WHO tool was used to monitor AMS program implementation at the national level during the last meeting in August 2024. The evaluation showed a national overall score of 74% for AMS program implementation and 90% for monitoring/surveillance and evaluation. The lowest score was 63%, for education awareness and training.

MTaPS supported the DGSHP and the 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 4 virtual meetings to monitor the implementation of IPC activities described in the 16 facility action plans. MTaPS also supported a total of 5 HF supervision visits from the inception of the project until December 2023. In collaboration with the DPM and the National Agency for the Accreditation and Evaluation of Health Facilities (ANAES), MTaPS facilitated the organization of 7 virtual meetings and conducted 4 DTC supervision visits to each of the 16 HFs.

Additionally, MTaPS supported the National Institute of Public Health (INSP), the DGSHP, and the DPM in developing the 2023–2027 NAP-AMR, the 2023–2027 IPC strategic plan, the IPC training toolkit, the AMS training toolkit, infectious disease treatment guidelines, and IEC materials. With MTaPS' help, the GCMN-RAM conducted a rapid assessment of policy, regulations, and supply chain management of antimicrobials in the human health and animal health sectors, and the GCMN-RAM 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 health 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 and 1,520 treatment guidelines for infectious diseases to the MOH, the Ministry of Environment, the Ministry of Animal Resources, the Ministry of Agriculture, finance and technical partners, and medical professional associations. Furthermore, MTaPS facilitated the development and implementation of e-Learning platforms that are now installed and operational at both the DGSHP and the Faculty of Medicine and Odontostomatology. In partnership, MTaPS supported the DPM in printing and disseminating 195 AMS training toolkits, including the facilitator guide and participant manual to HCWs and MOH's national and regional departments.

MTaPS supported the GCMN-RAM in participating in national and international events to share achievements and lessons learned and to sensitize people to rational use of antimicrobials, as well as to promote IPC and AMS practices. During these events, IEC materials including 1,044 flyers and 2,436 posters to raise awareness of AMR and inform health workers and the general population of the dangers of AMR and irrational use of antibiotics were disseminated, contributing to improved prescription practices by providers.

YEAR 6 ACHIEVEMENTS & RESULTS

In FY24, MTaPS supported the GCMN-RAM to update TORs, adding other actors including universal health coverage (UHC), primary health care (PHC), and health emergencies to this governance body and the transition and sustainability plan. MTaPS also supported IPC and AMS TWGs to develop a strategy for scaling up IPC and AMS practices in response to the 2023 JEE. MTaPS supported the GCMN-RAM to attend the 6th conference of the African Epidemiology Association (AfEA) and the 1st congress of the Malian Society of Epidemiology (SOMEPI), jointly organized in Mali on October 25–27, 2023; the 5th conference of the *Société Malienne de Pathologies Infectieuses et Tropicales* (SOMAPIT) held on January 14–15, 2024, in Bamako, Mali. The GCMN-RAM communicated MTaPS Mali's achievements and lessons learned, presented the importance of IPC committees, guidelines on IPC and infectious disease, the IPC and AMS e-Learning guide, and the IPC Strategic Plan.

MTaPS supported the DPM and the MTaPS MERL specialist to attend the 11th African Evaluation Association (AfrEA) International Conference in Kigali, Rwanda. The DPM shared evidence from an evaluation that looked at the usage of the NEML and how that evidence was utilized to update the NEML in Mali. Furthermore, the abstract highlighted the integration of the WHO AWaRe categorization into the new NEML.

Additionally, MTaPS supported the IPC TWG and AMS TWG in organizing meetings to monitor and evaluate the IPC and AMS programs at the national level. During these meetings, the TWGs used the WHO IPCAT2 and the WHO guideline for integrated AMS tools. For IPC, results indicated that the IPC program, IPC guidelines core components, and HAI surveillance have improved since 2022. For AMS, the evaluation showed a national overall score of 74% for AMS program implementation and 90% for monitoring/surveillance and evaluation. The lowest score was 63%, for education awareness and training. MTaPS assisted the GCMN-RAM, the DPM, and the DGSHP in organizing virtual meetings and

supervision visits to monitor the implementation of IPC and AMS activities described in the 16 facility action plans.

MTaPS supported the AMS TWG to print 1,150 flyers and 4,050 posters on AMR. Out of these,1,044 flyers and 2,436 posters were disseminated during the launching of the WAAW ceremony to regional health directorates, health facilities, pharmacists, and key stakeholders. In addition, the DTCs are using these materials to promote appropriate use of antimicrobials at the facility level.

MTaPS supported the DPM, ANAES, and the GCMN-RAM to lead 1 field supervision visit for each facility and 2 virtual monitoring meetings gathering all 16 supported health facilities. During the virtual monitoring meetings, participants shared updates on the implementation of their respective CQI plans and followed up on recommendations made during the last supervision visit. MTaPS, the DPM, and the GCMN-RAM utilized the results of the supervision visit to sensitize HF managers to further strengthen the functioning of the respective DTCs and to improve the implementation of the facility AMS CQI plan. Furthermore, MTaPS worked with the DTCs to integrate the updated CQI plans into the facility operational plan.

The DTCs, under the supervision of the DPM, use the WHO assessment tool to assess and strengthen their own AMS practices. They also use the WHO Guidelines for Integrated Asset Management and Antimicrobial Treatment Activities to assess facility-level asset management practices. The evaluation of the AMS practices highlights an increase in the overall score from 48% to 65%. While progress has been made, there is a need to strengthen the "education and training" component, which is scored at 57% and the "reporting feedback within the health care facility" component, which is at 51%.

Table 13. Assessment of AMS practices from the 16 targeted health facilities

Component	2023	2024
Presence of DTC, IPC, or AMS team	91%	92%
DTC functionality	42%	61%
Leadership commitment	57%	68%
Accountability and responsibility	47%	71%
AMS actions	45%	62%
Education and training	56%	57%
Monitoring and surveillance	38%	70%
Reporting feedback within the health care facility	37%	51%
Overall score	48%	65%

MTaPS supported the IPC-WASH group to develop an annual and costed IPC operational plan. The operational plan was based on priority activities identified from the 2023–2027 IPC Strategic Plan. Participants from the Regional Health Directorate, ANAES, *Direction Nationale de l'Assainissement du Contrôle des Pollutions et des Nuisances*, members of the IPC-WASH group, and other partners (WHO, UNICEF, WaterAid Mali, World Vision, International Rescue Committee/WASH, Terre des Hommes IMC, and Keneya Sinsi Wale) contributed to its development.

MTaPS supported the IPC-WASH group and the DGSHP to lead 1 field supervision and 2 virtual monitoring meetings engaging the 16 supported health facilities. During the virtual monitoring meetings, participants shared updates on the implementation of their respective CQI plans and followed up on recommendations made during the last supervision visit. During the supervision visit, the IPC-WASH group and the DGSHP used the WHO IPCAF, WHO HHSAF, and WHO scorecard tool for COVID-19 to measure and verify progress made. The figures below present the results obtained through March 2024 for each of the assessments conducted.

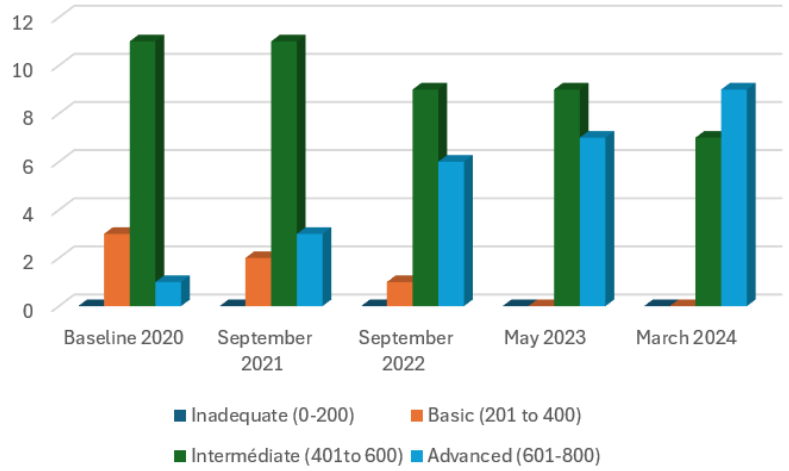


Figure 2. Number of health facilities meeting IPC standard requirements

In March 2024, 8 of 16 assessed facilities progressed to the intermediate level, and 9 health facilities have reached the advanced level. As seen in the chart above, this is a marked improvement from the 2020 baseline.

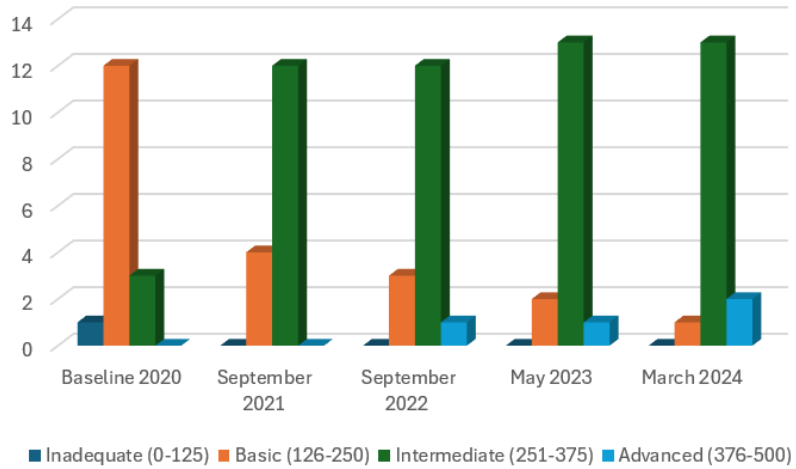


Figure 3. Hand washing self-assessment scores

The chart above depicts progress made in hand washing; however, more progress needs to be made to move a critical number of facilities to the advanced level.

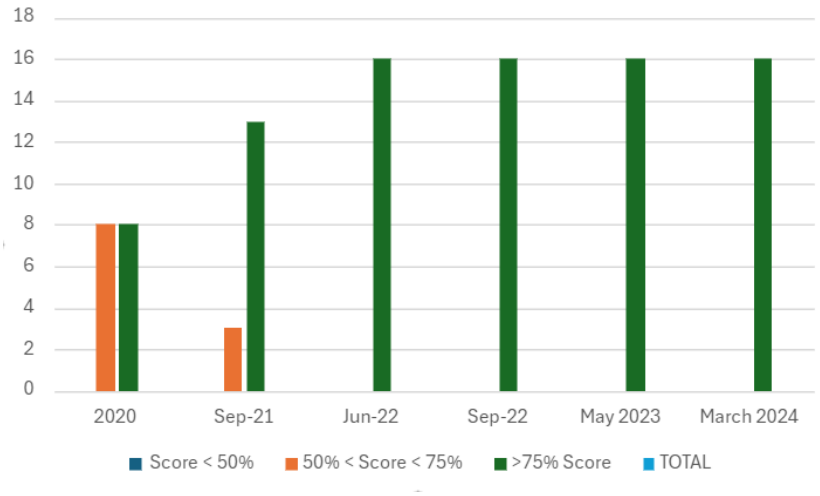


Figure 4. COVID-19 IPC scorecard evaluation results per facility

By March 2024, all facilities visited met COVID-19 prevention and control standards as recommended by WHO.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

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

This quarter, MTaPS supported the INSP, the DGSHP, and the DPM to develop a strategy for scaling up IPC and AMS activities. The strategy was then validated during a workshop that comprised 50 participants (40 male, 10 female) from the human, animal, and environmental health sectors. The strategy is finalized and submitted to the MOH for official endorsement.

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

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

MTaPS supported the DPM to organize a meeting with 40 DTC members (37 male, 3 female) of the supported health facilities to monitor AMS practices in the 16 targeted health facilities. The following topics were discussed:

- Implementation of supervision recommendations and action plan activities
- Introduction of SDADME indicator collection sheet
- Sharing the results of evaluation at the facility level using the WHO guidance on integrated AMS activities.

The supervision used the WHO's tool for assessment of AMS practices at the facility level. As a result, the overall score progressed from 48% in 2023 to 65% in 2024, as shown in table 1 above. The

evidenced improvements can be credited to MTaPS' supporting the HFs in updating their CQI plans to address gaps identified in the 2023 assessment.

BEST PRACTICES/LESSONS LEARNED

There were no best practices or lessons learned this quarter.

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	October–December 2024
Activity 3.5.2: Support the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices at 16 health facilities	October–December 2024
Activity 2.5.1: Support the IPC TWG and DGSHP in monitoring implementation of IPC practices at health facilities	October–December 2024
Activity 2.5.2: Support the IPC-WASH group and the DGSHP to strengthen HH practices and monitor compliance with waste management SOPs in HFs	October–December 2024

Table 14. Quarter 4, 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	5.4	1.1	▪ National strategy for scaling up IPC and AMS activities developed. ▪ AMS technical working group held.
Activity 3.5.2: Support the GCMN-RAM, ANAES, and the DPM in monitoring implementation of AMS practices at 16 health facilities	5.4	3.5	▪ AMS activities in the 16 health facilities supported by MTaPS monitored.

MATERNAL, NEWBORN, AND CHILD HEALTH ACTIVITIES

OVERVIEW

The MNCH goal in Mali includes strengthening pharmaceutical regulatory systems, focusing generally on registration or marketing authorization for all products, and specifically on 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 3-day training session focused on building data entry teams' capacity to use the DPM's electronic platform, Pro-E-Med, 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 2 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, helping to launch it 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 website for the safe use of pharmaceutical products and for improving the quality of health services in facilities and governance in the pharmaceutical sector.

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 management team, *Unité de Mise en Oeuvre du Renforcement du Système de Santé*, supported the DPM in developing training tools on rational prescription and in organizing a workshop to develop the guidelines for rational prescription and to train 25 trainers (22 male, 3 female) on rational prescription of antimicrobials. Those trainers trained 116 health practitioners (85 male, 31 female) on infectious disease treatment and rational prescribing practices.

In May 2024, MTaPS supported the DPM to conduct the mid-term evaluation of the 2022–2026 pharmaceutical policy master plan.

YEAR 6 ACHIEVEMENTS & RESULTS

As mentioned above, in September 2023, MTaPS, supported the DPM in developing training tools and in organizing a workshop to train trainers on rational prescription of antimicrobials. Building on this activity, in May and June 2024, those trainers trained 116 health practitioners from the region of Kayes, Sikasso, Segou, Mopti, and Bamako on infectious disease treatment and rational prescribing practices.

In May 2024, MTaPS supported the DPM to conduct the mid-term evaluation of the 2022–2026 pharmaceutical policy master plan. Following the mid-term evaluation, MTaPS supported the DPM to organize a workshop to validate findings and recommendations, identify priority activities, and develop an advocacy paper to mobilize funding. A total of 49 participants (40 male, 9 female) from the central and regional levels attended the validation workshop.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

There were no activities implemented in PY6 Quarter 4.

BEST PRACTICES/LESSONS LEARNED

- Despite the existence of a legal framework, including the government institution leading the implementation of this plan, the implementation rate of the pharmaceutical master plan is currently at 12% with 15 of the 126 planned activities implemented. This low implementation rate is due to the lack of resources allocated in support of its implementation. With MTaPS support, a resource mobilization document has been developed to fund priority activities.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Sub-activity 3.1.6.2. Support the DPM to improve the functionality and operationalization of the website	October–December 2024
Support the DPM in reproducing and disseminating the national list of essential medicines	October–December 2024

Quarter 4, FY24, Activity Progress, Mali—MNCH

There were no MNCH activities in PY6 Quarter 4. MNCH activities will resume in October.

I. 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 September 2024, MTaPS has supported the achievement of 39 (63%) of the 62 WHO benchmark actions—12 contributing to MSC/AMR, 14 to IPC, and 13 to AMS.

In MSC, MTaPS contributed to 2 (50%) of the 4 actions of capacity level 3, 4 (100%) of the 4 actions in capacity level 4 and 4 (80%) of the 5 actions in capacity level 5. With MTaPS' support, the country is on track to complete 100% of level 5 benchmark actions by the end of FY24 (PY6). Following the review of the performance of the 2017–2022 NAP-AMR, MTaPS has worked with the AMR Coordinating Committee (AMR CC) and other partners, including WHO, FAO, the WOAH, and the United Nations Environment Program (UNEP), to coordinate the development of the new 2024–2028 NAP-AMR for the country. In addition to supporting the prioritization of NAP-AMR 2.0 activities, MTaPS supported the training of 4 M&E officers and 4 focal persons, 1 officer and 1 focal person from each of the quadripartite ministries, in the use of the developed and adopted M&E tools.

MTaPS supported the NCDC national AMS TWG to validate the AMS training modules/mentorship toolkit that were developed in Quarter 3 FY24 to sustain continued AMS trainings. These developed tools were validated in consultation with local mentors, NCDC, national AMR TWG, WHO, Ministry of Health, Ministry of Agriculture, subject matter experts from Nigerian universities, and the National Agency for Food and Drugs Administration and Control (NAFDAC) (Lagos, July 23–26).

At the subnational level, MTaPS supports the state-level AMR TWGs in Kebbi and Enugu States and the corresponding facility programs in 7 facilities. MTaPS has also supported 7 HCFs, 3 in Enugu and 4 in Kebbi, who have locally developed antibiotics formularies, which are expected to strengthen AMS activities across all MTaPS-supported facilities.

In IPC, MTaPS' support contributed 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 4. 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 surveillance to support HCAI monitoring in the country. MTaPS also provided technical support in the review of the national IPC strategic plan and the national IPC policy in FY24. Additionally, MTaPS supported submission of the finalized manuscript on the systematic review and meta-analysis of HCAI in Nigeria for publication in FY24.

YEAR 6 ACHIEVEMENTS & RESULTS

MTaPS' key achievements at the facility level include the establishment of IPC programs in 7 MTaPS-supported private and public facilities in Enugu and Kebbi States. Key outcomes include the movement of 6 facilities from "inadequate" (assessed during the FY22 baseline assessment) to "intermediate," and 1 facility (Enugu State University Teaching Hospital) from "inadequate" to "basic" after the reassessment in FY23 using the WHO IPCAF tool. MTaPS improved the Multimodal Hand Hygiene Program across the 7 supported facilities, moving from a score of "basic" at baseline, as assessed by the Hand Hygiene Self-Assessment Framework (HHSAF) in FY23, to a score of "intermediate" during a follow-up assessment in FY24. Through an in-person, competency-based training approach, the increased capacity of 59 members (21 male, 38 female) from 7 facility teams demonstrated improvement in key technical, managerial, and leadership areas for the effective coordination and management of the IPC program across the states, including the use of WHO tools for self-assessment and evaluation and development of targeted improvement plans. As a result, these facility teams conducted step-down training, reaching 2,217 HCWs (855 male, 1,362 female). To ensure sustained impact, MTaPS provided ongoing support through regular remote mentoring and in-person mentorship visits to reinforce skills and sustain the effectiveness of these IPC programs.

At the state level, AMS programs were established in 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. As a result, 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 AMU-PPS in 6 facilities. All surveyed facilities reported prescription of Access group antibiotics in the range of 18%–53%, which is below the WHO-recommended minimum of 60%, a critical indicator for appropriate AMU. MTaPS provided feedback on the AMU-PPS outcomes to facility AMS teams during monitoring and supportive supervisory visits for advising the updating of their facility AMS plans. This feedback guided facility AMS teams to support the monitoring of antibiotics prescribing and to have more effective engagement with prescribers and other health care practitioners across supported facilities. A follow-up PPS was conducted in FY23, and 4 out of the 6 surveyed facilities recorded improvements in the proportion of Access group antibiotics prescribed, with 1 facility, Mother of Christ Specialist Hospital, 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 provides 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 guide optimal use of antibiotics. MTaPS supported a meta-analysis of published data on

resistance and sensitivity patterns of common bacterial pathogens to commonly used antibiotics in Nigeria—an abstract was accepted and presented at the PharmaConnect Africa Conference 2024, Lusaka, Zambia. 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 AWaRe groupings in April 2023. MTaPS collaborated with the Federal Ministry of Health (FMOH) and the NEML committee to review the NEML in line with the developed AWaRe list.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

MTaPS, working collaboratively with the NCDC and other partners utilizing the OH approach, successfully validated the AMS Mentorship toolkit and AMS training modules in July 2024. These validated AMS documents are now part of the national AMR TWG's resources, aimed at strengthening and scaling up AMS programs across Nigeria to combat AMR.

The seven MTaPS-supported HCFs have locally developed antibiotics formularies, and this is expected to guide antibiotic selection, prescription, dispensing, and administration and to strengthen AMS activities in both MTaPS-supported and non-supported HCFs in Nigeria.

MTaPS, working collaboratively with the NCDC and other partners, finalized the 2024–2028 NAP-AMR, including the monitoring framework, and it is currently awaiting launch. This NAP-AMR will guide the implementation of AMR programs in the country for the next four years.

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 CC, has concluded the development of the new NAP-AMR 2024–2028, which is awaiting its launch. This was achieved through a series of workshops involving WHO, UNICEF, the Federal Ministry of Health and Social Welfare, the Federal Ministry of Agriculture and Food Security, and the Federal Ministry of Environment and Water Resources. Tentatively, the launch will be in October 2024.

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

Following the conclusion of the development of M&E tools to evaluate the NAP-AMR implementation and with the prioritization of the new NAP-AMR activities in Quarter 2, MTaPS continued to support the TWGs in Kebbi and Enugu States and their corresponding seven facility programs through mentoring and supportive supervision.

RESULT AREA 2: IPC

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

MTaPS strengthened the state IPC programs through the mentoring of the two state IPC focal persons in Kebbi and Enugu states (one in each state), vis-à-vis the local government authorities' IPC focal points, to support governance and coordination at the state level and, in collaboration with NCDC, to sustain monitoring of IPC activities at the supported facilities.

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 provided assistance for the continued provision of on-the-ground support and mentoring on the use of the developed IPC for VHF manual. The mentors continued to work alongside the state IPC focal persons and the facility IPC teams, reinforcing the process of adoption and implementation of the IPC for VHF guidelines to MTaPS-supported health facilities in the NCDC network.

Activity 2.1.3: Strengthen HCAI surveillance in human health sector

In Quarter 4 FY24, MTaPS, in collaboration with the NCDC, submitted the finalized manuscript for the completed systematic review meta-analysis for HCAI surveillance in the country to PLOS ONE Global Public Health Journal for publication, contributing to the global learning agenda for IPC, patient safety, and health security. The findings have also been incorporated into the existing NCDC report on HCAI surveillance in Nigeria.

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

In Quarter 4 FY24, MTaPS, in collaboration with the national AMR TWG secretariat, continued to provide support to IPC focal persons and teams at the seven supported facilities in Enugu and Kebbi states through the deployed local IPC experts. MTaPS standardized IPC practice by capacitating the supported facilities and other state HCFs to conduct knowledge and practiced experience exchange. The support addressed gaps in the IPC programs, education and training, and monitoring in MTaPS-supported facilities.

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

In Quarter 4 FY24, MTaPS, in collaboration with the national AMR TWG secretariat, continued to provide mentoring to the IPC teams on the use of standardized tools for IPC and WASH to strengthen the functionality of IPC teams across the 7 MTaPS-supported facilities in Enugu and Kebbi States. Through this mentorship support, MTaPS provided task-based training to 232 (19 male, 213 female) HCWs on basic standard and transmission-based precautions, as well as training on the facility-adapted state IPC guidelines and monitoring and audit of IPC practices and feedback using monitoring tools such as IPCAF, HHSAF, and Hand Hygiene Compliance across the 7 supported facilities.

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 supported the FMOH and the NEML committee to finalize the NEML at the third and final workshop. This final list will be disseminated across MTaPS-supported facilities and deployed to guide stewardship activities among prescribers. MTaPS has also supported the development of AMS training modules. This process has been completed and validated by subject matter experts and key stakeholders in the country, and the document is ready for use across both MTaPS-supported HCFs and non-MTaPS-supported HCFs in implementing AMS programs.

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

MTaPS, in conjunction with the NCDC, conducted joint monitoring, supportive, and supervisory visits across the three supported facilities and four supported facilities in Enugu and Kebbi states, respectively, in April 2024. The facility AMS consultants continued to mentor the facilities on improving AMS core elements. MTaPS is also supporting the development of an AMS mentorship toolkit, which has been completed and validated in July 2024 at a stakeholders' workshop in Lagos. This validated mentorship toolkit has been used to support implementation of AMS programs across HCFs in Nigeria.

BEST PRACTICES/LESSONS LEARNED

- An intentional inclusive implementation strategy (especially involving the state stakeholders) can encourage the host government to support the program more effectively. MTaPS has worked collaboratively with the state governments of Kebbi and Enugu in all stages of the program implementation. It was involved in the planning, monitoring and supervision, mentoring, and closing of the IPC programs in the supported facilities, and this has increased the state governments' capacity in implementing IPC programs in their states. As a result of this, Enugu State government has independently activated 10 facilities in the state for IPC program implementation and monitoring. These newly activated facilities participated in a recently concluded IPC knowledge exchange workshop, where various best practices for IPC implementation were derived from the supported IPC teams to enable ownership and sustainable development for facility IPC program implementation.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
AMS implementation tools, approaches, and lessons learned workshop in Enugu and Kebbi States	October 2024
Pilot of NAP M&E tools	October 2024
End-of-project Learning event	November2024

Table 15. Quarter 4, FY24, Activity Progress, Nigeria—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
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	With MTaPS' support, the 2024–2028 NAP strategic plan and operational plan has been finalized and is awaiting launch and sign-off by the Minister. Editorial has returned the finished document to the AMR CC.
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 4 M&E officers and 4 focal persons of the quadripartite ministries based on the prioritized indicators. The next steps include incorporating the developed tools into the AMR Information System and piloting data collection with the tools.
Activity 3: Development of AWaRe categorization of antibiotics **Activity description:** 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	5.4	3.1	The final validation workshop for the integration of WHO AWaRe classification into the NEML has been held. The NEML was reviewed in line with the AWaRe classification.
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	Support for facility AMS programs in Enugu and Kebbi States through the consultants continued capacity strengthening of new and old members on hospital antibiotics formulary and antimicrobial consumption surveillance, 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 the disseminated IPC for VHF manual.
Activity 6: Strengthen HCAI surveillance in human health.	5.4	2.1	Manuscript development finalized.
Activity 7: Strengthen 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 the supported states in July and August 2024.

J. RWANDA

FIELD SUPPORT ACTIVITIES

OVERVIEW

The goal of MTaPS in Rwanda is to provide support in strengthening the country's 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 increase its institutional capacity to address key areas of weakness and gaps identified in successive WHO GBT assessments.

CUMULATIVE PERFORMANCE TO DATE

Over the past five 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 more than 1,000 pending medicine registration applications at the Rwanda FDA. As part of implementing 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 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 oversight of clinical trials.

To increase the efficiency of the Rwanda FDA's regulatory functions, MTaPS provided technical support for customizing IRIMS to the FDA's requirements and implementing it with training of internal and external users. MTaPS worked with the Rwanda FDA and Rwanda Information Society Authority (RISA) to facilitate the final hosting of IRIMS in the country's National Data Center, leveraging COVID-19 funds from USAID. IRIMS has gone live, enhancing efficiency and accountability in regulatory service provision and access to information for decision-making at the Rwanda FDA. MTaPS supported the integration of IRIMS with iRembo to facilitate efficient payments management and the digital certificate platform through the RISA and facilitated a service-level agreement for system maintenance with the developer.

In addressing the human resources capacity gap, MTaPS supported training of more than 500 health care workers and Rwanda FDA regulatory personnel. The training comprised various aspects of pharmaceutical management and regulatory processes, including medicine evaluation and registration, good manufacturing practices, good review practices, good reliance practices, PV, QMS, and medicines

management, thereby strengthening the pharmaceutical management capacity of health care providers. 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. To improve pharmaceutical management in HFs via MTCs, MTaPS oriented 313 health care providers (113 female) on the developed MTC operational manual, tools, and SOPs. 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 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 multi-year national PV plan to guide the implementation of medicine safety monitoring activities and trained 19 participants (13 males and 6 females) from the National Pharmacovigilance Advisory Committee and Rwanda FDA on PV. In strengthening both active and spontaneous PV, PViMS (now known as the digital public good OpenRIMS-PV[i]) was adapted to manage data for spontaneous reporting of AEs, including AEFIs for Ebola and COVID-19 vaccines, and for active safety monitoring of DTG-based antiretroviral therapy (ART) regimens. From June 2021 to April 2024, 2,002 AEFIs were submitted by health care providers and reported to the Rwanda FDA. Of those, 858 were serious AEs related to COVID-19 vaccines, which the Rwanda FDA reported to the WHO Uppsala Monitoring Center. The use of OpenRIMS-PV 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.

MTaPS—working with the MOH, the RBC, and the Rwanda FDA—developed a study protocol for active surveillance of DTG-based ART regimens. After approval by the Rwanda National Ethics Committee, the protocol was implemented in 20 HFs with 1,430 enrolled patients (1,090 females and 340 males). By the end of the study in May 2023, 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 6-month 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 contributes to reducing workload at the HF level and improving the quality of HIV care.

YEAR 6 ACHIEVEMENTS & RESULTS

In preparation for the successful transition of IRIMS, MTaPS revised and submitted a comprehensive plan to facilitate a smooth transition and handover of IRIMS to the Rwanda FDA. This plan ensures that all the necessary steps for final transition and handover of the system to Rwanda FDA are clearly outlined.

MTaPS has provided regulatory support to the Authority to help achieve its goal of WHO GBT ML3 in regulatory inspection related to clinical trials. Rwanda FDA has progressed toward ML3 with MTaPS'

technical support providing capacity building to strengthen the Authority, thereby contributing evidence to address the GBT ML3 sub-indicator RI03.01: Enough competent staff (education, training, skills, and experience) are assigned to perform regulatory inspection activities.

Specifically, MTaPS' technical support helped to strengthen regulatory oversight of clinical trials and improve competency of clinical trialists through training in GCP principles of 23 (7 female) researchers and higher education institution lecturers from the local scientific community. Furthermore, the training materials were availed for future capacity building of new staff at Rwanda FDA responding to the GBT sub-indicator RI03.01.

MTaPS has worked toward enhancing digitalization of Rwanda's national pharmacovigilance system (PViMS) to respond to WHO VigiFlow requirements, responding to GBT indicator VL04.01: Vigilance procedures and tools are in place and implemented for collection and assessment of AEs. The system can now allow direct export of individual case safety reports to WHO's VigiFlow without immediate use of MS Excel.

In September 2024, MTaPS conducted trainings to enhance the capacity of the Rwanda FDA information communication technology (ICT) team to manage and maintain PViMS as part of transitioning and handing over the system to Rwanda FDA.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

To build capacity for an effective use of IRIMS, MTaPS worked with the consultant to update the IRIMS user manuals and guides and submit them to Rwanda FDA to assist system users to effectively undertake regulatory activities and guide the Authority's ICT team on system configuration options.

MTaPS continued to provide mentorship and coaching of Rwanda FDA clinical trials staff through the established WhatsApp social media platform where they continue to interact with the GCP lead inspector consultant that previously trained the staff. The clinical trials staff seek guidance from the expert and apply it in their GCP inspections and other clinical trial oversight activities. This is in line with the established memorandum of understanding with the Ghana FDA since the consultant works for Ghana FDA, thus the FDA staff will continue to benefit from further mentorship and coaching in GCP after MTaPS' closure.

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 for medicines used in HIV/AIDS, MNCH, and FP/RH programs (PY5)

In September 2024, MTaPS participated in the Coalition of Interested Parties (CIP) meeting led by the WHO and presented on the program's planned support to the Rwanda FDA until November 2024. The meeting also evaluated how various partners have provided support to the Rwanda FDA to address the remaining four institutional development plans raised in the May 2024 WHO GBT evaluation, as well as priority activities being undertaken by the Authority in its journey toward achieving ML3. The next CIP meeting is planned for December 2024.

Activity 1.1.2: Enhance the clinical trials oversight function of the Rwanda FDA

During quarter 4, MTaPS—through the GCP lead inspector consultant—continued to provide mentorship and coaching to enhance the knowledge of Rwanda FDA GCP staff, including new staff, through the WhatsApp group social media platform. The Rwanda FDA team will continue to leverage the memorandum of understanding between Rwanda FDA and Ghana FDA after the closure of MTaPS to obtain further mentoring in GCP.

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

To fine-tune and troubleshoot the implementation of IRIMS, MTaPS continued to provide system support and knowledge transfer to Rwanda FDA ICT staff in IRIMS management and administration, and facilitated the updating of the previously developed transition plan to cover system updates and changes. In addition, MTaPS' consultant worked with the Rwanda FDA ICT team to resolve tickets raised through the system's helpdesk. Two staff from the consultant software development firm and the MTaPS principal technical advisor were in-country from August to September to work with the Rwanda FDA ICT team to address user requests and fine-tune the system in preparation for the IRIMS transition and handover plan.

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

Activity 3.2.1: Continue to strengthen PV and safety monitoring for regulated medicines, including ARVs and vaccines, through enhancing the existing spontaneous reporting system (activity continuing from FY23)

MTaPS further updated OpenRIMS-PV to meet the WHO requirements for the electronic transmission of individual case safety report format version three, known as the E2B R3 standard, for the direct upload of AE reports into VigiFlow, thereby establishing full interoperability. For sustainability of OpenRIMS-PV, MTaPS conducted a 3-day training of 10 Rwanda FDA staff—6 ICT team members (4 female) and 4 PV staff (2 female)—on the updated version from September 9 to 11, 2024.

BEST PRACTICES/LESSONS LEARNED

- None to report this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation processes ▪ MTaPS will support Rwanda FDA by providing advanced capacity building on IRIMS administration and management to the ICT and enable them to provide system support following the transition and handover. ▪ Provide in-house support to the users to facilitate continuous use of the IRIMS, including the recently implemented changes, to ensure a successful and comprehensive system handover.	October–November 2024

Activity 3.2.1: Continue to strengthen PV and safety monitoring for medicines, including ARVs and vaccines, through enhancing the existing spontaneous reporting system (continuing from FY23) ▪ Conduct a final one-day training of Rwanda FDA ICT team and an additional two-day training for PV team on the enhanced PViMS features and system handover (total three days).	October–November 2024
End-of-project meetings ▪ Conduct brief transition and closeout meetings with government partners, implementing partners, and other stakeholders.	October–November 2024

Table 16. Quarter 4, FY24, Activity Progress, Rwanda—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
(PY6) 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 (SoftClans) 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; handover of IRIMS to Rwanda FDA	3.1	MTaPS worked with SoftClans and Rwanda FDA IT team to resolve new raised requests from the Authority's divisions and continued to provide system support by resolving tickets submitted through the IRIMS helpdesk.
Activity 1.1.2: Enhance the clinical trials oversight function of the Rwanda FDA **Activity description:** Conduct further training in assessment of clinical trial study protocols, including hands-on practical exercises focusing on the assessment of trial applications and mentoring and coaching to strengthen the regulatory staff's ability to assess the protocols; conduct training dedicated to educating lecturers, research fellows, and the scientific community in higher education institutions on GCP principles MTaPS, working with the GCP lead consultant, continued to provide coaching and mentorship to Rwanda GCP staff through the created WhatsApp group	1.2	There has been ongoing coaching and mentorship through a social media forum and leveraging of the existing memorandum of understanding between Rwanda FDA and Ghana FDA.
Activity 3.2.1: Continue to strengthen PV and safety monitoring for medicines, including ARVs and vaccines, through enhancing the existing spontaneous reporting system **Activity description**: Work with the Rwanda FDA to build the capacity of the FDA's PV and ICT staff on the PViMS enhancements	3.1, 5.3	MTaPS further updated OpenRIMS-PV to meet the WHO requirements for direct upload of AE reports into VigiFlow (E2B R3 standard), thereby establishing full interoperability; 10 Rwanda FDA staff—6 ICT team members (4 female) and 4 PV staff (2 female)—trained on the updated version from September 9 to 11, 2024.

K. 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 has improved 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 the GHSA builds on the work done in PYs 1–5.

MTaPS continued 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. 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 critical. MTaPS contributed to building the capacity of HCPs to implement the IPC-related reporting system (as part of the DHIS2) to provide the MOH with data for decision-making on IPC and for the active implementation of CQI methodologies and AMS interventions in supported HFs.

CUMULATIVE PERFORMANCE TO DATE

From PY1 through PY6 Quarter 3, MTaPS supported 39 of 62 (63%) WHO IHR benchmark actions: 6 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 50% (2/4) of capacity level 3, 50% (2/4) of capacity level 4, and 40% (2/5) of capacity level 5 WHO benchmark actions, resulting in an overall achievement rate of 35% (6/17) 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 fisheries 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, the Ministry of Agriculture, the Ministry of Livestock and Fisheries, the President's Office Regional Administration and Local Government (PO-RALG), and the five 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 WAAW each year to increase community awareness and advocacy for 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 also 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) trainers on the IPC M&E system and used the trainers to further train 61 (32 female) HCPs from the Dodoma region (7 district hospitals, 2 faith-based hospitals, and 2 council health management team 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 aiming to reduce 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 an HAI surveillance system with reporting through DHIS2. All 10 MTaPS-supported facilities are now conducting HAI surveillance, reporting to the MOH, and 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) of benchmark actions completed. MTaPS supported the MOH, the Ministry of Agriculture, and the 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 and developing and disseminating the STGs and the NEML for Tanzania, which included AWaRe classification of antibiotics. MTaPS trained 110 (43 female) 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 Association of Private Health Facilities in Tanzania (APHFTA) to continue the rollout of AMS implementation to the 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 AMC in Tanzania from 2017 to 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 NAP-AMR 2023–2028. MTaPS launched the use of the Extension for Community Healthcare Outcomes (ECHO) program for mentorship of HCPs, with approximately 2,035 HCPs (1,342 in IPC and 693 in AMS) reached countrywide, which contributed to improved IPC and AMS practices.

YEAR 6 ACHIEVEMENTS & RESULTS

- MTaPS supported the AMR MCC in conducting AMS, IPC, and M&E TWG meetings and in the development of a draft M&E framework for the NAP-AMR 2023–2028. MTaPS also cooperated with

the MOH and other partners in preparation for the commemoration of the 2023 WAAW and presented a poster presentation on "Improving IPC practices through e-Learning" to the national AMR symposium, aimed at spearheading the AMR agenda in private hospitals in Tanzania and increasing community awareness and advocacy on AMR.

- MTaPS conducted in-service AMS training for HCPs, regional and district pharmacists, public-private partnership (PPP) focal persons, representatives of PO-RALG, and APHFTA members. Trainees were exposed to hands-on practices by conducting data collection, analysis, and report writing on AMU using WHO PPS methodology at Mwananyamala regional referral hospital. PO-RALG and APHFTA members were engaged for their support in continuing the rollout of AMS implementation to the subnational level including the primary health care and private sectors.
- MTaPS conducted onsite IPC mentorship at eight MTaPS-supported HFs to follow up on implementation of various IPC interventions, and mentor the facility HCWs on areas that needed improvement, including hand hygiene, equipment sterilization, appropriate infrastructure, availability of materials and equipment for IPC, and standards for reduction of overcrowding in wards. Furthermore, the team conducted IPC data quality assessments, whereby the HFs were mentored on properly completing SSI surveillance forms, which helped to identify SSI cases and enhanced their reporting into DHIS2 to inform national MOH planning and decision-making.
- USAID MTaPS Tanzania held a closeout event for the program with the theme "Celebrating six years of USAID MTaPS achievements in collaboration with the government of Tanzania." The event was attended by the MOH, members from supported health facilities, WHO, USAID, and partners.

QUARTER 4/YEAR 6 ACHIEVEMENTS & RESULTS

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 AMR MCC meeting on August 21, 2024, that was organized and led by the MOH, portraying the MOH's ownership and sustainability of the MCC. MTaPS also used the opportunity to update the MCC on the USAID MTaPS Tanzania closeout event held on August 21, 2024, which had the theme "Celebrating six years of USAID MTaPS achievements in collaboration with the government of Tanzania," and thanked the MCC for their great cooperation and support during MTaPS' implementation as well as a vote of thanks to the government of Tanzania and stakeholders for the collaboration and support during planning and implementation over the six years of the program.

BEST PRACTICES/LESSONS LEARNED

No best practices or lessons learned for this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

The MTaPS Tanzania program concluded in September 2024.

Table 17. Quarter 4, 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:** Attended regular meetings of the AMR MCC that oversee implementation of the NAP-AMR.	5.4	1.1	MTaPS attended the AMR MCC meeting and presented the program's achievements over the past six program years. MTaPS appreciated the support from and collaboration with the MCC and briefed the MCC on the USAID MTaPS closeout event.

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 ARVs and 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 ML3 according to the WHO's GBT and will provide evidence to elevate the TMDA toward ML4.

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 train new staff and ensure sustainable knowledge transfer within the TMDA and Tanzania at large. MTaPS supported the TMDA in organizing product dossier review retreats that evaluated 95 dossiers, including 16 for ARVs. The trained assessors applied knowledge and practical expertise to the evaluation of the medical products. This helped to reduce the backlog of pending dossiers for medicines used to manage HIV/AIDS and to increase 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 the inclusion of four pediatric experts on 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 assessments of 76 PSURs and 18 RMPs to address the 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 PV (QPPVs) on coordination of PV activities regarding the approved medicines they are managing for their market authorization holders (MAHs) and development and submission of PV documents, including PSURs and RMPs. The training built the QPPVs' capacity to support their MAHs to set up a functioning internal PV system for follow-up on the 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 medicines, including ARVs for the public sector, which aimed to identify barriers and bottlenecks in the supply chain of ARVs and mitigate them by engaging the TMDA and medicine importers. MTaPS facilitated a stakeholder validation workshop that addressed the findings and challenges affecting registration and importation processes and made recommendations that led to an action plan for improving the processes. The activity helped create awareness of bottlenecks in the processes 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 (16 female) clinical trial officers 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 practice (GCP) compliance. These trainees further gained practical experience by conducting inspections of 3 clinical sites located in the Dar es Salaam region: 1 at Mwananyamala Regional Referral Hospital and 2 at Muhimbili University of Health and Allied Sciences. The interventions contributed to efforts to strengthen clinical trials control in Tanzania and solidify the TMDA's ML3 rating for WHO GBT sub-indicator CT03.01: Enough competent staff (education, training, skills, and experience) are assigned to perform clinical trials oversight activities.

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 the program. The training helped to improve the 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. In addition, MTaPS provided technical support to the TMDA in the development of the Authority's GSDP guidelines and to conduct a stakeholder validation workshop. The guidelines are now pending official approval by TMDA. These guidelines will contribute to improving pharmaceutical supply chain management for FP, MNCH, and other medical products and ensuring proper handling, storage, and distribution of medical products from the level of the manufacturer down to the HCP and the end user.

YEAR 6 ACHIEVEMENTS & RESULTS

- MTaPS Tanzania provided technical support to the TMDA to conduct a meeting with stakeholders from different institutions to allow sharing of experiences and to learn from each other in the supply chain. The participants included medicine importers, MAHs, local technical representatives (LTRs), local manufacturers, and the Medical Stores Department.

- The stakeholders assessed and were happy with the progress that TMDA has made addressing recommendations from previous stakeholder meetings aimed at improving the importation and registration processes for medicines and other health products.
- The event noted such achievements as the increase in the number of sensitizations and meetings of TMDA with stakeholders to increase regulatory compliance by MAHs, LTRs, and importers such as to the PV Regulation of 2018. The TMDA committed to increase the frequency of engaging stakeholders, especially when there are new regulations or changes to existing ones.
- A WhatsApp group of the meeting participants was created to facilitate better communication between the TMDA and the stakeholders. This WhatsApp group will be used for the TMDA to provide timely regulatory updates and will also provide a platform for the stakeholders to discuss concerns.
- The activity contributed to improving the relationship between the TMDA and its clients. It also helped motivate compliance of regulatory guidance by medicine importers, MAHs, LTRs, and local manufacturers for more efficient clearance of imported medicines and other health products. This will help improve access to high-quality, safe, and effective health products, including ARVs for the public sector and products for FP and MNCH services.

- MTaPS trained 25 (9 female) assessors on the review, preparation, and publication of SmPCs and PARs using training materials and tools developed by MTaPS. The training helped to improve the 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. At the conclusion of the workshop, a significant portion of the hands-on practical exercises were successfully completed by the participants, with 127 (45.4%) out of 208 SmPCs and 103 (95.4%) out of 108 PARs that had been provided for evaluation by the participants being completely reviewed and prepared for publication on the Authority's website. 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.
- MTaPS provided technical support to the TMDA to develop the first GSDP guidelines and undertake stakeholder validation of the developed guidelines. These guidelines are now pending approval and signature by TMDA leadership. Once approved, the Authority will disseminate aiming at improving pharmaceutical supply chain management practices among the supply chain stakeholders and ensuring proper handling, storage, and distribution of medical products. This will ensure that these products maintain their quality, safety, and effectiveness throughout the supply chain.

BEST PRACTICES/LESSONS LEARNED

No best practices or lessons learned for this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

MTaPS Tanzania concluded in September 2024.

MTAPS CLOSEOUT EVENT IN TANZANIA

MTaPS Tanzania held a closeout event on August 21, 2024. The Guest of Honor for the event was the Chief Pharmacist at the MOH, Daudi Msasi, on behalf of the Chief Medical Officer. The event was attended by representatives from the MOH, supported health facilities, WHO, USAID, MTaPS Tanzania Staff and MTaPS Deputy Technical Director, Medi Peace, Breakthrough ACTION, and other partners and stakeholders.

The Chief Pharmacist appreciated the support from USAID on different health interventions in the country. This support came mainly through MTaPS and led to many remarkable improvements in the country at the national level and beyond the 10 MTaPS-supported health facilities in MSC, IPC, AMS, and strengthening the regulatory system through the TMDA. The Chief Pharmacist specifically thanked MTaPS for the great support in the development and implementation of the previous and current NAPs, noting that many of the achievements in implementing the NAP were contributed through MTaPS' support.

> *"We celebrate the achievements of the USAID MTaPS program in Tanzania. As a country we [have] started missing [MTaPS'] technical and financial support to the extent that we plan to conduct many virtual multisectoral coordinating committee meetings, while during [MTaPS'] time we could hold the meetings physically for maximum achievement." —Daudi Msasi, Chief Pharmacist.*

In her remarks, the USAID Health Office Director Anne Murphy on behalf of the US Government, mentioned, "Today, the U.S. and Tanzania celebrated the impact of the USD 11.4 million MTaPS project over 6 years. It has transformed medicine prescribing practices and fought infectious diseases, thereby helping save countless lives in hospitals." She acknowledged the government of Tanzania, facilities, and partners for their good cooperation and support toward successful implementation of the MTaPS program. The program contributed to saving countless lives by improving the appropriate prescribing of medicines and preventing the spread of infectious diseases within hospitals.

The linkage of IPC and AMS in AMR containment was presented by Associate Professor Jeremiah Seni from one of MTaPS'-supported facilities, i.e., Bugando Medical Centre (BMC) a zonal referral hospital serving seven regions of the Lake and Western Zones of Tanzania. He explained how the support from MTaPS had helped the hospital to strengthen cooperation and effective working among teams of different departments. The joint efforts in IPC and AMS had positive impacts at the facility and in the country at large, including improving IPC practices and surveillance for the timely detection and containment of outbreaks through IPC measures, thereby improving AMR containment.

Following the event, a press release entitled "United States Celebrate Six Years of Strengthening Tanzania Pharmaceutical System to Prevent Infectious Diseases" was published by USAID Tanzania as well as a post on X:

https://www.usaid.gov/tanzania/press-release/aug-21-2024-united-states-celebrate-six-years-strengthening-tanzania-pharmaceutical-system-prevent-infectious-diseases

https://x.com/USAIDTanzania/status/1826265223311073590

Participants at the MTaPS Tanzania closeout event. Photo credit: Dayauna Davis, USAID

Daudi Msasi, the Chief Pharmacist at the MOH giving his opening speech during the MTaPS closeout event. Photo credit: Dayauna Davis, USAID

Anne Murphy, USAID Health Office Director, giving her remarks during the MTaPS closeout event. Photo credit: Dayauna Davis, USAID

5. PROGRESS BY REGIONAL BUREAUS

A. ASIA REGIONAL BUREAU

OVERVIEW

MTaPS set out to advance pharmaceutical management systems within the Asia region by improving the ability to institutionalize transparent and evidence-based decision making, strengthening capacity to use robust information to define and cost pharmaceutical coverage, and strengthening 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 the 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. With 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, namely a regional capacity-strengthening strategy; improved political economy; 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 implementing 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. In addition, MTaPS conducted a PE tracking training for the Bangladesh HEU to increase its capability in conducting quality PE tracking, including data collection, compilation, analysis, and policy decision making. At the end of the training, a PE tracking institutionalization plan was developed, and a pool of champions was identified from among the participants to conduct subsequent PE tracking exercises and share their experience and knowledge with the National Health Accounts staff of the HEU across the country.

Under Objective 3, in PY1 and PY2 MTaPS collaborated with stakeholders to bolster capacity within the medical products regulatory systems of ASEAN member states. In PY3 and PY4, MTaPS organized a regional TOT 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 capacity. In PY3 and PY4, MTaPS undertook competency mapping and developed capacity strengthening plans for Bangladesh, Nepal, and Philippines NRAs, to address

competency gaps and improve regulatory efficiency and effectiveness. In PY4 and PY5, MTaPS worked closely with the WHO Southeast Asia Regulatory Office and SEARN to develop a regional capacity-strengthening strategy, endorsed by the SEARN Assembly of the Members, to structure capacity strengthening in regulatory functions. In PY5, 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, MTaPS has provided TA in the development of a model for efficient regulations of medicines and vaccines for NRAs with limited resources in SEARN, advocated for the adoption of minimum standards for regulatory IMS in ASEAN, and trained 26 (9 female, 17 male) DGDA personnel on Good Clinical Practice.

Under Objective 4, MTaPS collaborated with the Philippines DOH to evaluate procurement laws and policies to produce a legal analysis document highlighting the legal and policy factors supporting or hindering the implementation of strategic procurement initiatives (PPM and FA) and providing recommendations for effective implementations. As a result, and based on this legal analysis, the DOH drafted and submitted a PPM policy proposal to the Government Procurement Policy Board (GPPB) in 2023, which is still under review. MTaPS used a multiphased approach that included desk reviews, data collection and analysis, and interviews with representatives of selected LGUs and DOH-retained hospitals. This approach was used to generate evidence for the selection of health products, DOH-retained hospitals, and LGUs and assess the capacity and readiness of the LGUs and hospitals to engage in PPM. MTaPS also conducted an analysis of sales data and determined a priority list of health products, LGUs, and DOH-retained hospitals. Thirty-six medicines from twelve therapeutic areas, along with six LGUs and nine DOH-retained hospitals, were selected for piloting the PPM policy. In collaboration with *IQVIA*, MTaPS conducted a deeper analysis of procurement practices and challenges in five LGUs and five DOH-retained hospitals, utilizing online in-depth interviews to assess their readiness and capacity to engage in PPM. The data analysis and assessment results have been used to guide the development of a generic pilot implementation plan that can eventually be easily adapted by the DOH-PS to carry out the pilot when the GPPB approves the PPM policy.

In response to the DOH's bid failures, which led to stock-outs of vital health commodities, MTaPS conducted a study to identify root causes and propose solutions. This involved reviewing procurement laws; analyzing data on failed procurements (2021–2024) for HIV, TB, and FP commodities; and interviewing key stakeholders. The findings were communicated to USAID, the DOH, and USP PQM+ through a technical analysis report (technical advisory) and presentations.

YEAR 6 ACHIEVEMENTS & RESULTS

- MTaPS developed an article with HTAsiaLink conference organizers entitled "A framework for improved collaboration on HTA in the Asia-Pacific region: a role for HTAsiaLink", which was accepted by the *International Journal of Technology and Health Care*.
- MTaPS strengthened the capacity of the Bangladesh HEU on PE tracking and developed an institutionalization plan.
- MTaPS, in collaboration with ASEAN and USAID PQM+, advocated for the adoption of minimum common standards for regulatory IMS among eight ASEAN member states.
- MTaPS, in collaboration with the WHO-Bangladesh office, strengthened the capacity of the DGDA on Good Clinical Practice through a training in June 2024.

- MTaPS, in collaboration with WHO and other stakeholders, provided TA to SEARN in the development of a model for the efficient regulation of medicines and vaccines for NRAs with very limited resources in SEARN. This model has been published by WHO.
- MTaPS, in collaboration with *IQVIA,* conducted an analysis of sales data for medicines and identified 36 medicines across 12 therapeutic areas, 6 LGUs, and 9 DOH-retained hospitals as candidates for piloting the Philippines PPM policy.
- MTaPS, in collaboration with *IQVIA*, completed a report assessing the capacity and readiness of the selected DOH-retained hospitals and LGUs in managing health products after devolution and developed a generic PPM pilot implementation plan.
- A new Procurement Act was ratified in the Philippines that incorporated MTaPS' recommendations. The law permits pooled procurement and FAs to improve procurement efficiency and availability of health products.
- MTaPS identified the root causes of bid failures in DOH procurements and developed recommendations to mitigate them; these were communicated to both the DOH and USAID.

QUARTER 4/Y6 ACHIEVEMENTS & RESULTS

OBJECTIVE 1: STRENGTHEN CAPACITY TO CONDUCT AND USE HTAS TO SUPPORT INSTITUTIONALIZATION OF TRANSPARENT AND EVIDENCE-BASED DECISION MAKING IN ASIAN COUNTRIES

PY6 Activity 1.1.1: Technical Assistance to HTAsiaLink in Shaping the HTA ecosystem in the Asia region

MTaPS continues to support the Health Intervention and Technology Assessment Program (HITAP)—the Secretariat of HTAsiaLink—in the programmatic capacity and clarification of the contracting mechanism. With MTaPS support, HITAP has now received a Unique Entity Identifier, which is required for doing business with the US Government. Extensive subcontract discussions are ongoing focusing on clarification of clauses as this is HITAP's first USAID subcontract. Technical alignment has previously been achieved, focused on HTAsiaLink's strategy plan, improving political economy for HTA in Asia, and developing the HTA registry.

MTaPS led an organized session at the HTAi conference in Seville in June 2024, "Advancing Health Technology Assessment (HTA) Worldwide: Insights from Global Initiatives." This panel discussion explored the development and institutionalization of HTA guidance across diverse contexts with a global perspective. The session showcased collaborative efforts that have led to the creation of HTA roadmaps, offering valuable insights from Indonesia, the Philippines, Ukraine, and Ethiopia.

MTaPS developed an article with HTAsiaLink conference organizers entitled, "A framework for improved collaboration on HTA in the Asia-Pacific region: a role for HTAsiaLink", which was accepted by the *International Journal of Technology and Health Care.*

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 2.1.2: Conduct a webinar on pharmaceutical expenditure tracking - A review of the Bangladesh and Indonesia experiences

On July 11, 2024, MTaPS shared its experience in strengthening the capacity of the national health accounts of Bangladesh and Indonesia through a webinar targeting the countries' USAID Missions and in-country government stakeholders. The webinar focused on the PE tracking methodology, tools, and use of PE data for policy making.

OBJECTIVE 3: BUILD HARMONIZED, SUSTAINABLE, AND RESILIENT MEDICINE REGULATORY SYSTEMS IN ASIA

Activity 3.1.3: Develop a capacity building action plan for the South-East Asia Regulatory Network

MTaPS continued to engage with SEARN and the WHO Southeast Asia Regulatory Office and participated in the Assembly of the Members of SEARN/Meeting of the Heads July 1–4, 2024. The meeting agenda included reviewing progress of the SEARN 2023–2024 work plan and discussing and adopting the SEARN 2024–2025 work plan; adoption of the documents and strategies developed by the working groups, including the capacity strengthening action plan, and discussion on additional measures to enhance information sharing, reliance, collaboration, and capacity strengthening; discussion with the Coalition of Interested Parties (CIP) on their plan of support; and discussion and adoption of updated TOR for the Network.

MTaPS made a presentation during the meeting to highlight its work, share lessons learned, and advocate for the adoption of minimum common standards for regulatory IMS as part of the 2024–2025 work plan. RIMS was adopted as an action point in the 2024–2025 SEARN work plan during the meeting.

MTaPS also participated in the first formal meeting of the CIP Network Regional Steering Group for SEARN, convened on September 3, 2024, to provide an overview of the CIP Network, endorsement of the TOR for the CIP Network Regional Steering Group SEARN, provide an update on CIP Network support to SEARN, and elect the Chair and the Vice-Chair of the CIP Network Regional Steering Group SEARN.

Activity 3.1.4: Global and regional dissemination of MTaPS regulatory systems strengthening work in Asia

MTaPS continued to develop manuscripts to document the lessons learned from its TA in the Asian region. The draft manuscripts on the convergence of medical registration and workforce development are undergoing internal technical review.

MTaPS continued engaging with the organizers and planning for the International Conference of Drug Regulatory Authorities (ICDRA), scheduled for October 14–18, 2024, in New Delhi, India. MTaPS has been invited to participate as a panelist in two sessions on CIP and RIMS.

Activity 3.1.5: Strengthen the capacity of national regulatory authorities in the Association of Southeast Nations member states through regional harmonization

MTaPS, through USAID, continued its engagement with the ASEAN Pharmaceutical Product Working Group to plan PV training. The training will focus on strengthening capacity in active surveillance, post-authorization safety studies, and the review of periodic safety reports. A consultant has been engaged to oversee activity implementation and deliver knowledge transfer in these specialized PV areas.

Activity 3.1.7: Advocate for adoption of global standards to support the development of regulatory information management systems for electronic transmission of information across national regulatory authorities in SEARN

MTaPS advocated for the inclusion of adopting regulatory IMS in the SEARN 2024–2025 work plan during the Heads of Assembly Meeting July 1–4, 2024. As a follow-up to this meeting, MTaPS engaged the SEARN Secretariat to discuss a virtual workshop to disseminate, discuss, and advocate for the adoption of the findings from the minimum common standards for regulatory IMS among SEARN member states. A tentative implementation timeline of November 2024 was proposed by SEARN.

OBJECTIVE 4: PHARMACEUTICAL-SECTOR GOVERNANCE IN ASIAN COUNTRIES STRENGTHENED

Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines (Year 5)

MTaPS, in collaboration with *IQVIA,* completed the capacity and readiness assessment report. The report covers the status of health product management after devolution, procurement challenges faced by hospitals and LGUs, and a summary of the PPM to be implemented by the Philippines Pharma Procurement Inc. (PPPI). It also includes short- and long-term recommendations for piloting and implementing PPM with the PPPI and DOH-PS. The findings from this assessment along with a previous phase 1 report were used to create a generic pilot implementation plan. This plan serves as a starting point that can be adapted by the DOH-PS to pilot the PPM policy once it is approved by the GPPB. In July 2024, a new procurement law was passed that incorporated key recommendations from MTaPS. The law now allows pooled procurement and FAs as alternative methods to improve procurement efficiency and health product availability.

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 (Year 6)

After the successful completion of the activity in Q3, MTaPS, with approval from USAID, developed an abstract based on the results of the activity and submitted an abstract to the Global Health Supply Chain Summit (GHSCS) 2024. The abstract has been accepted for oral presentation, and the findings of this study will be presented in November 2024.

BEST PRACTICES/LESSONS LEARNED

- In supporting organizations nascent to receiving USAID funding, significant operational support is needed to meet timeliness and project objectives. (Activity 1.1.1)
- Collaboration among partners with respect to activities, focus areas, and target implementation matrixes has been essential to avoid duplication of activities and provide targeted support to NRAs.

- Regional centers of regulatory excellence can help sustain the push for regulatory systems strengthening; they can serve as centers of collaboration, provide models that can be adopted by other countries, and support capacity strengthening.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Technical Assistance to HTAsiaLink in Shaping the HTA ecosystem in the Asia region.	December 2024
Activity 3.1.4: Global and regional dissemination of MTaPS regulatory systems strengthening work in Asia. **Activity Description**: Continue preparations for the ICDRA planned for October 14–18 in New Delhi, India	December 2024
Activity 3.1.5: Strengthen the capacity of national regulatory authorities in the Association of Southeast Nations member states through regional harmonization. **Activity Description:** Seek date approval from Pharmaceutical Product Working Group for the implementation of the activity	December 2024
Activity 3.1.7: Advocate for adoption of global standards to support the development of regulatory information management systems for electronic transmission of information across national regulatory authorities in SEARN **Activity Description:** Continue discussions with the SEARN Secretariat to agree on a date for the regulatory IMS workshop	December 2024
Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines (Year 5) and **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 (Year 6). **Activity Description:** Develop a presentation on the activity and deliver it to the USAID team, as requested by USAID. Develop the handover package and send it to USAID, the DOH, and other partners as required in addition to making the package available through the MTaPS Asia Bureau website.	October 2024
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 (Year 6). **Activity Description:** Present the study findings during the GHSCS in November.	November 2024

Table 18. Quarter 4, FY24, Activity Progress, Asia Regional Bureau

Activity	MTaPS Objective(s)	Activity Progress
PY3 Activity 1.1.2: Develop and disseminate HTA strategic briefs on lessons learned for HTA advancement in the region	4	Report completed, received USAID feedback, actively working to incorporate USAID feedback.
PY5 Activity 1.2.1: Support cross-country learning exchange and in-person technical assistance on HTA in Asia region	4	Report completed, received USAID feedback, actively working to incorporate USAID feedback.
PY5 Activity 1.1.1b: Global and regional dissemination of MTaPS HTA Asia work products through peer-reviewed journal articles and conferences	4	Delivered organized session at HTAi conference. Paper on HTAsiaLink accepted by IJTHC. Report completed.
PY6 Activity 1.1.1: Technical assistance to HTAsiaLink in shaping the HTA ecosystem in the Asia region	4	Actively working, providing clarification support to HITAP to facilitate subcontracting process.
Activity 2.1.2: Conduct a webinar on pharmaceutical expenditure tracking - A review of Bangladesh and Indonesia experiences	2.1.2	MTaPS shared its experience on strengthening the capacity of the national health accounts of Bangladesh and Indonesia though a webinar targeting the countries' USAID Missions and in-country government stakeholders. The webinar focused on the PE tracking methodology, tools, and the use of PE data for policy making.
PY6 Activity 3.1.4: Global and regional dissemination of MTaPS regulatory systems strengthening work in Asia	5.1	Two manuscripts on convergence of medicine registration and competency mapping are undergoing technical review. Planning for the ICDRA conference is ongoing.
PY6 Activity 3.1.5: Strengthen the capacity of national regulatory authorities in the Association of Southeast Nations member states through regional harmonization	2.4.3	ASEAN approved the concept note for the implementation of PV training. Consultant recruitment was finalized and waiting for the date to be approved for the activity.
PY6 Activity 3.1.7: Advocate for adoption of global standards to support the development of regulatory information management systems for electronic transmission of information across national regulatory authorities in SEARN	2.4.3	MTaPS advocated for the adoption of this activity in the SEARN work plan. Planning of a virtual workshop is ongoing.
PY5 Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines	4.1.1	MTaPS, in collaboration with *IQVIA,* finalized the capacity and readiness assessment that provided recommended actions for the effective implementing of existing and new PPM. In addition, MTaPS developed a generic pilot implementation plan that the DOH-PS and other partners can easily adapt to guide the pilot implementation once the policy is approved by the GPPB.
PY6 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	4.1.1	MTaPS developed and submitted an abstract on the activity, and it has been accepted for oral presentation during GHSCS in November 2024.

6. PROGRESS IN ACHIEVING CONTRACT DELIVERABLES

Table 19. FY24 Annual Quarter 4 Progress in Achieving Contract Deliverables

Contractual Deliverable	Due Date	Submission Date	Comments
Annual Work Plans	8/31/24	8/31/24	
Quarterly Performance Report, PY6 Quarter 3	8/31/24	07/26/24	
Quarterly Performance Report, PY6 Quarter 2	04/30/24	04/25/24	
Subcontract reporting (eSRS)	04/30/24	04/29/24	
Reporting of foreign taxes	04/16/24	04/16/24	
Quarterly Performance Report, PY6 Quarter 1	02/28/24	02/16/24	
Environmental Mitigation and Monitoring Report	10/31/23	10/27/23	Submitted with Annual Report
Annual report of government property in contractor's custody	N/A—annual submission	10/27/23	There is no specified deadline in the contract. Annual report is required, so MSH submits the report by 10/31 each year.

7. PROGRAM SPOTLIGHT

Enhancing Antimicrobial Resistance Awareness: MTaPS Jordan Collaborative Effort to Educate Adolescents on Responsible Use of Antimicrobials

Enhancing Infection Prevention and Control Practices in Jordanian Health Facilities

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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

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

Enhancing Antimicrobial Resistance Awareness: MTaPS Jordan Collaborative Effort to Educate Adolescents on Responsible Use of Antimicrobials

Figure1: School Health Education Unit Heads participate in the CASS Training of Trainers session on AMR awareness for school students. February 18-19, 2024, Amman-Jordan. Photo credit: MTaPS Jordan.

Addressing Antimicrobial Resistance through Education

Antimicrobial Resistance (AMR) is a significant public health challenge exacerbated by lack of awareness and education among communities and healthcare providers. Common practices such as self-medication, stopping antibiotics prematurely, or sharing medications with other patients contribute to improper treatment and development of resistant microbes. In Jordan, where nearly 30% of the population is aged 10 to 24, it is crucial to focus tailored AMR education for adolescents. Misconceptions about antimicrobials among this group can be addressed with proper health education, ensuring that future adults make responsible choices and avoid unnecessary antibiotic use, ultimately reducing AMR's impact on the community.

To help address these issues, MTaPS implemented the Communication and Awareness Intervention for School Students (CASS) on AMR in collaboration with the Ministry of Health (MOH), the School Health Directorate (SHD), and other relevant partners. This joint effort aims to promote a deeper understanding of AMR among school-aged students, fostering a culture of responsible antimicrobial use and paving the way for a healthier and more sustainable future in the communities. The practices and awareness cultivated today will continue to shape behavior and policy going forward.

Training School Health Department Heads and Health Promoters

In 2023 and 2024, MTaPS supported the MOH SHD in conducting training of trainers for all 24 school health department heads and health promoters nominated by the MOH who represent 14 MOH health affairs directorates on interactive AMR communication content and approaches, enhancing their capabilities in health education, effective communication of health messages, and training skills (Figure 1). These trained individuals then capacitated all 70 health service providers nominated by the MOH who will be assigned to schools to deliver AMR awareness sessions to students. MTaPS provided essential tools for these health service providers to use during the sessions, including evaluation tools for teachers, knowledge assessment tools for students, and information, education, and communication (IEC) materials for both teachers and students to ensure the awareness sessions are interactive and effectively convey AMR messages.

Dr. Asharf Aqel, Head of the Student Health Promotion Department, said: "The topics addressed in the training sessions are very important, and the CASS program was highly successful. It has been integrated into the national action plan for AMR 2023-2025 and is now a regular part of the school health awareness programs."

Ms. Mais Karaki, School Health Head at Al Balqaa Health Directorate, added: "During the training sessions, we were equipped with the necessary skills and knowledge to effectively interact and communicate the dangers of antimicrobial resistance. By doing so, we hope to raise awareness among school students and encourage them to adopt responsible behaviors that can help combat this growing issue."

Wide-ranging Impact of the AMR Awareness Sessions

In 2023 and 2024, the AMR awareness program reached 7,734 high school students (Figures 2 and 3). A total of 1,690 posters and 12,700 pamphlets were distributed to schools countrywide with, along with the training sessions for health service providers, help promote better understanding of AMR and responsible antimicrobial use among youth and adolescents. The interactive AMR communication and awareness program activities were incorporated into the National Action Plan-AMR 2023-2025, ensuring sustainability and continued impact.

Figure 3 highlights the extensive coverage of the AMR awareness sessions conducted under the CASS program with the number of educational sessions held and the total number of students engaged in each governorate, showcasing the widespread impact of the initiative. By targeting young people, who make up a significant portion of the population in Jordan, the awareness program is effectively shaping the next generation's understanding and behavior regarding responsible antimicrobial use with profound implications for the future of public health in the country.

Figure 2: Group photo of students from one of the public schools in Amman during the implementation of the CASS awareness session on AMR.

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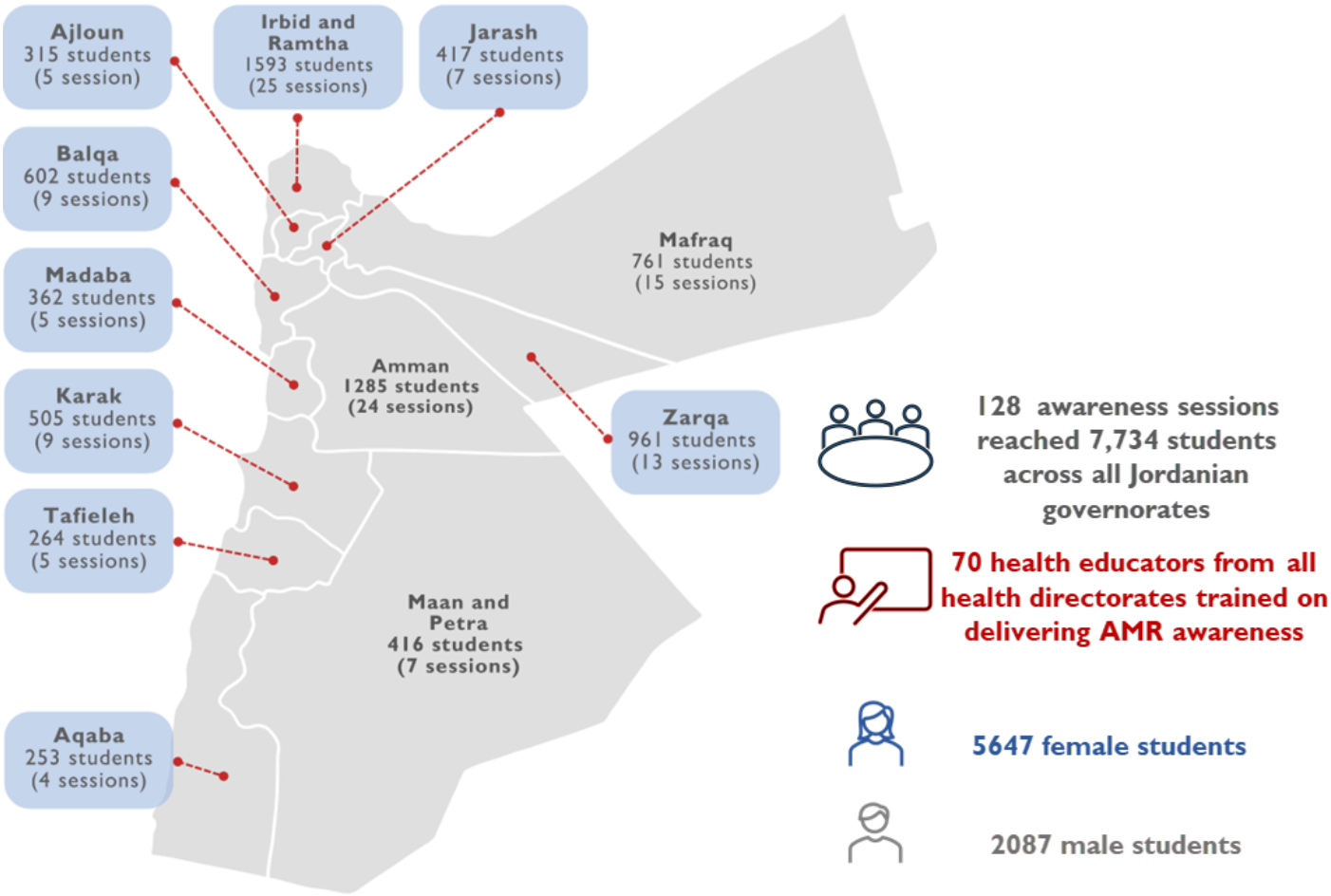

Figure 3: Jordan map with the coverage of the AMR educational sessions across Jordan's governorates, including the number of sessions and students and health educators trained.

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USAID
FROM THE AMERICAN PEOPLE

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

Enhancing Infection Prevention and Control Practices in Jordanian Health Facilities

To bolster infection prevention and control (IPC) practices across Jordan, USAID MTaPS, in collaboration with the Health Care Accreditation Council (HCAC), has successfully implemented two comprehensive training programs: the "Healthcare Certified Infection Prevention (HCIP) Training Program for Hospitals" and the "Healthcare Certified Safety and Infection Control Preventionist (HCSIP) Training Program for Primary Healthcare Centers." These initiatives, developed in coordination with the National Advisory Committee for Infection Prevention and Control (ACIPC), aim to standardize and strengthen IPC measures in Jordanian health facilities, ultimately enhancing patient outcomes and healthcare quality.

The HCIP Training Program for Hospitals was designed specifically for IPC focal points from the Ministry of Health (MOH) hospitals. Spanning six months, the program involves 650 hours of comprehensive training, including 16 theoretical sessions and seven practical assignments. Twenty-eight IPC focal points from selected 25 MOH hospitals participated in the training (Figure 1). The training modules covered a range of topics:

- Overview of infection prevention program
- Microbiology and risk factors for transmission of pathogens
- Basic principles of infection prevention
- Employee occupational health
- Environment cleaning disinfection and sterilization principles
- Risk factors facilitating transmission of infectious agents
- Surveillance and epidemiological investigation
- Education and research
- Quality improvement process

Duaa Demas, an infection control officer from Al Bashir Hospitals, stated: "This program has truly expanded my horizons, enabling me to make a significant contribution to reducing the spread of infections in my institution. The comprehensive coverage of topics, many of which have not been addressed in any previous training sessions, has equipped me with the knowledge and skills I need in my workplace. Thanks to the MTaPS Program and the HCAC for their efforts in organizing the program."

SUCCESS STORY

MTaPS collaborated with the Philippines' Department of Health to digitize and streamline information onto a single platform using an electronic logistics management information system (eLMIS). The system made managing the distribution of health supplies easier, quicker, and more cost-effective, resulting in reduced product waste and ensuring that health centers maintain an adequate supply of essential items—which was previously a challenge.

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

Figure 1: IPC focal points from 25 MOH hospitals participate in the Healthcare Certified Infection Prevention (HCIP) Training Program first session on December 18, 2023, in Amman, Jordan. Photo credit: MTaPS Jordan.

The HCSIP Training Program for Primary Healthcare Centers is dedicated to improving IPC among IPC focal points from the Health Affairs Directorates and selected MOH Primary Healthcare Centers. This five-month course involves 300 training hours, consisting of 10 theoretical sessions and six practical assignments tailored to the specific needs of primary healthcare settings. Fifty IPC focal points from all 36 primary healthcare centers participating in the HCAC accreditation program and all MOH 14 health directorates participated in the training (Figure 2). The training modules covered the following topics:

- Infection prevention and control principles
- Occupational safety and risk management
- Healthcare waste management and disposal
- Quality improvement and continuous learning

Dr. Muntaha Atoum, IPC Head at Jarash Health Affairs Directorate, said: "It was a valuable workshop filled with rich information. The trainers were experienced and competent in the topics presented, and they allowed for fruitful discussions on infection prevention. Thanks to the MTaPS program and the HCAC for their commitment to improving infection prevention in primary healthcare centers and for providing such opportunities."

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Figure 2: IPC focal points from 36 primary healthcare centers and 14 health directorates participate in the Healthcare Certified Safety and Infection Control Preventionist (HCSIP) Training Program first session on December 10, 2023, in Amman, Jordan. Photo credit: MTaPS Jordan.

HCIP and HCSIP Training Outcomes

Participants of the HCIP and HCSIP training programs are now equipped with the skills to enhance IPC practices across health facilities in Jordan. HCIP trainees, comprising IPC focal points from MOH hospitals, can develop and implement comprehensive IPC programs at their facilities, aiming to prevent disease spread, shorten hospital stays, and improve outcomes for vulnerable populations. Similarly, HCSIP-trained focal points from Health Affairs Directorates and MOH primary healthcare centers are prepared to plan, implement, and monitor IPC interventions at their facilities. All trained personnel are also ready to prepare their facilities to meet national accreditation IPC standards, contributing to enhanced patient outcomes nationwide.

Graduation Ceremony

On May 30, 2024, 78 infection prevention focal points from MOH hospitals, health directorates, and primary healthcare centers graduated from the two training programs (Figure 3). This achievement was made possible through the MOH's dedicated leadership and vision, which places great importance on IPC due to its significant impact on public health.

The graduation ceremony was attended by His Excellency Dr. Raed Al-Shboul, the Secretary General for Primary Health Care and Epidemics at the MOH, who emphasized the importance of these training programs in elevating healthcare standards, reducing hospital stays and treatment costs, and ultimately ensuring the well-being of patients and their families.

Mr. John McKay, Deputy Office Director of the USAID Population and Family Health (PFH) praised the fruitful partnership between the MOH and USAID in addressing critical public health challenges like antimicrobial resistance and enhancing infection control protocols.

Congratulations to all the graduates for their dedication and hard work throughout these rigorous training programs. Their commitment to excellence in IPC is commendable and contributes significantly to improving the healthcare system.

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Figure 3: 78 IPC focal points from MOH hospitals, primary healthcare centers and health directorates attended the training programs graduation ceremony on May 30, 2024, in Amman, Jordan. Photo credit: MTaPS Jordan.

USAID FROM THE AMERICAN PEOPLE

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8. MONITORING, EVALUATION, RESEARCH, & LEARNING

A. MONITORING & EVALUATION

YEAR 6 ACHIEVEMENTS

In the sixth year of the program, MTaPS' M&E plan has been focused on an efficient closeout of the performance-monitoring plan. Each country's closeout plan was developed based on its operational and implementation closeout dates. Through monthly meetings with Home Office (HO) M&E staff, M&E colleagues across all MTaPS countries are ensuring submission of high-quality quarterly, semiannual, and annual data, closely tracking progress toward targets every quarter and archiving all supporting documents.

Country-specific Data Reference Sheets with easy access to monitoring data across the six years of the project were shared with each country. These sheets became the basis for reviewing data easily and integrating any relevant quantitative evidence in the country end-of-project reports and presentations.

At the start of Year 6, the HO M&E team sent out a data-driven decision-making survey, asking country colleagues to what extent they have reviewed and reflected on the data and used them to aid key programmatic decisions. 77% of the employees to whom the survey was sent, mentioned that they have consulted the project's performance-monitoring data to draft next year's work plan. Decisions are not only informed by MTaPS-owned program-monitoring data. DHIS2, technical reports, partner surveillance data, facility-level data and WHO IHR Benchmark actions also emerged as key sources of data that MTaPS colleagues have reviewed for making key programmatic decisions.

MTaPS' M&E HO team is also working toward archiving the de-identified monitoring data, following the highest ethical standards.

QUARTER 4 PROGRESS

DevResults Data And Dashboards

The DevResults system continues to be used as the key platform for data submission by countries and portfolios followed by a validation by the HO MERL team. DevResults and Power BI dashboards are also being used to understand and visualize the project's progress on selected indicators. The HO team is regularly reviewing and reflecting on current and historical monitoring data trends with MTaPS countries in monthly meetings, to ensure that any data gaps can be identified and resolved before the project ends.

M&E Closeout Activities

In PY6 Quarter 4, the HO M&E team worked with MTaPS countries closing at the end of PY6 Quarter 4 to ensure that all the M&E-specific tasks are completed before the closeout date for each country. In each country-specific meeting, the HO M&E team shared key roles and responsibilities specific to closeout and provided country-specific timelines based on operational closeout dates. 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 the historical data, and integration of any key performance-monitoring data evidence in end-of-project reports, summaries, and presentations, etc. Each country will continue to follow its own timeline to make sure all key tasks are completed by the tailored deadlines provided.

COVID-19 In-Country Activity Reports

In PY6 Quarter 4, COVID-19 activities are continuing in Rwanda and Kenya. Monitoring data on relevant indicators were collected, along with narratives for submission to USAID's Development Information Solution platform.

ACTIVITIES & EVENTS FOR NEXT QUARTER

Activity & Description	Date
Finalize the Global End-of-Project report	Until December 2025
Closeout of the MTaPS' Performance Monitoring Plan	Until March 2025

B. KNOWLEDGE MANAGEMENT AND LEARNING

YEAR 6 ACHIEVEMENTS AND RESULTS

In PY6, MTaPS developed 4 technical briefs and highlights to address learning questions and 2 technical briefs and highlights to document implementation knowledge. MTaPS developed 18 country summary reports and 6 core and health area summary reports for capturing and showcasing end-of-project achievements, results, and recommendations.

QUARTER 4 PROGRESS

TECHNICAL DOCUMENTATION

During Quarter 4, MTaPS developed 4 technical briefs and highlights to address learning questions:

Asia Bureau: Using the One Health Tool to Allocate Pharmaceutical Budgets. MTaPS completed a technical highlight to respond to the learning question: What strategies and information are required for policymakers in the Ministry of Health, through using the OHT, to appropriately allocate budgets for pharmaceuticals?

Strengthening Information Systems for PSCM in Bangladesh. MTaPS completed 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?

Introducing Comprehensive Electronic Recording and Reporting for TB in Bangladesh. MTaPS completed 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? This highlight is currently with USAID for review and approval.

Supporting Rwanda FDA to Strengthen Its Regulatory Services. MTaPS completed 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?

During Quarter 4, MTaPS also developed two technical briefs and highlights to document implementation knowledge:

Asia Bureau: Mapping Regulatory Workforce Competency for National Regulatory Authorities. MTaPS completed 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 institutional and individual levels.

Institutionalizing the eAMS in Bangladesh. MTaPS completed 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.

COUNTRY SUMMARY REPORTS

MTaPS supported development of country summary reports to Missions highlighting key achievements, results, recommendations, and future PSS considerations for the country. During Quarter 4, one country summary report was completed:

Rwanda Country Summary Report. This report summarizes MTaPS' efforts to strengthen pharmaceutical systems and services in Rwanda by improving regulatory systems, strengthening AMS and IPC practices, supporting COVID-19 vaccination, and improving access to MNCH and HIV/AIDS medicines and commodities.

During Quarter 4, 11 country summary reports were drafted:

Asia Bureau Portfolio Summary Report. This report summarizes MTaPS' efforts to provide technical assistance to countries in USAID's Asia Bureau portfolio, including Bangladesh, Indonesia, the Philippines, and other countries, to advance pharmaceutical management systems within the Asian region. MTaPS' technical assistance focused on strengthening the capacity to institutionalize evidence-based decision-making, using robust information to define and cost pharmaceutical coverage, improving medicine regulatory capacity, strengthening pharmaceutical-sector governance, and increasing transparent and strategic procurement in the Philippines.

Bangladesh Country Summary Report. This report summarizes MTaPS' efforts to improve and modernize procurement and supply chain systems, strengthen pharmaceutical regulatory systems, institutionalize systems for evidence-based decision-making, and improve pharmaceutical services that promote appropriate medicines use, combat AMR, and contribute to COVID-19 pandemic response.

Burkina Faso Country Summary Report. This report summarizes MTaPS' efforts to improve AMS and IPC practices, establish multisectoral governance structures and coordination mechanisms, and improve COVID-19 IPC and vaccination implementation.

Cameroon Country Summary Report. This report summarizes MTaPS' efforts to strengthen AMS and IPC practices, strengthen MSC structures for combatting AMR, improve COVID-19 vaccination and IPC practices, and strengthen and streamline medical product registration and marketing authorization processes for malarial medicines.

Côte d'Ivoire Country Summary Report. This report summarizes MTaPS' efforts to strengthen AMS and IPC practices, strengthen MSC structures for combatting AMR, establish and strengthen One Health governance structures, improve COVID-19 vaccination and supply chain management, and increase adherence to Ebola virus disease IPC standards.

Democratic Republic of the Congo Country Summary Report. This report summarizes MTaPS' efforts to improve pharmaceutical systems to combat AMR, improve access to MNCH and FP medicines

and commodities, strengthen pharmaceutical supply chain management and private sector engagement, and prevent and control the spread of TB and Monkeypox.

Jordan Country Summary Report. This report summarizes MTaPS' efforts to strengthen pharmaceutical systems, improve pharmaceutical procurement governance and organizational capacity, and promote rational use of antimicrobials and improved adherence to IPC practices as a method to combat AMR.

Kenya Country Summary Report. This report summarizes MTaPS' efforts to improve MSC for combatting AMR, increase adherence to IPC practices, promote rational use of antimicrobials, strengthen regulatory systems and pharmacovigilance structures, and impact COVID-19 preparedness, response, and vaccination implementation.

Mali Country Summary Report. This report summarizes MTaPS' efforts to strengthen AMS and IPC practices, strengthen MSC structures for combatting AMR, improving MNCH medicine registration, and increasing capacity to respond to COVID-19 and Ebola virus disease outbreaks.

Nigeria Country Summary Report. This report summarizes MTaPS' efforts to strengthen AMS and IPC practices, strengthen MSC structures for combatting AMR, and engage private community pharmacies, hospitals, and clinics to improve COVID-19 vaccination implementation.

Tanzania Country Summary Report. This report summarizes MTaPS' efforts to strengthen AMS and IPC practices, strengthen MSC structures for combatting AMR, support COVID-19 vaccination and IPC, and increase regulatory and pharmacovigilance capacity (and specifically regulatory capacity for MNCH commodities).

CORE AND HEALTH AREA SUMMARY REPORTS

During Quarter 4, five Core and Health Area summary reports were completed:

COVID-19 Summary Report. This report summarizes MTaPS' efforts to respond to the COVID-19 pandemic, namely through accelerating widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations and through reducing morbidity and mortality from COVID-19, mitigating transmission, and strengthening health systems, including their capacity to prevent, detect, and respond to pandemic threats.

Cross Bureau Summary Report. This report summarizes MTaPS' efforts to develop evidence-based approaches and tools and to identify best practices in PSS, which contribute to addressing emerging health problems, and to identify innovative strategies and tools to advance USAID's technical leadership in PSS.

Gender Summary Report. This report summarizes MTaPS' efforts to raise awareness of its own staff, partners, and stakeholders on sex and gender considerations related to PSS; conduct sex and gender analyses; advocate for the routine collection and use of sex- and gender-disaggregated data; and review national policies and guidelines to ensure adequate consideration of sex and gender differences and to contribute to equitable access for persons of all sexes and genders.

Commodity Security and Logistics Report. This report summarizes MTaPS' efforts to assure commodity security and promote the long-term availability of a range of essential FP/RH commodities, by applying a PSS approach that includes strengthening the enabling environment; supporting the availability of and access to commodities at the last mile; and meeting the future needs of the supply chain workforce. Toward this goal, MTaPS recommended context-specific approaches for increasing financing and strengthening supply and logistics services for FP/RH commodities.

Maternal, Newborn, and Child Health Report. This report summarizes MTaPS' efforts to improve access to and appropriate use of safe, effective, affordable, and quality-assured MNCH medical products (medicines and medical devices) and pharmaceutical services, as a mechanism to reduce maternal, newborn, and child mortality. MTaPS contributed toward improved MNCH medical products access and safety by improving civil society engagement, strengthening regulation of MNCH medical products, enabling forecasting and supply planning, streamlining procurement, ensuring timely and consistent quality assurance, and enabling adherence to antibiotic treatments.

During Quarter 4, one Core and Health Area summary report was drafted:

GHSA/AMR Summary Report. This report summarizes MTaPS' GHSA TA to 13 collaborating countries including Bangladesh, Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Kenya, Mali, Mozambique, Nigeria, Senegal, Tanzania, and Uganda, focusing on AMR containment. MTaPS' GHSA TA endeavored to assist collaborating countries in achieving higher IHR (2005) capacity levels, as measured by the JEE and the WHO benchmarks for IHR capacities frameworks. This support focused on strengthening MSC for AMR containment, IPC, and AMS.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

No activities/events for next quarter.

C. RESEARCH

YEAR 6 ACHIEVEMENTS AND RESULTS

This past year, the MTaPS team wrapped up a series of activities and documents that yielded 9 peer-reviewed publications and 10 manuscripts under review. Publications include:

- Alemkere G, Tadeg H, Getahun W, Shewarega W, Agalu A, Joshi MP, Konduri N. Optimizing prophylactic antibiotic use among surgery patients in Ethiopian hospitals. J Infect Public Heal. 2023;16(Suppl. 1):82–89. https://doi.org/10.1016/j.jiph.2023.10.037
- Babar ZU, Dulal S, Dhakal NP, Upadhyaya MK, Trap B. Developing Nepal's medicines pricing policy: evidence synthesis and stakeholders' consultation. J Pharm Policy Pract. 2024;17(1):2346222. https://doi.org/10.1080/20523211.2024.2346222
- Bahegwa RP, Hokororo JC, Msigwa YS, et al. Infection prevention and control compliance during COVID-19 pandemic era: assessment of 26 regional referral hospitals in Tanzania. Discov Health Systems. 2024;3(article 21). https://doi.org/10.1007/s44250-024-00078-6
- Embrey M, Parveen S, Hafner T, Islam H, Zahid A, Joshi MP. Integration of IPC/WASH critical conditions into quality of care and quality improvement tools and processes: Bangladesh case study. Antimicrob Resist Infect Control. 2024;13(1):100. https://doi.org/10.1186/s13756-024-01455-9
- Kamere N, Rutter V, Munkombwe D, Aywak DA, Muro EP, Kaminyoghe F, Rajab K, Lawal MO, Muriithi N, Kusu N, Karimu O, Barlatt SHA, Nambatya W, Ashiru-Oredope D. Supply-chain factors and antimicrobial stewardship. Bull World Health Organ. 2023 Jun 1;101(6):403–411. doi: 10.2471/BLT.22.288650. Epub 2023 Apr 17. PMID: 37265674; PMCID: PMC10225941.
- Kiggundu R, Waswa JP, Konduri N, Kasujja H, Murungi M, Vudriko P, Joshi MP. A One Health approach to fight antimicrobial resistance in Uganda: Implementation experience, results, and lessons learned. Biosafety and Health. 2024;6(2):125–132. https://doi.org/10.1016/j.bsheal.2024.01.003
- Murungi M, Byomire Ndagije H, Kiggundu R, Nakitto Kesi D, Waswa JP, Rajab K, Barigye M, Serwanga A, Manirakiza L, Kasujja H, Kaweesi D, Joshi MP, Namugambe J, Konduri N. Antimicrobial consumption surveillance in Uganda: Results from an analysis of national import data for the human health sector, 2018–2021. J Infect Public Heal. 2023;16(Suppl. 1):45–51. https://doi.org/10.1016/j.jiph.2023.10.029
- Waswa J, Kiggundu R, Kasujja H, et al. A bottom-up, One Health approach to assessing progress in the implementation of a national action plan for combatting antimicrobial resistance: a case study from Uganda. One Health Adv. 2024;2(article 23). https://doi.org/10.1186/s44280-024-00057-9
- Waswa JP, Kiggundu R, Joshi MP, Mpagi J, Kasujja H, Murungi M, Kajumbula H, Were E, Schwarz D, Lwere K, Konduri N. Addressing gaps in AMR awareness in the public: an evidence-based policy brief to guide school curriculum review in Uganda. Front Public Health. 2023;11:1287523. doi: 10.3389/fpubh.2023.1287523

Manuscripts—several of which are intended for a special issue on PSS that MTaPS is planning for the *Journal of Pharmaceutical Policy and Practice*—currently under review include:

- Behavioral Nudges to Encourage Appropriate Antibiotic Use among Health Professionals in Uganda
- Pioneering Global Health Security Agenda to combat Antimicrobial Resistance: Lessons Learned from a Multi-Year Technical Assistance in 13 Countries

- 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
- Costs of the Supervision, Performance Assessment, and Recognition Strategy (SPARS) for medicines management in Nepal: evidence from a pilot study
- Inter-rater reliability and validity of Supervision, Performance Assessment, and Recognition (SPARS) indicators to assess medicines management in public health facilities in Nepal
- Assessment of the Quality of Adverse Drug Reaction Reports Submitted to the National Pharmacovigilance Center of Nepal: A Comparative Pre-/Post-Training Intervention
- An exploratory study of the mandate and functions of National Pharmaceutical Services Units: Global trends and the case of Côte d'Ivoire, Kenya, and Nepal
- The registration status of maternal, newborn, and child health medical products: evidence from nine countries
- Impact of community health workers' use of a digital consumption tracking tool on continuous family planning use in rural Zambia: A type 2 hybrid implementation-effectiveness trial

The program also made substantive efforts to continue showcasing its achievements at a range of regional and international meetings, having at least one abstract accepted at the following conferences and covering all five technical objectives:

- One Health Bangladesh Conference
- African Epidemiological Association Conference
- 3rd International Conference on Public Health in Africa (CPHIA)
- Workshop on Corruption and Conflicts of Interest in Healthcare
- 2023 Global Digital Health Forum
- 20th General Membership Meeting of the Reproductive Health Supplies Coalition
- 6th Biennial SCOMRA
- People that Deliver Global Indaba 2024
- Global Health Security Conference 2024
- AIDS 2024
- Health Systems Research 2024
- FIP Congress of Pharmacy and Pharmaceutical Sciences
- Africa One Health University Network (AFROHUN) Conference
- ISOP Annual Meeting 2024 (Montreal)
- ISOP Africa Chapter Meeting 2024 (Kampala)
- Priorities 2024/ISPH Conference
- PharmaConnect 2024
- Global Health Supply Chain Summit 2023 and 2024

QUARTER 4 PROGRESS

MTaPS participated in two conferences this quarter. At the International Society for Pharmacovigilance (ISOP) Africa Chapter meeting held July 22–24, 2024, in Kampala, Uganda, MTaPS presented two oral

presentations and five posters. MTaPS was awarded as the organization with the best posters with respect to design and technical content. The posters were:

- Strengthening Pharmacovigilance in Rwanda, Introducing PViMS for Spontaneous Reporting of Adverse Drug Effects
- Implementing an Active Surveillance Study of Patients Treated with a Tenofovir/Lamivudine/Dolutegravir (TLD) Regimen for HIV in Mozambique
- Improving the maturity level of the pharmacovigilance system of Cameroon using the WHO Global Benchmarking Tool
- Pharmacovigilance system strengthening approaches of MTaPS, and results obtained at the regulatory Authorities of African countries
- Medicines Safety and Strengthening Pharmacovigilance in Senegal: Improving Adverse Drug Event Reporting by Involving the Bajenu Gox

The oral presentations were:

- Strengthening the Adverse Events Following Immunization Surveillance System for COVID-19 Vaccine Safety Monitoring and beyond: a case of Tanzania.
- Pharmacovigilance Monitoring System PViMS (OpenRIMS-PV)—A Digital Tool to Enhance Decision-Making for Active and Passive Patient Safety Monitoring

At PharmaConnect 2024, held August 20–22, 2024, in Lusaka, Zambia MTaPS' participation included:

- Two oral presentations:
    - The critical role of strong regulatory systems for sustainable local manufacturing in Africa
    - National Pharmaceutical Services Units (NPSUs)—A Critical Component for Medicines Availability & Use
- Three posters:
    - Flexible Digitalization of National Regulatory Authority Functions in Africa
    - Streamlining the Registration and Importation of Antiretroviral Medicines in Tanzania: A Process Improvement Approach
    - Using a systems approach to strengthen regulation of medical products in Rwanda
- Three interactive sessions:
    - Plenary workshop on PSS skills building
    - Career development workshop for pharmacy students. A total of 40 pharmacy students from 5 Zambian universities participated with MTaPS staff and other experienced pharmacy professionals in this session, which focused on pharmacy career paths and key skills development for a pharmacy career.
    - Capacity development workshop for academics. This was a 1-day workshop that included 40 academics from five Zambian universities and 1 Nigerian university.

This quarter MTaPS also started preparing technical material for accepted abstracts at the following conferences scheduled for next quarter:

- Health Systems Research (HSR) 2024, scheduled for November 18–22 in Nagasaki, Japan
    - "Addressing climate risks in health facilities through capacity strengthening on health care waste management, infection prevention and control, and emergency supply chain in the Philippines" has been accepted for an oral presentation.
- ISOP global annual meeting scheduled for October 1–15 in Montreal, Canada (five posters).
    - Strengthening the Adverse Events Following Immunization Surveillance System for COVID-19 Vaccine Safety Monitoring and beyond: a case of Tanzania.
    - Strengthening Pharmacovigilance in Rwanda, Introducing PViMS for Spontaneous Reporting of Adverse Drug Effects
    - Implementing an Active Surveillance Study of Patients Treated with a Tenofovir/Lamivudine/Dolutegravir (TLD) Regimen for HIV in Mozambique
    - Strengthening Pharmacovigilance and safety surveillance in Bangladesh
    - Institutionalizing a Digital System for Active Tuberculosis Drug Safety Monitoring in the Philippines
- The Global Health Supply Chain (GHSC) Summit, scheduled for November 12–15, 2024 in Lagos, Nigeria:
    - Strengthening approaches to managing and preventing conflicts of interest to increase the integrity of health value chain
    - The impact of a digital stock and service management tool on family planning commodity distribution in rural Zambia
    - Institutionalizing the Electronic Asset Management System (eAMS) in Bangladesh
    - Addressing Medical Product Procurement Failures in the Philippines: Root Cause Analysis and Recommendations for Resolution
    - Institutionalizing the implementation of Framework Agreements for the public procurement of pharmaceuticals in Jordan

Under the CSL portfolio, MTaPS submitted both the technical report and accompanying manuscript reporting on the impact evaluation of a client, stock, and workflow management (OpenSRP) application on unmet FP need at the last mile in Luapula Province, Zambia. Under Cross Bureau, the team continued finalizing several publications for the PSS special issue to be published, if accepted, in the *Journal of Pharmaceutical Policy and Practice*. A total of five manuscripts are currently under review. In addition, the team submitted a manuscript for peer review reporting 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 study shows that behavioral nudges can produce immediate improvements in antimicrobial prescribing adherence and addresses a critical evidence gap regarding interventions that can encourage appropriate antimicrobial prescribing among health care personnel.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Prepare presentations and posters for HSR, ISOP, and GHSC	November 2024
Finalize manuscripts and submissions to various journals	December 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	8/8				8/8
	Bangladesh		No	Yes	Yes	Yes	Yes	N/A				N/A
	Burkina Faso		No	No	Yes	No	Yes	Yes				Yes
	Cameroon		No	No	No	No	Yes	Yes				Yes
	Côte d'Ivoire		No	No	No	No	N/A	Yes				Yes
	DRC		No	Yes	Yes	Yes	Yes	Yes				Yes
	Ethiopia		No	No	No	Yes	Yes	N/A				N/A
	Kenya		No	No	No	No	Yes	Yes				Yes
	Mali		No	No	No	No	N/A	N/A				N/A
	Mozambique		No	No	No	No	Yes	N/A				N/A
	Nigeria		No	No	No	No	Yes	Yes				Yes
	Senegal		No	Yes	Yes	Yes	Yes	Yes				Yes
	Tanzania		No	Yes	Yes	Yes	Yes	Yes				Yes
	Uganda		No	No	No	No	Yes	N/A				N/A
GH-IO 2	Has the country implemented WHO AWaRe categories (yes/no)?	Annually	1/12	3/12	8/12	7/12	10/12	5/8				5/8
	Bangladesh		Yes	Yes	Yes	Yes	Yes	N/A				N/A
	Burkina Faso		No	No	Yes	Yes	Yes	Yes				Yes
	Cameroon		No	No	No	No	Yes	No				No
	Côte d'Ivoire		No	No	No	No	Yes	Yes				Yes
	DRC		No	Yes	Yes	Yes	Yes	Yes				Yes
	Ethiopia		No	No	Yes	Yes	Yes	N/A				N/A
	Kenya		No	No	Yes	Yes	Yes	Yes				Yes
	Mali		No	No	Yes	No	N/A	N/A				N/A
	Mozambique		No	No	No	No	Yes	N/A				N/A
	Nigeria		No	No	No	No	No	No				No
	Senegal		No	No	Yes	Yes	Yes	No				No

	Tanzania		No	Yes	Yes	Yes	Yes	Yes	Yes
	Uganda		No	No	No	No	Yes	N/A	N/A
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)	29% (16/55)	29% (16/55)
	Côte d'Ivoire		0%	N/A	N/A	100%	N/A	N/A	N/A
	DRC		28%	N/A	N/A	0%	25% (3/12)	25% (3/12)	25% (3/12)
	Jordan		0%	N/A	N/A	N/A	N/A	N/A	N/A
	Kenya		80%	N/A	N/A	N/A	92% (22/24)	N/A	N/A
	Mali		80%	N/A	49%	56%	62% (10/16)	75% (12/16)	75% (12/16)
	Nigeria		0%	N/A	N/A	0%	16.67% (1/6)	14.29% (1/7)	14.29% (1/7)
	Senegal		0%	N/A	N/A	0%	N/A	N/A	N/A
	Tanzania		100%	N/A	N/A	N/A	N/A	N/A	N/A
	Uganda		100%	N/A	N/A	100%	N/A	N/A	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	N/A	N/A
	Philippines		179%	N/A	N/A	N/A	N/A	N/A	N/A
IO.2	Mean % availability across a set of tracer medicines	Annually	16% (114/705)	75% (75/100)	76% (76/100)	78% (78/100)	50% (50/100)	N/A	N/A
	Bangladesh		1% (17/575)	N/A	N/A	N/A	N/A	N/A	N/A
	Mozambique		63% (19/30)	N/A	N/A	N/A	N/A	N/A	N/A
	Nepal		78% (78/100)	75% (75/100)	76% (76/100)	78% (78/100)	50% (50/100)	N/A	N/A
IO.3	% of medicines on the EML that have at least one registered product available	Annually	49% (649/1,316)	N/A	73% (239/329)	69% (324/469)	29% (434/1,477)	100% (38/38)	100% (38/38)
	Bangaldesh		83% (236/285)	N/A	N/A	N/A	N/A	N/A	N/A
	DRC MNCH		N/A	N/A	N/A	17% (5/29)	79% (30/38)	100% (38/38)	100% (38/38)
	Nepal		84% (304/360)	N/A	73% (239/329)	72% (305/426)	75% (318/426)	N/A	N/A
	Philippines		100% (11/11)	N/A	N/A	100% (14/14)	N/A	N/A	N/A
	Rwanda		15% (98/660)	N/A	N/A	N/A	9% (86/1,013)	N/A	N/A
IO.4	Has the country's regulatory system increased its score since the last WHO global regulatory benchmarking	Annually	No	No	No	Yes	Yes	N/A	N/A

	assessment in at least one regulatory function (yes/no)?								
	Bangladesh		No	N/A	N/A	N/A	N/A	N/A	N/A
	Nepal		No	No	No	Yes	Yes	N/A	N/A
	Rwanda		No	N/A	N/A	N/A	N/A	N/A	N/A
IO.5/GH-IO-4	*% of surveyed patients who can correctly state instructions dosage of antimicrobial prescriptions*	Baseline/ endline	74% (1,347/ 1,829)	0% (0/0)	55% (55/100)	68% (325/480)	57% (181/317)	69% (263/380)	69% (263/380)
	Bangladesh		100% (1/1)	N/A	N/A	N/A	N/A	N/A	N/A
	Côte d'Ivoire		19% (3/16)	N/A	N/A	N/A	N/A	N/A	N/A
	DRC		65% (41/63)	N/A	N/A	89% (142/160)	N/A	80% (48/60)	80% (48/60)
	Ethiopia		73% (220/302)	N/A	N/A	N/A	N/A	N/A	N/A
	Kenya		81% (82/101)	N/A	N/A	N/A	N/A	N/A	N/A
	Mali		43% (127/297)	N/A	55% (55/100)	57% (183/320)	57% (181/317)	67% (215/320)	67% (215/320)
	Mozambique		69% (187/273)	N/A	N/A	N/A	N/A	N/A	N/A
	Nepal		76% (16/21)	0% (0/0)	N/A	N/A	N/A	N/A	N/A
	Philippines		89% (365/410)	N/A	N/A	N/A	N/A	N/A	N/A
	Rwanda		91% (228/250)	N/A	N/A	N/A	N/A	N/A	N/A
	Senegal		87% (13/15)	N/A	N/A	N/A	N/A	N/A	N/A
	Tanzania		80% (24/30)	N/A	N/A	N/A	N/A	N/A	N/A
	Uganda		80% (40/50)	N/A	N/A	N/A	N/A	N/A	N/A
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		0.38	N/A	0/5	N/A	0.25	N/A	N/A
	Rwanda		0.43	N/A	N/A	N/A	N/a	N/A	N/A
MNCH 17	# of countries participating in the dissemination of the regulation guidelines for medical devices	Annually	0	0	0	N/A	N/A	N/A	N/A
MNCH 18	# of MNCH medical devices included in the guidelines	Annually	0	N/A	0	N/A	N/A	N/A	N/A
MNCH 19 [5]	# of stakeholders from regulatory authorities and manufacturers of oxygen participating in the dissemination and	Annually	0	0	0	N/A	N/A	N/A	N/A

	adoption of the oxygen regulatory framework									
MNCH 6	# of countries using the RMNCH forecasting supplement	Annually	0	N/A	5	8	N/A	N/A		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	N/A		N/A
MNCH 10	# of MTaPS-supported NMRAs implementing improved registration practices relevant for MNCH medical products	Annually	0	1	N/A	1	0	16[5]		16[5]
MNCH 11	# of countries supported to develop and implement action plans for regional harmonization efforts relevant for MNCH medical products	Semiannually	0	0	N/A	N/A	0	N/A	N/A	N/A
MNCH 12	# of quality-assured MNCH products registered in selected country	Semiannually	0	0	N/A	123	N/A	N/A	N/A	N/A
MNCH 13	# of countries supported to implement decentralized procurement systems	Semiannually	0	1	N/A	1	N/A	N/A	N/A	N/A
MNCH 21	# of quantification guidance documents developed	Annually	0	N/A	0	5	2	N/A		N/A
MNCH 22	# of countries in selected region implementing regulation of medical devices	Annually	0	N/A	N/A	N/A	0	4[6]		4[6]
MNCH 23	# of countries participating in the joint assessment of	Annually	0	N/A	N/A	N/A	0	10[7]		10[7]

[5] Activity is a continuation from the PY4 work plan
[6] Activity is a continuation from the PY4 work plan
[7] Activity is a continuation from the PY5 work plan

	MNCH medical devices								
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	N/A	N/A
MNCH 25	# of countries receiving MTaPS support to include nonmalaria commodities in their Global Fund proposals	Annually	0	N/A	N/A	N/A	6	N/A	N/A
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	62	62
MNCH 27	Number of stakeholders involved in validation of oxygen QA resource document	Annually	0	N/A	N/A	N/A	36	N/A	N/A
MT 1.1.1	# of entities that have clarified roles and responsibilities in pharmaceutical systems and made information publicly available with MTaPS support	Annually	0	3	7	6	2	4	4
	Bangladesh		0	2	1	2	N/A	N/A	N/A
	DRC		0	N/A	N/A	N/A	0	1	1
	Jordan		0	N/A	N/A	3	N/A	N/A	N/A
	Nepal		0	0	0	N/A	1	3	3
	Philippines		0	N/A	N/A	N/A	N/A	N/A	N/A
	Rwanda		0	1	4	1	1	N/A	N/A
	IGAD		0	N/A	2	N/A	N/A	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	17	17
	DRC MNCH		0	0	29	17	17	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)	N/A				N/A
	IGAD		0	N/A	100% (2/2)	N/A	N/A	N/A				N/A
	Mali		0	N/A	N/A	0% (0/1)	100% (1/1)	N/A				N/A
MT 1.2.1	# of pharmaceutical sector–related policy, legislation, regulation, or operational documents developed or updated with technical assistance from MTaPS	Annually	0	31	30	20	80	37				37
	Asia Bureau		0	N/A	1	4	1	1				1
	CSL		0	N/A	N/A	N/A	N/A	3				3
	Cross Bureau		0	N/A	N/A	1	1	0				0
	Bangladesh		0	2	2	5	1	N/A				N/A
	DRC MNCH		0	N/A	N/A	N/A	N/A	2				2
	Global MNCH		0	N/A	0	N/A	N/A	N/A				N/A
	Indonesia		0	N/A	N/A	N/A	1	N/A				N/A
	Jordan		0	N/A	N/A	0	11	3				3
	Mali MNCH		0	N/A	N/A	1	N/A	N/A				N/A
	Mozambique		0	1	2	N/A	N/A	N/A				N/A
	Nepal		0	N/A	3	6	65	22				22
	Philippines		0	2	3	1	N/A	1				1
	Rwanda		0	26	17	0	N/A	4				4
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	1				1
	Tanzania PEPFAR		0	N/A	2	2	N/A	N/A				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	5	N/A				N/A
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	N/A	N/A	3,483
MT 1.2.2	# of pharmaceutical regulatory	Semiannually	0	0	5	8	24	0		2		2

	enforcement mechanisms established or strengthened with MTaPS support										
	Bangladesh		0	N/A	N/A	N/A	N/A	N/A		N/A	N/A
	Burkina Faso		0	N/A	N/A	0	0	N/A		N/A	N/A
	Global MNCH		0	N/A	0	N/A	1	N/A		2[8]	2[8]
	Mozambique		0	0	2	N/A	N/A	N/A		N/A	N/A
	Philippines		0	N/A	N/A	N/A	N/A	0		N/A	0
	Rwanda		0	0	5	8	23	N/A		N/A	N/A
	Tanzania PEPFAR		0	N/A	1	N/A	3	N/A		N/A	N/A
MT 1.2.3	% of established pharmaceutical regulatory enforcement mechanisms that are functional	Semiannually	0%	42% (11/26)	88% (15/17)	75% (3/4)	100% (1/1)	N/A		N/A	N/A
	Bangladesh		0%	100% (2/2)	100% (8/8)	100% (2/2)	100% (1/1)	N/A		N/A	N/A
	Mozambique		0%	22% (2/9)	67% (2/3)	N/A	N/A	N/A		N/A	N/A
	Rwanda		0%	83% (5/6)	83% (5/6)	75% (6/8)	N/A	N/A		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	N/A	1	1	1	1			1
	DRC MNCH		0	N/A	1	1	1	1			1
PP 1.3.1	% of US Government (USG)-supported facilities using MTaPS-supported eLMIS	Quarterly	0	N/A	0	0% (0/36)	100% (84/84)	100% (97/97)	100% (10/10)	N/A	N/A	100% (97/97)
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	N/A				N/A
	Jordan		0	0	0	0	N/A	N/A				N/A
MT 2.1.2	# of MTaPS-supported health professional training curricula	Annually	0	5	2	7	6	5				5

[8] Activity is a continuation from the PY4 work plan

	developed or revised to address pharmaceutical management topics															
	Asia Bureau		0	N/A	1	2	N/A	N/A								N/A
	Bangladesh		0	4	0	1	N/A	N/A								N/A
	IGAD		0	1	1	N/A	N/A	N/A								N/A
	Jordan		0	N/A	N/A	4	2	5								5
	Mali MNCH		0	N/A	N/A	N/A	3	N/A								N/A
	Tanzania PEPFAR		0	N/A	N/A	N/A	1	N/A								N/A
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		964		1,016		8,744
	Asia Bureau		0	N/A	101	413	184	*Female*	0	*Female*	5	*Female*	9	*Female*	14	1563
								Male	0	*Male*	18	*Male*	17	*Male*	35	
								Unknown	1,064	*Unknown*	401	*Unknown*	0	*Unknown*	0	
								Total	1064[9]	***Total***	424	***Total***	26	***Total***	49	
	Bangladesh		0	1,678	2,856	3,013	1,961	*Female*	7	*Female*	46	*Female*	21	*Female*	17	287
								Male	47	*Male*	16	*Male*	104	*Male*	29	
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*	0	
								Total	54	***Total***	62	***Total***	125	***Total***	46	
	Burkina Faso		0	N/A	N/A	N/A	32	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	3	16
								Male		*Male*		*Male*		*Male*	13	
								Unknown		*Unknown*		*Unknown*		*Unknown*	0	
								Total		***Total***		***Total***		***Total***	16	
	Cross Bureau		0	N/A	N/A	124	2,895	*Female*	0	*Female*	0	*Female*	0	*Female*	0	4,717
								Male	0	*Male*	0	*Male*	0	*Male*	0	
								Unknown	1,713	*Unknown*	1,393	*Unknown*	713	*Unknown*	898	
								Total	1,713	***Total***	1,393	***Total***	713	***Total***	898	
	DRC MNCH		0	N/A	373	192	334	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	DRC Supply Chain		0	N/A	N/A	0	223	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	1	7
								Male		*Male*		*Male*		*Male*	6	
								Unknown		*Unknown*		*Unknown*		*Unknown*	0	
								Total		***Total***		***Total***		***Total***	7	
	IGAD		0	N/A	843	23	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Indonesia		0	N/A	0	251	75	*Female*	43	*Female*	N/A	*Female*	N/A	*Female*	N/A	63
								Male	20	*Male*		*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*	100	*Female*	N/A	527

[9] Data reporting in PY6Q1 is for the Asia Bureau PY5 e-Learning course

								Male	110	*Male*	84	*Male*	0	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		
								Total	240	***Total***	187	***Total***	100	***Total***		
	Mali MNCH		0	N/A	N/A	8	37	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Mozambique		0	105	21	125	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Nepal		0	N/A	38	121	733	*Female* *Male* *Unknown* ***Total***	196 781 0 977							977
	Philippines		0	N/A	7,615	5,191	1,048	*Female* *Male* *Unknown* ***Total***	304 133 0 437	*Female* *Male* *Unknown* ***Total***	22 47 0 69	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	506
	Rwanda		0	44	603	246	616	*Female* *Male* *Unknown* ***Total***	22 30 0 52	*Female* *Male* *Unknown* ***Total***	1 3 0 4	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	56[10]
	Rwanda PEPFAR		0	N/A	N/A	78	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	9 16 0 25	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	25
	Tanzania PEPFAR		0	N/A	30	27	N/A	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	0
MT 2.2.3	# of in-person or e-Learning courses developed with MTaPS assistance	Annually	0	1	9	11	1	2								2
	Asia Bureau		0	N/A	3	2	1	N/A								N/A
	Bangladesh		0	N/A	0	N/A	N/A	N/A								N/A
	Cross Bureau		0	1	1	2	N/A	N/A								N/A
	IGAD		0	N/A	0	N/A	N/A	N/A								N/A
	Jordan		0	N/A	N/A	N/A	N/A	N/A								N/A
	Mozambique		0	N/A	1	1	N/A	N/A								N/A
	Nepal		0	N/A	N/A	N/A	N/A	2								2
	Philippines		0	N/A	4	6	N/A	N/A								N/A

[10] Rwanda PY6 field support activities are a continuation of the PY5 work plan.

	Rwanda		0	N/A	N/A	N/A	N/A	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		113		1,488		1,110		6,857
	Asia Bureau		0	0	52	0	8	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Bangladesh FS		0	0	0	0	2,012	*Female* *Male* *Unknown* ***Total***	64 395 5 464	*Female* *Male* *Unknown* ***Total***	7 105 1 113	*Female* *Male* *Unknown* ***Total***	109 478 2 589	*Female* *Male* *Unknown* ***Total***	13 75 0 88	1,254
	Bangladesh GHSA		0	N/A	N/A	N/A	56	*Female* *Male* *Unknown* ***Total***	173 401 2 576	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	576
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	64 122 0 186	*Female* *Male* *Unknown* ***Total***	52 72 0 124	310
	Cross Bureau		0	6	8	208	3,123	*Female* *Male* *Unknown* ***Total***	0 0 1,713 1,713	*Female* *Male* *Unknown* ***Total***	0 0 1,393 1,393	*Female* *Male* *Unknown* ***Total***	0 0 713 713	*Female* *Male* *Unknown* ***Total***	0 0 898 898	4,717
	DRC		0	N/A	N/A	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	0
	Mozambique		0	65	0	0	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Philippines		0	0	6,857	3,892	762	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Rwanda		0	0	0	127	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
MT 2.4.1	# of days reduced for product registration in countries with MTaPS-supported NMRAs	Annually	0	0	180	0	N/A	N/A								N/A
	Mali MNCH		0	N/A	N/A	0	N/A	N/A								N/A
	Mozambique		0	N/A	N/A	N/A	N/A	N/A								N/A
	Rwanda		0	N/A	N/A	N/A	240	N/A								N/A
	Tanzania PEPFAR		0	N/A	180	180	N/A	N/A								N/A

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	2	2
	Asia Bureau		0	N/A	1	10	1	2	2
	Cross Bureau		0	N/A	N/A	N/A	1	N/A	N/A
	IGAD		0	N/A	2	N/A	N/A	N/A	N/A
	Mozambique		0	0	0	N/A	N/A	N/A	N/A
	Rwanda		0	N/A	N/A	N/A	N/A	N/A	N/A
MT 2.4.4	# of countries that have conducted an assessment at any level of the regulatory system	Annually	3	2	5	1	2	N/A	N/A
	IGAD		No	N/A	Yes	N/A	N/A	N/A	N/A
	Mozambique		Yes	Yes	Yes	N/A	N/A	N/A	N/A
	Nepal		Yes	Yes	Yes	N/A	Yes	N/A	N/A
	Philippines		No	N/A	N/A	N/A	N/A	N/A	N/A
	Rwanda		Yes	N/A	Yes	No	No	N/A	N/A
	Tanzania PEPFAR		No	N/A	Yes	Yes	Yes	N/A	N/A
MT 2.4.5	# of medicines with current valid registration	Annually	0	N/A	N/A	60	482	N/A	N/A
	Mali MNCH		0	N/A	N/A	60	N/A	N/A	N/A
	Rwanda		0	N/A	N/A	N/A	482	N/A	N/A
	Tanzania PEPFAR		0	N/A	5966	5966	7458	N/A	N/A
MT 3.3.1	*Has the country used PSS metrics to assess its pharmaceutical system?*	Annually	No	N/A	N/A	No	No	N/A	N/A
	Bangladesh		No	N/A	N/A	N/A	N/A	N/A	N/A
	Cross Bureau		No	N/A	N/A	No	No	N/A	N/A
	Mozambique		No	N/A	N/A	N/A	N/A	N/A	N/A
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	Annually	0	0	12	N/A	N/A	10	10

	good pharmacy practice inspection guidelines								
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	10	12	6	14	N/A	N/A
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	N/A	4	0	8	N/A	N/A
PP 2.2.1	# of TB and FP products registered in the Philippines with MTaPS support	Annually	0	0	4	9	5	N/A	N/A
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	5	3	3
PP 3.3	% of MTaPS-supported entities carrying out supply chain management functions without external TA	Annually	0	N/A	33% (4/12)	25% (2/8)	50% (6/12)	N/A	N/A

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	64% (1,126/1,767)	92% (4,303/4,690)	99% (2,006/2,016)	100% (60/60)	100% (60/60)	N/A				N/A				N/A		
	Bangladesh		90% (104/115)	92% (4,293/4,680)	100% (2,006/2,006)	N/A	N/A	N/A				N/A				N/A		
	Mozambique		62% (1022/1652)	N/A	N/A	N/A	N/A	N/A				N/A				N/A		
	Rwanda Field Support		0%	100% (10/10)	0% (0/10)	100% (40/40)	100% (40/40)	N/A				N/A				N/A		
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	100% (20/20)	N/A				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)	75% (5,116/6,821)	65% (4,461/6,846)				62% (4,226/6,843)				65% (4,461/6,846)		
	Bangladesh		61% (61/100)	88% (3,875/4,396)	77% (4,734/6,173)	72% (4,418/6,106)	75% (5,111/6,816)	65% (4,461/6,846)				62% (4,226/6,843)				65% (4,461/6,846)		
	Mozambique		0%	64% (9/14)	85% (1,412/1,652)	64% (9/14)	100% (5/5)	N/A				N/A				N/A		
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	N/A				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	1								1		
	Bangladesh		0	Yes	Yes	Yes	Yes	Yes								Yes		
	Mozambique		0	No	No	No	N/A	N/A								N/A		
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)		81% (342/422)		93% (393/422)		93% (393/422)		
	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*		*Hospitals*		*Hospitals*		*Hospitals*		N/A		
								Other	N/A	*Other*	N/A	*Other*	N/A	*Other*	N/A			
								Total		***Total***		***Total***		***Total***				
	DRC MNCH		42% (74/177)	Data not reported	56% (100/177)	74% (132/177)	78% (1,123/1,441)	*Hospitals*		*Hospitals*	0% (0/0)	*Hospitals*	0% (0/0)	*Hospitals*	60% (6/10)	60% (6/10)		
								Health centers	N/A	*Health centers*	92% (385/419)	*Health centers*	81% (342/422)	*Health centers*	94% (387/412)	94% (387/412)		
								Pharmacies		*Pharmacies*	79% (11/14)	*Pharmacies*	0% (0/0)	*Pharmacies*	0% (0/0)	0% (0/0)		

								Other		*Other*	0% (0/0)	*Other*	0% (0/0)	*Other*	0% (0/0)	0% (0/0)		
								Total		***Total***	91% (396/433)	***Total***	81% (342/422)	***Total***	93% (393/422)	93% (393/422)		
	Philippines		0% (0/1356)	N/A	N/A	N/A	N/A	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	N/A	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	N/A	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	N/A	*Hospitals* *Health centers* *Pharmacies* *Other* ***Total***	N/A	N/A		
MT 3.3.2	# of PSS technical documents authored by MTaPS	Semiannually	0	14	39	56	48	26				52				78		
	Asia Bureau		0	N/A	N/A	0	2	N/A				4				4		
	Burkina Faso GHSA		0	N/A	N/A	N/A	N/A	0				0				0		
	Burkina Faso PV		0	N/A	N/A	N/A	N/A	0				0				0		
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	2				4				6		
	Cross Bureau		10	13	10	11	16	2				4				6		
	CSL		0	N/A	1	10	1	0				1				1		
	DRC MNCH		0	N/A	N/A	N/A	N/A	2				2				4		
	Global MNCH		0	1	1	9	10	1				2				3		
	Indonesia		0	N/A	0	7	8	3				N/A				3		
	Jordan		0	N/A	N/A	2	7	0				13				13		
	Kenya		0	N/A	N/A	N/A	N/A	2				12				14		
	Mali GHSA		0	N/A	N/A	N/A	N/A	6				6				12		
	Mali MNCH		0	N/A	N/A	N/A	1	N/A				N/A				N/A		
	Mozambique		0	N/A	N/A	N/A	N/A	1				N/A				1		
	Philippines		0	N/A	N/A	N/A	N/A	5				N/A				5		
	Rwanda		0	N/A	27	17	3	0				N/A				0		
	Senegal		0	N/A	N/A	N/A	N/A	1				3				4		
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	1				1				2		
	Tanzania PEPFAR		0	N/A	N/A	N/A	5	N/A				N/A				N/A		
MT 3.3.3	# of activities to engage with stakeholders to advance the PSS global learning agenda	Quarterly	0	4	12	64	67	29		18		29		23		99		
	Asia Bureau		0	N/A	N/A	1	7	0		N/A		N/A		1		1		
	Cross Bureau		0	11	12	31	34	17		10		18		15		60		
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0		N/A		N/A		N/A		0		
	CSL		0	N/A	0	16	N/A	N/A		N/A		N/A		N/A		N/A		
	Global MNCH		0	N/A	N/A	N/A	N/A	N/A		N/A		N/A		N/A		N/A		
	Indonesia		0	N/A	0	16	23	4		N/A		N/A		N/A		4		
	Kenya		0	N/A	N/A	N/A	N/A	4		4		10		4		22		
	Mali		0	N/A	N/A	N/A	N/A	2		2		1		3		8		
	Mozambique		0	N/A	N/A	N/A	0	0		1		N/A		N/A		1		
	Tanzania GHSA		0	N/A	N/A	N/A	N/A	2		N/A		N/A		N/A		2		
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	0		1		N/A		N/A		1		

PP 3.1	# of joint success stories produced	Annually	0	2	3	2	8	N/A		N/A
PP 3.4	# of gender assessments, analyses, studies, or research activities conducted by MTaPS on PSCM and PV	Annually	0	1	1	1	1	N/A		N/A
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	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	N/A	N/A
MNCH 15 [4]	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	0	0	N/A	N/A	N/A	1		1
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	N/A		N/A
	DRC Supply Chain		0	N/A	N/A	N/A	2	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	N/A		N/A
	Bangladesh		0	1	N/A	N/A	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	N/A		N/A
	Indonesia		0	N/A	0	N/A	N/A	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	N/A	N/A

	Asia Bureau		0	N/A	N/A	N/A	0	N/A		N/A	N/A
	Bangladesh		0	2	0	0	N/A	N/A		N/A	N/A
	Indonesia		0	N/A	N/A	2	3	N/A		N/A	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	N/A			N/A
	Indonesia		0	N/A	No		Yes	N/A			N/A
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	N/A			N/A
	Indonesia		0	N/A	Yes	Yes	Yes	N/A			N/A
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	Yes			Yes
	Indonesia		0	N/A	N/A	No	Yes	N/A			N/A
	Bangladesh		0	N/A	N/A	No	N/A	Yes			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	N/A			N/A
	Indonesia		0	N/A	0	N/A	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		N/A	N/A
	Global MNCH		0	N/A	N/A	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			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% (5,763/17,679)	N/A	N/A	N/A	32% (5,763/17,679)
	Philippines		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	N/A	N/A	32.6% (5,763/17,679)
	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	N/A	N/A	27% (554/2,021)

	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	N/A	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	68% (406/600)	N/A	N/A	N/A	68% (406/600)
	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	N/A	N/A	19% (102/535)
	TB second-line drug (moxifloxacin 400 mg)		0	50% (100/199)	7% (12/168)	N/A	N/A	N/A	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	N/A	N/A	38% (203/535)
	TB second-line drug (bedaquiline)		0	47% (95/199)	8% (14/183)	4.5% (9/198)	19% (95/504)	29% (155/535)	N/A	N/A	N/A	29% (155/535)
	GeneXpert cartridges		0	3% (13/395)	14% (46/338)	30% (367/1,207)	69% (932/1,345)	37% (239/654)	N/A	N/A	N/A	37% (239/654)
	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	N/A	N/A	20% (443/2,199)
	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	N/A	N/A	47% (859/1,836)
	FP oral combimed oral contraceptive (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	N/A	N/A	27% (617/2,292)
	FP oral progestogen-only pill (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	N/A	N/A	21% (470/2,195)
	IUD		36.70%	37% (466/ 1,264)	41% (836/2,022)	43% (1,892/4,369)	39% (1,006/2,593)	63% (1,264/2,022)	N/A	N/A	N/A	63% (1,264/2,022)
	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	N/A	N/A	20% (451/2,255)
MT 5.1.1 (FP)	Stockout rates of tracer medicines in MTaPS-supported HFs (FP)	Semiannually	37% (35/94)	N/A	N/A	.00116% (70/60,363)	0.36% (202/56,464)	22% (6,673/30,571)		44% (13,500/30,527)		33% (20,173/ 61,098)
	Bangladesh		37% (35/94)	N/A	N/A	.00116% (70/60,363)	0.36% (202/56,464)	22% (6,673/30,571)		44% (13,500/30,527)		33% (20,173/ 61,098)
MT 5.1.1 (MNCH)	Stockout rates of tracer medicines in MTaPS-supported HFs (MNCH)	Semiannually	0%	N/A	N/A	N/A	31% (29,836/ 97,060)	29% (14,050/48,530)		22% (10,726/48,569)		28% (54,612/ 194,159)
	Bangladesh		0%	N/A	N/A	N/A	31% (29,836/ 97,060)	29% (14,050/48,530)		22% (10,726/48,569)		28% (54,612/ 194,159)
MT 5.1.1 (TB)	Stockout rates of tracer medicines in MTaPS-supported HFs (TB)	Semiannually	78% (33/42)	N/A	N/A	N/A	10% (145/1,408)	0.31% (3/972)		.72% (7/972)		.51% (10/1,944)
	Bangladesh		78% (33/42)	N/A	N/A	N/A	10% (145/1,408)	0.31% (3/972)		.72% (7/972)		.51% (10/1,944)
MT 5.1.2	% of tracer products stocked according to plan	Semiannually	0%	N/A	28% (52/186)	28% (25/88)	46% (27/59)	0% (0/31)		16% (5/31)		8% (5/62)
	Bangladesh		0%	N/A	0% (0/7)	50% (3/6)	N/A	*Stocked according to plan*	*N/A*	*Stocked according to plan*	*N/A*	N/A
					92% (12/13)	50% (3/6)		*Overstocked*		*Overstocked*		

					14% (1/7)	0		*Understocked*		*Understocked*		
					0% (0/7)	0		*Stocked out*		*Stocked out*		
	DRC MNCH		0%	N/A	37% (14/38)	56% (11/19)	46% (27/59)	*Stocked according to plan*	0% (0/31)	*Stocked according to plan*	16% (5/31)	8% (5/62)
					42% (16/38)	26% (5/19)		*Overstocked*	48% (15/31)	*Overstocked*	42% (13/31)	45% (28/62)
					18% (7/38)	16% (3/19)		*Understocked*	29% (9/31)	*Understocked*	19% (6/31)	24% (15/62)
					53% (2/38)	0% (0/19)		*Stocked out*	22% (7/31)	*Stocked out*	22% (7/31)	22% (14/62)
MT 5.1.2 (FP)	% of tracer products stocked according to plan (FP)	Semiannually	77% (51/64)	N/A	100% (6/6)	50% (6/12)	25% (6/24)	N/A		N/A		N/A
	Bangladesh		77% (51/64)	N/A	100% (6/6)	50% (6/12)	25% (6/24)	N/A		N/A		N/A
MT 5.1.2 (TB)	% of tracer products stocked according to plan (TB)	Semiannually	60%	N/A	N/A	N/A	N/A	N/A		N/A		N/A
	Bangladesh		60%	N/A	N/A	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		N/A		N/A
	Bangladesh		0%	Data not reported	100% (3/3)	100% (3/3)	100% (3/3)	N/A		N/A		N/A
MT 5.1.4	% of initially MTaPS-supported supply chain functions carried out by national entities that are done without external TA	Annually	0%	N/A	N/A	100.67	109.00	64.67				64.67
	Bangladesh		0%	N/A	N/A	100.67	109.00	64.67				64.67
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		N/A		N/A
	Rwanda		0%	0%	0% (0/100)	0%	N/A	N/A		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		N/A		N/A
	Rwanda		0%	N/A	N/A	100% (20/20)	N/A	N/A		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		N/A		N/A
	Rwanda		0%	N/A	N/A	100% (20/20)	100% (02/20)	*Hospitals* *Health centers* *Pharmacies*	N/A	*Hospitals* *Health centers* *Pharmacies*	N/A	N/A

								Other				*Other*					
								Total				*Total*					
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)		68% (44/65)		64% (44/69)		79% (70/89)	
	Bangladesh		31% (31/100)	3% (3/100)	56% (28/50)	58% (38/65)	77% (50/65)	*Hospitals*	75% (49/ 65)	*Hospitals*	77% (50/ 65)	*Hospitals*	68% (44/ 65)	*Hospitals*	68% (44/ 65)	77% (50/65)	
								Total	75% (49/ 65)	***Total***	77% (50/ 65)	***Total***	68% (44/ 65)	***Total***	68% (44/ 65)	77% (50/65)	
	Burkina Faso PV		0%	N/A	N/A	N/A	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	0% (0/4)	0% (0/4)	
	IGAD		0%	Data not reported	24% (10/41)	6.5% (8/123)	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	N/A	
								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*	N/A	*Hospitals*	N/A	N/A	
								Health centers		*Health centers*		*Health centers*		*Health centers*			
								Total		***Total***		***Total***		***Total***			
	Rwanda		0% (0/10)	0% (0/10)	50% (5/10)	N/A	100% (20/20)	*Hospitals*	100% (10/ 10)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	100% (10/10)	
								Health centers	100% (10/ 10)	*Health centers*		*Health centers*		*Health centers*		100% (10/10)	
								Pharmacies	0% (0/0)	*Pharmacies*		*Pharmacies*		*Pharmacies*		0% (0/0)	
								Other	N/A	*Other*		*Other*		*Other*		N/A	
								Total	100% (20/ 20)	***Total***		***Total***		***Total***		100% (20/20)[11]	
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	N/A	
								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)	N/A				99% (480/487)				99% (480/487)	
	Bangladesh		68% (68/100)	22%	77% (449/586)	90% (852/945)	80% (617/774)	N/A				N/A				N/A	
	IGAD		0% (0/0)	N/A	100% (1,104/1,104)	N/A	N/A	N/A				N/A				N/A	

[11] Rwanda PY6 field support activities are a continuation of the PY5 work plan.

	Mozambique		60%	N/A	56% (1,237/2,213)	12.19% (1,223/ 10,035)	N/A	N/A		N/A		N/A
	Mozambique PEPFAR		0	0	23% (1,563/6,635)	12.19% (1,223/ 10,035)	N/A	N/A		N/A		N/A
	Rwanda		0	73% (274/374)	55% (102/186)	29% (503/1,746)	31% (694/2,226)	N/A		99% (480/487)		99% (480/487)
	Tanzania PEPFAR		0	N/A	2,641/	N/A	N/A	N/A		N/A		N/A
NP-MT 5.3.2	# of ADEs reported in Nepal	Annually	194	29	43	6	27	N/A				N/A
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	1	15	25	N/A				N/A
	IGAD		0	N/A	1	N/A	N/A	N/A				N/A
	Nepal		0	N/A	N/A	15	25	N/A				N/A
	Tanzania PEPFAR		0	N/A	0	0	N/A	N/A				N/A
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	100% (3/3)				100% (3/3)
	Jordan		0	N/A	N/A	0% (0/3)	N/A	100% (3/3)				100% (3/3)
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)		N/A		100% (81/81)
	Jordan		0%	N/A	N/A	N/A	N/A	100% (81/81)		N/A		100% (81/81)
	Mozambique		0%	100%	100% (7/7)	100% (7/7)	N/A	N/A		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	N/A	N/A	N/A
	Jordan		0	N/A	N/A	4	N/A	N/A	N/A	N/A	N/A	N/A
	Nepal		0	N/A	N/A	N/A	9	N/A	N/A	N/A	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	N/A	N/A	N/A
	Mali MNCH		0	0	0	1	N/A	N/A	N/A	N/A	N/A	N/A
ML 2	# of quarterly meetings to orient key stakeholders on using	Quarterly	0	0	0	1	N/A	N/A	N/A	N/A	N/A	N/A

	directory of registered medical products												
	Mali MNCH		0	0	0	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EVD 1	# of policies, legislation, regulations, operational documents, or guidelines for EVD management developed or updated with TA from MTaPS	Quarterly	0	0	0	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	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	N/A	N/A	N/A	N/A
	Côte d'Ivoire		0	0	0	N/A	N/A	*Ebola treatment unit (ETU)* *Non-ETU* *Point of entry (POE)* ***Total***	N/A	*ETU* *Non-ETU* *POE* ***Total***	N/A	*ETU* *Non-ETU* *POE* *Total*	N/A	*ETU* *Non-ETU* *POE* *Total*	N/A	N/A
	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	N/A	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***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A

	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		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***	N/A	*ETU* *Non-ETU* *POE* ***Total***	N/A			N/A
	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		N/A		N/A				N/A
	Philippines		0	0	20%	70% (564/801)	100% (197/197)	N/A		N/A		N/A		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	N/A										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	N/A	N/A										N/A
	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	N/A	N/A	N/A
	Jordan						1	N/A	N/A	N/A	N/A	N/A
JO 2	# of HFs implementing AMR guidelines/protocols developed by MTaPS	Annually	0	N/A	N/A	N/A	3	3				3
	Jordan		0	N/A	N/A	N/A	3	3				3
JO 3	# of active hospital-level AMS teams	Annually	0	N/A	N/A	3	3	3				3
	Jordan		0	N/A	N/A	3	3	3				3
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	98	200	298
	Jordan		0	N/A	N/A	4	30	N/A	N/A	98	200	298
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	5,034	N/A	5,034
	Jordan		0	N/A	N/A	0		*Female* / *Male* / *Unknown* / ***Total*** N/A	*Female* / *Male* / *Unknown* / ***Total*** N/A	*Female* 4,288 / *Male* 746 / *Unknown* 0 / ***Total*** 5,034	*Female* / *Male* / *Unknown* / ***Total*** N/A	
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	N/A	N/A	N/A
	Jordan		0	N/A	N/A	0	N/A	N/A	N/A	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	N/A	N/A	N/A
	Jordan		0	N/A	N/A	3	N/A	N/A	N/A	N/A	N/A	N/A
JO 8	# of IPC assessments conducted at HFs	Annually	0	N/A	N/A	N/A	N/A	600				600
	Jordan		0	N/A	N/A	N/A	N/A	600				600
MSC 1	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	0	122	170	188	144	45	21	22	16	104

	Bangladesh		0	3	2	9	9	2	N/A	N/A	N/A	2
	Burkina Faso		0	2	2	4	11	1	3	N/A	N/A	4
	Cameroon		0	5	7	4	3	1	1	1	1	4
	Côte d'Ivoire		0	35	67	76	29	11	7	11	4	33
	DRC		0	6	20	8	8	3	0	1	1	5
	Ethiopia		0	1	N/A	5	9	N/A	N/A	N/A	N/A	N/A
	Jordan		0	0	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Kenya		0	38	26	24	18	18	5	4	5	32
	Mali		0	16	6	13	8	4	1	2	3	10
	Mozambique		0	0	13	12	9	N/A	N/A	N/A	N/A	N/A
	Nigeria		0	N/A	6	10	12	1	1	N/A	2	4
	Senegal		0	2	5	8	14	1	1	1	N/A	3
	Tanzania		0	4	2	8	6	3	2	2	N/A	7
	Uganda		0	9	7	7	8	N/A	N/A	N/A	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)		35% (341/975)		38% (1,072/2,848)
	Bangladesh		29% (24/84)	29% (24/84)	29% (12/41)	20% (60/300)	24% (41/171)	N/A		N/A		N/A
	Burkina Faso		18% (3/17)	22% (6/27)	33% (10/10)	29% (5/17)	33% (56/171)	37% (176/480)		N/A		37% (176/480)
	Cameroon		50% (2/4)	39% (39/101)	52% (32/62)	27% (38/138)	49% (40/81)	30% (5/17)		50% (61/121)		48% (66/138)
	Côte d'Ivoire		38% (21/55)	38% (42/110)	43% (70/163)	39% (151/382)	37% (145/392)	30% (79/260)		33% (156/467)		32% (235/727)
	DRC		34%	36% (76/212)	32% (30/93)	35% (54/154)	39% (41/105)	36% (21/59)		26% (11/43)		31% (32/102)
	Ethiopia		22%	17% (16/93)	N/A	22% (71/321)	14% (70/490)	N/A		N/A		N/A
	Jordan		45% (5/11)	Data not reported	45% (5/11)	N/A	N/A	N/A		N/A		N/A
	Kenya		66%	44% (562/1270)	51% (105/207)	45% (101/226)	45% (205/453)	49% (375/771)		53% (8/15)		48% (383/786)
	Mali		15%	16% (20/124)	20% (22/109)	21% (82/394)	26% (103/392)	25% (62/247)		34% (96/280)		30% (158/527)
	Mozambique		48% (11/23)	N/A	40% (4/10)	40% (36/92)	48% (93/195)	N/A		N/A		N/A
	Nigeria		Data not reported	N/A	41% (17/41)	46% (44/95)	45% (25/56)	N/A		18% (9/49)		18% (9/49)
	Senegal		58% (54/93)	58% (54/93)	34% (11/32)	39% (70/181)	38% (127/332)	44% (11/25)		N/A		44% (11/25)
	Tanzania		14% (3/21)	14% (3/21)	0% (0/0)	22% (14/63)	28% (12/42)	33% (13/39)		N/A		33% (13/39)
	Uganda		Data not reported	N/A	61% (28/46)	43% (44/102)	35% (32/92)	N/A		N/A		N/A
MSC 3	# of policies, legislation, regulations, and operational documents related to NAP-AMR implementation	Annually	0	22	13	12	19	13				13

	developed or updated with MTaPS support															
	Bangladesh		0	0	2	1	N/A	N/A								N/A
	Burkina Faso		0	0	1	1	0	0								0
	Cameroon		0	1	1	0	1	N/A								N/A
	Côte d'Ivoire		0	0	0	1	N/A	1								1
	DRC		0	3	0	0	N/A	N/A								N/A
	Ethiopia		0	4	N/A	N/A	2	N/A								N/A
	Kenya		0	3	3	1	3	2								2
	Mali		0	9	N/A	1	1	3								3
	Mozambique		0	N/A	2	N/A	3	N/A								N/A
	Nigeria		0	N/A	0	1	1	5								5
	Senegal		0	1	2	3	4	2								2
	Tanzania		0	1	2	1	3	N/A								N/A
	Uganda		0	0	0	2	1	N/A								N/A
MSC 4	# of multisectoral bodies that have developed a national monitoring framework with MTaPS support	Annually	0	2	2	9	3	13								13
	Bangladesh		0	1	0	N/A	N/A	N/A								N/A
	Burkina Faso		0	0	0	0	N/A	N/A								N/A
	Cameroon		0	0	0	1	1	N/A								N/A
	Côte d'Ivoire		0	0	0	1	N/A	N/A								N/A
	DRC		0	0	0	1	N/A	3								3
	Ethiopia		0	N/A	N/A	N/A	N/A	N/A								N/A
	Kenya		0	1	1	1	1	2								2
	Mali		0	0	N/A	1	N/A	N/A								N/A
	Mozambique		0	0	0	0	N/A	N/A								N/A
	Nigeria		0	N/A	0	1	0	8								8
	Senegal		0	0	1	2	1	N/A								N/A
	Tanzania		0	0	0	1	N/A	N/A								N/A
	Uganda		0	0	0	0	N/A	N/A								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		0		19		41
	Bangladesh		0	0	0	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Burkina Faso		0	0	80	0	0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Cameroon		0	0	20	N/A	N/A	*Female* *Male*	N/A	*Female* *Male*	N/A	*Female* *Male*	N/A	*Female* *Male*	N/A	N/A

								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Côte d'Ivoire		0	134	0	N/A	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	DRC		0	0	463	0	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Ethiopia		0	150	N/A	22	144	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	3	11
								Male		*Male*	14	*Male*		*Male*	16	30
								Unknown		*Unknown*	0	*Unknown*		*Unknown*	0	0
								Total		***Total***	22	***Total***		***Total***	19	41
	Senegal		0	0	0	0	N/A	*Female*	0	*Female*	0	*Female*	0	*Female*	N/A	0
								Male	0	*Male*	0	*Male*	0	*Male*		0
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		0
								Total	**0**	***Total***	**0**	***Total***	**0**	***Total***		**0**
	Tanzania		0	0	0	N/A	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	N/A	N/A
								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	N/A								N/A
	Bangladesh		0	0	0	0	1	N/A								N/A

	Burkina Faso		0	0	1	0	N/A	N/A				N/A
	Cameroon		0	0	20	20	46	N/A				N/A
	Côte d'Ivoire		0	1	2	6	1	N/A				N/A
	DRC		0	0	0	N/A	N/A	N/A				N/A
	Ethiopia		0	N/A	N/A	N/A	2	N/A				N/A
	Kenya		0	0	0	0	N/A	N/A				N/A
	Mali		0	1	2	N/A	N/A	N/A				N/A
	Mozambique		0	N/A	0	N/A	N/A	N/A				N/A
	Nigeria		0	N/A	0	N/A	N/A	N/A				N/A
	Senegal		0	0	0	0	N/A	N/A				N/A
	Tanzania		0	0	0	N/A	N/A	N/A				N/A
	Uganda		0	0	0	0	N/A	N/A				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	N/A				N/A
	Bangladesh		0	0	0	N/A	N/A	N/A				N/A
	Burkina Faso		0	0	0	0	N/A	N/A				N/A
	Cameroon		0	0	0	1	1	N/A				N/A
	Côte d'Ivoire		0	0	0	0	N/A	N/A				N/A
	DRC		0	0	1	0	N/A	N/A				N/A
	Kenya		0	0	0	1	1	N/A				N/A
	Mozambique		0	N/A	1	2	1	N/A				N/A
	Nigeria		0	N/A	0	0	N/A	N/A				N/A
	Senegal		0	0	0	0	2	N/A				N/A
	Tanzania		0	0	0	1	N/A	N/A				N/A
	Uganda		0	0	0	0	N/A	N/A				N/A
IP 1	# of updated policies, pieces of legislation, regulations, or operational documents for improving IPC	Annually	0	9	3	7	13	7				7
	Bangladesh		0	0	0	N/A	5	N/A				N/A
	Burkina Faso		0	0	0	N/A	N/A	N/A				N/A
	Cameroon		0	0	1	1	N/A	N/A				N/A
	Côte d'Ivoire		0	7	0	0	N/A	N/A				N/A
	DRC		0	0	0	N/A	N/A	N/A				N/A
	Kenya		0	0	3	2	3	5				5
	Mali		0	1	N/A	1	N/A	2				2
	Mozambique		0	N/A	1	N/A	N/A	N/A				N/A
	Nigeria		0	N/A	1	1	2	N/A				N/A
	Senegal		0	0	0	1	3	N/A				N/A
	Tanzania		0	1	0	1	N/A	N/A				N/A
	Uganda		0	0	0	1	N/A	N/A				N/A
IP 2	# of persons trained in IPC with MTaPS support	Quarterly	0	1,199	7,477	3,886	3,717	227	581	563	308	1,704

	Bangladesh		0	0	95	264	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Cameroon		0	86	88	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Côte d'Ivoire		0	0	131	158	N/A	*Female* *Male* *Unknown* ***Total***	18 88 0 106	*Female* *Male* *Unknown* ***Total***	5 10 0 15	*Female* *Male* *Unknown* ***Total***	42 70 0 112	*Female* *Male* *Unknown* ***Total***	26 26 0 52	285
	DRC		0	0	94	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Ethiopia		0	0	N/A	28	394	*Female* *Male* *Unknown* ***Total***	13 12 0 25[12]	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	25
	Kenya		0	642	5,230	742	926	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	198 97 0 295	*Female* *Male* *Unknown* ***Total***	35 12 0 47	*Female* *Male* *Unknown* ***Total***	18 6 0 24	366
	Mali		0	N/A	21	29	39	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Mozambique		0	0	0	57	73	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Nigeria		0	N/A	15	51	1,478	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	293 86 0 379	*Female* *Male* *Unknown* ***Total***	213 19 0 232	611
	Senegal		0	0	22	717	397	*Female* *Male* *Unknown* ***Total***	11 10 0 21	*Female* *Male* *Unknown* ***Total***	150 121 0 271	*Female* *Male* *Unknown* ***Total***	19 6 0 25	*Female* *Male* *Unknown* ***Total***	N/A	317
	Tanzania		0	471	17	117	108	*Female* *Male* *Unknown* ***Total***	46 54 0 100	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	100
	Uganda		0	0	1,247	1,770	302	*Female* *Male* *Unknown*	N/A	*Female* *Male* *Unknown*	N/A	*Female* *Male* *Unknown*	N/A	*Female* *Male* *Unknown*	N/A	N/A

[12] Ethiopia PY6Q1 trainings are continued activities from the PY5 work plan. Ethiopia implementation concluded in November 2023.

									Total		***Total***		***Total***		***Total***				
IP 3	# and % of MTaPS-supported facilities that are using a standardized tool(s) for monitoring IPC and informing programmatic improvement	Quarterly	50% (8/16)	100% (9/9)	94% (107/114)	100% (141/141)	98% (137/140)	100% (87/87)		92% (83/90)		94% (85/90)		93% (69/74)		100% (90/90)			
	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***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	N/A			
	Cameroon		0% (0/0)	0% (0/0)	100% (12/12)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (13/13)	*Hospitals*	100% (13/13)	*Hospitals*	100% (13/13)	100% (13/13)			
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)			
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)			
								Total	100% (12/12)	***Total***	100% (13/13)	***Total***	100% (13/13)	***Total***	100% (13/13)	100% (13/13)			
	Côte d'Ivoire		0% (0/0)	0% (0/0)	100% (12/12)	100% (22/22)	100% (20/20)	*Hospital*	100% (12/12)	*Hospital*	100% (12/12)	*Hospital*	100% (12/12)	*Hospital*	100% (12/12)	100% (12/12)			
								Animal health centers	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	0% (0/0)			
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	100% (8/8)			
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/ 20)	100% (20/20)			
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	58% (7/12)	*Hospitals*	58% (7/12)	*Hospitals*	58% (7/12)	100% (12/12)			
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)			
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)			
								Total	100% (12/12)	***Total***	58% (7/12)	***Total***	58% (7/12)	***Total***	58% (7/12)	100% (12/12)			
	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***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	N/A			
	Kenya		0% (0/0)	0% (0/0)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*	100% (4/4)	*Hospitals*	67% (4/6)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	100% (6/6)			
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)			
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)			

								Total	100% (4/4)	***Total***	67% (4/6)	***Total***	100% (6/6)	***Total***	100% (6/6)	100% (6/6)
	Mali		0% (0/0)	0% (0/0)	100% (16/16)	100% (16/16)	100% (16/16)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	100% (9/9)
								Health centers	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	100% (7/7)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	100% (16/16)
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (7/7)	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	N/A	N/A
								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*	100% (7/7)	*Hospitals*	100% (7/7)	100% (7/7)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	100% (7/7)
	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*	100% (6/6)	*Hospitals*	N/A	100% (6/6)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		0% (0/0)
								Total	100% (6/6)	***Total***	100% (6/6)	***Total***	100% (6/6)	***Total***		100% (6/6)
	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*	100% (10/10)	*Hospitals*	N/A	100% (10/10)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		0% (0/0)
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		100% (10/10)
	Uganda		0% (0/0)	0% (0/0)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	N/A
								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%	100%								100%

			(0/12)	(4/10)	(8/11)	(10/12)	(11/11)	(3/3)												(3/3)
	Bangladesh		No	No	No	No	Yes	N/A												N/A
	Cameroon		No	No	Yes	Yes	Yes	N/A												N/A
	Côte d'Ivoire		No	Yes	Yes	Yes	N/A	N/A												N/A
	DRC		No	No	No	Yes	Yes	Yes												Yes
	Ethiopia		No	Yes	N/A	Yes	Yes	N/A												N/A
	Kenya		No	Yes	Yes	Yes	Yes	N/A												N/A
	Mali		No	No	Yes	Yes	Yes	Yes												Yes
	Mozambique		No	N/A	Yes	Yes	Yes	N/A												N/A
	Nigeria		No	N/A	Yes	No	Yes	Yes												Yes
	Senegal		No	Yes	Yes	Yes	Yes	N/A												N/A
	Tanzania		No	No	Yes	Yes	Yes	N/A												N/A
	Uganda		No	No	No	Yes	Yes	N/A												N/A
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)		100% (78/78)		100% (62/62)		100% (72/72)				
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	50% (2/4)	100% (9/9)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		N/A				
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A					
								Others		*Others*		*Others*		*Others*						
								Total		***Total***		***Total***		***Total***						
	Cameroon		0% (0/6)	100% (6/6)	100% (12/12)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (13/13)	*Hospitals*	100% (13/13)	*Hospitals*	100% (13/13)	100% (13/13)				
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)				
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)				
								Total	100% (12/12)	***Total***	100% (13/13)	***Total***	100% (13/13)	***Total***	100% (13/13)	100% (13/13)				
	Côte d'Ivoire		50% (2/4)	100% (4/4)	100% (12/12)	92% (20/22)	100% (20/20)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)				
								Animal health centers	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	0% (0/0)				
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	100% (8/8)				
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	100% (20/20)				
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		N/A				
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A					
								Others		*Others*		*Others*		*Others*						
								Total		***Total***		***Total***		***Total***						
	Ethiopia		0% (0/0)	70%	N/A	0% (0/5)	100% (8/8)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		N/A				
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A					
								Others		*Others*		*Others*		*Others*						
								Total		***Total***		***Total***		***Total***						

	Kenya		100% (16/16)	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*	100% (4/4)	*Hospitals*	67% (4/6)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	100% (6/6)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (4/4)	***Total***	67% (4/6)	***Total***	100% (6/6)	***Total***	100% (6/6)	100% (6/6)
	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*	100% (9/9)	*Hospital*	100% (9/9)	100% (9/9)
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	100% (7/7)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	94% (15/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	100% (16/16)
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (6/6)	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	N/A	N/A
								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*	100% (7/7)	*Hospitals*	100% (7/7)	100% (7/7)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	100% (7/7)
	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*	100% (6/6)	*Hospitals*	N/A	100% (6/6)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		
								Total	100% (6/6)	***Total***	100% (6/6)	***Total***	100% (6/6)	***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*	100% (10/10)	*Hospitals*	N/A	100% (10/10)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		0% (0/0)
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		100% (10/10)
	Uganda		0% (0/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	N/A
								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)		100% (90/90)		100%(74/74)		100%(90/90)
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	100% (6/6)	100% (9/9)	*Hospitals* / *Health centers* / *Others* / ***Total***	N/A	*Hospitals* / *Health centers* / *Others* / ***Total***	N/A	*Hospitals* / *Health centers* / *Others* / ***Total***	N/A	*Hospitals* / *Health centers* / *Others* / ***Total***	N/A	N/A
	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*	100% (13/ 3)	*Hospitals*	100% (13/13)	100% (13/13)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (12/12)	***Total***	100% (13/13)	***Total***	100% (13/13)	***Total***	100% (13/13)	100% (13/13)
	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*	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Animal health centers	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	0% (0/0)
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	100% (8/8)
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	100% (20/20)
	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*	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (12/12)	***Total***	100% (12/12)	***Total***	100% (12/12)	***Total***	100% (12/12)	100% (12/12)
	Ethiopia		0% (0/0)	100%	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***	N/A	*Hospitals* / *Health centers* / *Others* / ***Total***	N/A	N/A
	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*	100% (6/6)	*Hospitals*	100% (6/6)	100% (6/6)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (4/4)	***Total***	67% (4/6)	***Total***	100% (6/6)	***Total***	100% (6/6)	100% (6/6)
	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*	100% (9/9)	*Hospital*	100% (9/9)	100% (9/9)

								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	100% (7/7)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	94% (15/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	100% (16/16)
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (6/6)	*Hospitals*		*Hospital*		*Hospital*		*Hospital*		
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A	N/A
								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*	100% (7/7)	*Hospitals*	100% (7/7)	100% (7/7)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	100% (7/7)
	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*	100% (6/6)	*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	N/A	100% (6/6)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		
								Total	100% (6/6)	***Total***	100% (6/6)	***Total***	100% (6/6)	***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*	100% (10/10)	*Hospitals*		100% (10/10)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	N/A	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		0% (0/0)
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		100% (10/10)
	Uganda		100% (7/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A	N/A
								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)	94% (82/87)								94% (82/87)
	Bangladesh		0	N/A	100% (2/2)	100% (4/4)	22% (2/9)	*Hospitals*	N/A							N/A
								Total								
	Cameroon		0	N/A	100% (12/12)	92% (11/12)	42% (5/12)	*Hospitals*	69% (9/13)							69% (9/13)
								Total	69% (9/13)							
	Côte d'Ivoire		0	100% (4/4)	90% (9/12)	45% (10/22)	90% (18/20)	*Hospitals*	100% (12/12)							100% (20/20)
								Others	100% (8/8)							

								Total	100% (20/20)	
	DRC		0	N/A	57% (4/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Total	100% (12/12)	
	Ethiopia		0	N/A	N/A	0% (0/5)	62% (5/8)	*Hospitals*	N/A	N/A
								Total		
	Kenya		0	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*	100% (6/6)	100% (6/6)
								Health centers	0% (0/0)	
								Total	100% (6/6)	
	Mali		0	N/A	94% (15/16)	75% (12/16)	86% (14/16)	*Hospital*	100% (9/9)	94% (15/16)
								Health centers	86% (6/7)	
								Total	94% (15/16)	
	Mozambique		0	N/A	0% (0/7)	43% (3/7)	100% (3/3)	*Hospitals*	N/A	N/A
								Total		
	Nigeria		0	N/A	0% (1/3)	14% (1/7)	100% (7/7)	*Hospitals*	100% (7/7)	100% (7/7)
								Total	100% (7/7)	
	Senegal		0	100% (3/3)	100% (8/8)	54% (7/13)	83% (10/13)	*Hospitals*	100% (3/3)	100% (3/3)
								Health Centers	0% (0/0)	
								Total	100% (3/3)	
	Tanzania		0	100% (6/6)	100% (10/10)	100% (10/10)	100% (10/10)	*Hospitals*	100% (10/10)	100% (10/10)
								Total		
	Uganda		0	100% (7/7)	100% (7/7)	100% (13/13)	86% (6/7)	*Hospitals*	N/A	N/A
								Total		
IP 8	# and % of MTaPS-supported facilities with improved performance in core IPC components	Annually	0	35% (26/73)	75% (78/104)	77% (113/146)	88% (127/145)		95% (83/87)	95% (83/87)
	Bangladesh		0	50% (1/2)	100% (2/2)	100% (4/4)	100% (9/9)	*Hospitals*	N/A	N/A
								Total		
	Cameroon		0	N/A	100% (12/12)	92% (11/12)	92% (11/12)	*Hospitals*	69% (9/13)	69% (9/13)
								Total	69% (9/13)	
	Côte d'Ivoire		0	N/A	80% (8/12)	41% (9/22)	90% (18/20)	*Hospitals*	100% (12/12)	100% (20/20)
								Others	100% (8/8)	
								Total	100% (20/20)	
	DRC		0	N/A	0% (0/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Total	100% (12/12)	
	Ethiopia		0	N/A	N/A	0% (0/5)	63% (5/8)	*Hospitals*	N/A	N/A
								Others		
								Total		
	Kenya		0	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*	100% (6/6)	100% (6/6)
								Health centers	0% (0/0)	
								Total	100% (6/6)	
	Mali		0	N/A	94% (15/16)	81% (13/16)	87% (14/16)	*Hospital*	100% (9/9)	100% (16/16)
								Health centers	100% (7/7)	
								Total	100% (16/16)	

	Mozambique		0	N/A	100% (7/7)	100% (7/7)	100% (3/3)	*Hospitals*	N/A	N/A
								Total		
	Nigeria		0	N/A	0% (0/3)	14% (1/7)	100% (7/7)	*Hospitals*	100% (7/7)	100% (7/7)
								Total	100% (7/7)	
	Senegal		0	100% (3/3)	100% (8/8)	100% (13/13)	54% (7/13)	*Hospitals*	100% (3/3)	100% (3/3)
								Health centers	0% (0/0)	
								Total	100% (3/3)	
	Tanzania		0	100% (6/6)	60% (6/10)	100% (10/10)	100% (10/10)	*Hospitals*	100% (10/10)	100% (10/10)
								Total	100% (10/10)	
	Uganda		0	N/A	0% (0/7)	100% (13/13)	86% (6/7)	*Hospitals*	N/A	N/A
								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	18		18
	Bangladesh		0	0	0	1	N/A	N/A		N/A
	Burkina Faso		0	0	2	2	N/A	N/A		N/A
	Cameroon		0	0	0	0	1	N/A		N/A
	Côte d'Ivoire		0	1	0	0	N/A	N/A		N/A
	DRC		0	1	3	1	N/A	N/A		N/A
	Ethiopia		0	N/A	N/A	2	2	N/A		N/A
	Kenya		0	1	3	3	5	1		1
	Mali		0	1	N/A	1	N/A	N/A		N/A
	Mozambique		0	N/A	1	3	6	N/A		N/A
	Nigeria		0	N/A	0	1	1	5		5
	Senegal		0	0	1	1	1	12		12
	Tanzania		0	1	2	1	3	N/A		N/A
	Uganda		0	0	0	2	1	N/A		N/A
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)	99% (76/77)	100% (63/63)	99% (86/87)
	Bangladesh		0% (0/0)	0% (0/0)	0% (0/2)	50% (2/4)	100% (9/9)	*Hospitals* / *Health centers* / *Others* / ***Total***	*Hospitals* / *Health centers* / *Others* / ***Total***	*Hospitals* / *Health centers* / *Others* / ***Total***	*Hospitals* / *Health centers* / *Others* / ***Total***	N/A
	Burkina Faso		0% (0/0)	0% (0/0)	25% (3/12)	0% (0/10)	60% (6/10)	*Hospitals*: 30% (3/10); *Health centers*: 0% (0/0)	*Hospitals*: 100% (10/10); *Health centers*: 0% (0/0)	*Hospitals* / *Health centers*	*Hospitals* / *Health centers*	100% (10/10); 0% (0/0)

								Others	0% (0/0)	*Others*	0% (0/0)	*Others*		*Others*		0% (0/0)
								Total	30% (3/10)	***Total***	100% (10/10)	***Total***		***Total***		100% (10/10)
	Cameroon		0% (0/0)	0% (0/0)	92% (11/12)	100% (12/12)	100% (11/11)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A	N/A
								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*	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	100% (8/8)
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	100% (20/20)
	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*	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (12/12)	***Total***	100% (12/12)	***Total***	100% (12/12)	***Total***	100% (12/12)	100% (12/12)
	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*	N/A	*Health centers*	N/A	N/A
								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*	100% (8/8)	*Hospitals*	100% (8/8)	100% (8/8)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Pharmacy	0% (0/0)	*Others*	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*	0% (0/0)	0% (0/0)
								Total	100% (6/6)	***Total***	75% (6/8)	***Total***	100% (8/8)	***Total***	100% (8/8)	100% (8/8)
	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*	100% (9/9)	*Hospital*	100% (9/9)	100% (9/9)
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	100% (7/7)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	87% (14/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	100% (16/16)
	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*	N/A	*Health centers*	N/A	N/A
								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*	100% (7/7)	*Hospitals*	100% (7/7)	100% (7/7)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	100% (7/7)
	Senegal		0% (0/0)	0% (0/0)	0% (0/8)	0% (0/14)	0% (0/13)	*Hospitals*	0% (0/4)	*Hospitals*	25% (1/4)	*Hospitals*	75% (3/4)	*Hospitals*	N/A	75% (3/4)[13]
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		
								Total	0% (0/4)	***Total***	25% (1/4)	***Total***	75% (3/4)	***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*	100% (10/10)	*Hospitals*	N/A	100% (10/10)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		0% (0/0)
								Total	100% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		100% (10/10)
	Uganda		43% (3/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	N/A
								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		165		333		1,524
	Bangladesh		0	0	0	420	260	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	N/A	N/A
								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*	N/A	*Female*	N/A	N/A
								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*	22	*Female*	44	288
								Male	55	*Male*	11	*Male*	52	*Male*	96	
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*	0	

[13] Senegal PY6 AMS activities are a continuation of the PY5 work plan.

								Total	62	***Total***	12	***Total***	74	***Total***	140	
	DRC		0	0	274	91	N/A	*Female* *Male* *Unknown* ***Total***	0	*Female* *Male* *Unknown* ***Total***	0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	18 48 0 66	66
	Ethiopia		0	0	N/A	180	490	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Kenya		0	165	1,333	869	895	*Female* *Male* *Unknown* ***Total***	325 436 0 761	*Female* *Male* *Unknown* ***Total***	15 11 0 26	*Female* *Male* *Unknown* ***Total***	54 37 0 91	*Female* *Male* *Unknown* ***Total***	10 5 0 15	893
	Mali		0	0	136	49	6	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Mozambique		0	0	0	34	72	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
	Nigeria		0	N/A	18	108	50	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	50 62 0 112	112
	Senegal		0	0	0	0	61	*Female* *Male* *Unknown* ***Total***	8 15 0 23	*Female* *Male* *Unknown* ***Total***	15 11 0 26	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	49[14]
	Tanzania		0	201	0	N/A	24	*Female* *Male* *Unknown* ***Total***	53 63 0 116	*Female* *Male* *Unknown* ***Total***	0 0 0 0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	116
	Uganda		0	70	2,513	1,776	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	N/A
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)		91% (70/77)		78% (49/63)		99% (86/87)
	Bangladesh		0% (0/0)	0% (0/0)	0% (0/2)	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***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	N/A

[14] Senegal PY6 AMS activities are a continuation of the PY5 work plan.

	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*	N/A	*Hospitals*	N/A	100% (10/10)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		*Health centers*		0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*		*Others*		0% (0/0)
								Total	30% (3/10)	***Total***	100% (10/10)	***Total***		***Total***		100% (10/10)
	Cameroon		0% (0/0)	0% (0/6)	92% (11/12)	100% (12/12)	100% (12/12)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		N/A
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A	
								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*	100% (12/12)	*Hospitals*	100% (12/12)	100% (12/12)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*	0% (0/8)	100% (8/8)
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***	60% (12/20)	100% (20/20)
	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*	50% (6/12)	*Hospitals*	50% (6/12)	100% (12/12)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	100% (12/12)	***Total***	50% (6/12)	***Total***	50% (6/12)	***Total***	50% (6/12)	100% (12/12)
	Ethiopia		3% (1/30)	13% (4/30)	N/A	0% (0/5)	100% (8/8)	*Hospitals*		*Hospitals*		*Hospitals*		*Hospitals*		N/A
								Health centers	N/A	*Health centers*	N/A	*Health centers*	N/A	*Health centers*	N/A	
								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*	100% (8/8)	*Hospitals*	100% (8/8)	100% (8/8)
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	0% (0/0)
								Pharmacy	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*	0% (0/0)	0% (0/0)
								Total	100% (6/6)	***Total***	75% (6/8)	***Total***	100% (8/8)	***Total***	100% (8/8)	100% (8/8)
	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*	100% (9/9)	*Hospital*	100% (9/9)	100% (9/9)
								Health centers	85% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	100% (7/7)
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	0% (0/0)
								Total	87% (14/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	100% (16/16)

	Mozambique		0% (0/7)	Data not reported	57% (4/7)	100% (7/7)	100% (6/6)	*Hospital* *Health centers* *Others* ***Total***	N/A	*Hospital* *Health centers* *Others* ***Total***	N/A	*Hospital* *Health centers* *Others* ***Total***	N/A	*Hospital* *Health centers* *Others* ***Total***	N/A	N/A
	Nigeria		0% (0/3)	N/A	0% (0/3)	14% (1/7)	100% (7/7)	*Hospitals* *Health centers* *Others* ***Total***	100% (7/7) 0% (0/0) 0% (0/0) 100% (7/7)	*Hospitals* *Health centers* *Others* ***Total***	100% (7/7) 0% (0/0) 0% (0/0) 100% (7/7)	*Hospitals* *Health centers* *Others* ***Total***	100% (7/7) 0% (0/0) 0% (0/0) 100% (7/7)	*Hospitals* *Health centers* *Others* ***Total***	100% (7/7) 0% (0/0) 0% (0/0) 100% (7/7)	100% (7/7) 0% (0/0) 0% (0/0) 100% (7/7)
	Senegal		0% (0/3)	0% (0/3)	0% (0/8)	0% (0/14)	8% (1/13)	*Hospitals* *Health centers* *Others* ***Total***	50% (2/4) 0% (0/0) 0% (0/0) 50% (2/4)	*Hospitals* *Health centers* *Others* ***Total***	75% (3/4) 0% (0/0) 0% (0/0) 75% (3/4)	*Hospitals* *Health centers* *Others* ***Total***	75% (3/4) 0% (0/0) 0% (0/0) 75% (3/4)	*Hospitals* *Health centers* *Others* ***Total***	N/A	75% (3/4)[15]
	Tanzania		0% (0/6)	100% (6/6)	20% (2/10)	60% (6/10)	100% (10/10)	*Hospitals* *Health centers* *Others* ***Total***	100% (10/10) 0% (0/0) 0% (0/0) 100% (10/10)	*Hospitals* *Health centers* *Others* ***Total***	100% (10/10) 0% (0/0) 0% (0/0) 100% (10/10)	*Hospitals* *Health centers* *Others* ***Total***	100% (10/10) 0% (0/0) 0% (0/0) 100% (10/10)	*Hospitals* *Health centers* *Others* ***Total***	N/A	100% (10/10) 0% (0/0) 0% (0/0) 100% (10/10)
	Uganda		86% (6/7)	100% (7/7)	100% (13/13)	100% (13/13)	100% (7/7)	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	*Hospitals* *Health centers* *Others* ***Total***	N/A	N/A
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)	82% (68/83)								82% (68/83)
	Bangladesh		0%	N/A	0% (0/2)	50% (2/4)	0% (0/9)	*Hospitals* ***Total***	N/A							N/A
	Burkina Faso		0%	0% (0/5)	0% (0/12)	0% (0/10)	0% (0/10)	*Hospitals* ***Total***	100% (10/10) 100% (10/10)							100% (10/10)
	Cameroon		0%	N/A	0% (0/12)	92% (11/12)	92% (11/12)	*Hospitals* ***Total***	N/A							N/A
	Côte d'Ivoire		0%	0% (0/2)	0% (0/12)	14% (3/22)	75% (15/20)	*Hospitals*	100% (12/12)							100% (20/20)

[15] Senegal PY6 AMS activities are a continuation of the PY5 work plan.

								Other	100% (8/8)		
								Total	100% (20/20)		
	DRC		0%	100% (3/3)	0% (0/7)	58% (7/12)	100% (12/12)	*Hospitals*	100% (12/12)		100% (12/12)
								Total	100% (12/12)		
	Kenya		0%	100% (18/18)	92% (22/24)	91% (21/23)	92% (22/24)	*Hospitals*	100% (8/8)		100% (8/8)
								Health centers	0% (0/0)		
								Pharmacies	0% (0/0)		
								Total	100% (8/8)		
	Mali		0%	N/A	13% (2/16)	0% (0/16)	N/A	*Hospital*	33% (3/9)		25% (4/16)
								Health centers	14% (1/7)		
								Total	25% (4/16)		
	Mozambique		0%	N/A	71% (5/7)	28% (2/7)	100% (3/3)	*Hospitals*	N/A		N/A
								Total			
	Nigeria		0%	N/A	0% (0/3)	0% (0/7)	57% (4/7)	*Hospitals*	57% (4/7)		57% (4/7)
								Total	57% (4/7)		
	Senegal		0%	N/A	0% (0/8)	0% (14/14)	0% (0/13)	*Hospitals*	N/A		N/A
								Total			
	Tanzania		0%	100% (6/6)	60% (6/10)	70% (7/10)	100% (10/10)	*Hospitals*	100% (10/10)		100% (10/10)
								Total	100% (10/10)		
	Uganda		0%	0% (0/7)	0% (0/7)	31% (4/13)	86% (6/7)	*Hospitals*	N/A		N/A
								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		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	N/A			N/A
DRC 3	# of HFs that are implementing the post-training action plan	Annually	0	0	0	50	22	64			64
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	N/A	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		4	8
DRC 8	# of HZs involved in provincial	Semiannually	0	0	19	10	N/A	N/A		N/A	N/A

	quantification exercises with MTaPS support										
DRC 9	# of MNCH treatment protocols or job aids disseminated to HFs with MTaPS support	Semiannually	0	0	0	0	N/A	N/A		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		N/A		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)		100% (151/151)		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		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	2				2
DRC 14	# of people starting e-Learning courses with MTaPS support	Quarterly	0	N/A	N/A	N/A	N/A	N/A	0	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		15		15
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	2	4	11
BG 1	% of procurement packages of DGFP and DGHS that are on schedule	Annually	0	0	82%	50%	50% (1/2)	75% (3/4)				75% (3/4)
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)	N/A				N/A
BG 8	# of laws, policies, regulations, action plans, or standards	Annually	0	N/A	N/A	N/A	4	1				1

	formally proposed, adopted, or implemented as supported by USG assistance											
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	N/A				N/A
BG 10	# and % of district hospitals using eAMS	Annually	0	N/A	N/A	N/A	75% (46/61)	82% (50/61)				82% (50/61)
BG 11	% of health facilities using USAID supported eLMIS (FP,TB, other health)	Annually	0	N/A	N/A	N/A	N/A	65% (4,621/7,028)				65% (4,621/7,028)
BG 12	# of health commodities tracked through USAID-supported eLMIS	Annually	0	N/A	N/A	N/A	N/A	3,025				3,025
BG 13	# of organizations whose members/staff were trained and/or mentored through USAID support	Semiannually	0	N/A	N/A	N/A	64	12		1		13
BG 14	# of TB patients registered in e-TB Manager	Quarterly	0	N/A	N/A	N/A	295,280	77,866	74,290	74,669	72,306	299,131
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	N/A				N/A
IN 4.3.1b	% of TB financing expected from domestic sources	Annually	0	N/A	N/A	N/A	22%	N/A				N/A
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	N/A				N/A
IP.MP.1	# of facilities receiving MTaPS support to strengthen IPC and/or WASH practices for mpox	Quarterly	0	N/A	N/A	N/A	177	N/A	N/A	N/A	N/A	N/A

	DRC		0	N/A	N/A	N/A	177[16]	N/A	N/A	N/A	N/A	N/A
IP.MP.2	# of people trained to prevent, detect, and/or respond to mpox outbreak with MTaPS support	Quarterly	0	N/A	N/A	N/A	319	N/A	N/A	N/A	N/A	N/A
	DRC		0	N/A	N/A	N/A	319[16]	N/A	N/A	N/A	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	N/A	N/A	N/A
	DRC		0	N/A	N/A	N/A	6[16]	N/A	N/A	N/A	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	N/A	N/A	N/A
	DRC		0	N/A	N/A	N/A	10[16]	N/A	N/A	N/A	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	N/A	N/A	N/A
	DRC		0	N/A	N/A	N/A	6[16]	N/A	N/A	N/A	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	N/A	N/A	N/A
	DRC		0	N/A	N/A	N/A	17[16]	N/A	N/A	N/A	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 mpox	Semiannually	0	N/A	N/A	N/A	47	N/A		N/A		N/A
	DRC		0	N/A	N/A	N/A	47[16]	N/A		N/A		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	2				2
	Asia Bureau		0	N/A	8	3	1	2				2
AB HL7	# of individuals receiving capacity development support to advance health development goals in Asia	Annually	0	N/A	401	173	134	68				68
	Asia Bureau		0	N/A	401	173	134	68				68

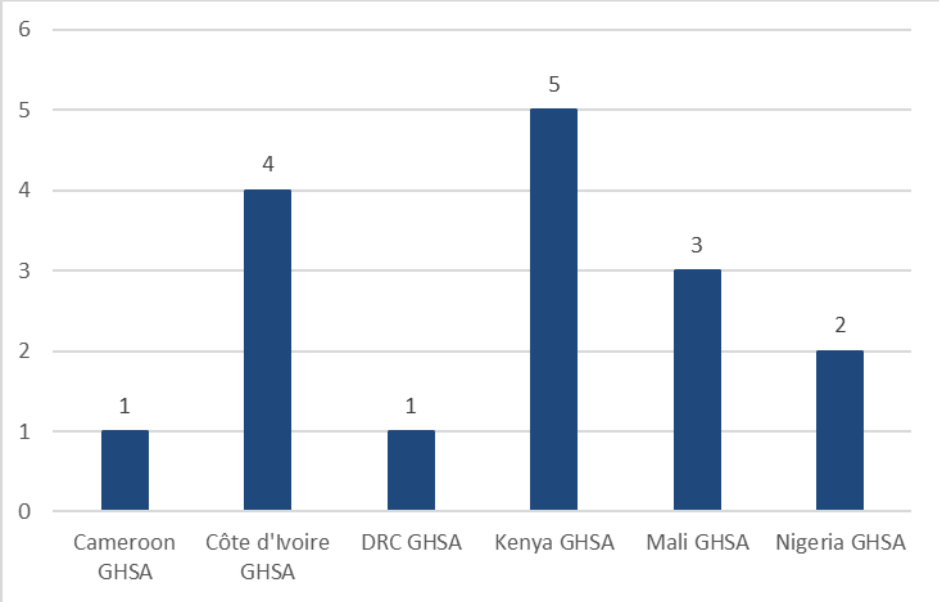
[16] DRC mpox activities concluded at the end of PY5.

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	25				25
	Asia Bureau		0	N/A	30	15	2	25				25
COV 24	Number of technical documents developed or updated with MTaPS support that contribute to the One Health Platform	Quarterly	0	N/A	N/A	N/A	N/A	0	0	3	0	3
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0	0	3	0	3
COV 25	Number of workshops that MTaPS participated in to conduct a risk analysis of the human-environment-animal interface using the SPAR-OMS tool.	Quarterly	0	N/A	N/A	N/A	N/A	0	0	1	0	1
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0	0	1	0	1
COV 26	Number of One Health–related meetings or workshops organized with MTaPS support	Quarterly	0	N/A	N/A	N/A	N/A	3	1	44	2	50
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	3	1	44	2	50

ANNEX 2. GLOBAL HEALTH SECURITY AGENDA—QUARTER PROGRESS FOR FY24Q4

SUMMARY OF ACTIVITIES FOR THIS QUARTER (FY24Q4)

SELECTED MTAPS GHSA INDICATOR PROGRESS



Annex figure 1. MSC1. Number of AMR-related in-country meetings or activities conducted with multisectoral participation in PY6Q4

Bangladesh, Ethiopia, Mozambique, Senegal, Tanzania, and Uganda concluded support for GHSA activities. Burkina Faso did not have planned activities toward MSC1 in Quarter 4.

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[9]	Uganda10
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
PY6Q3	N/A	100% (13/13)	100% (20/20)	58% (7/12)	N/A	100% (6/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q4	N/A	100% (13/13)	100% (20/20)	58% (7/12)	N/A	100% (6/6)	100% (16/16)	N/A	100% (7/7)	N/A	N/A	N/A

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon extended support to one additional 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. The facility IPC committee became functional in the next quarter.

[4] In PY6 Quarters 2, 3 and 4, with available budget MTaPS monitored seven facilities in the use of tools for monitoring IPC.
[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, 2 new facilities were added, and support began, improvement can be seen in Quarters 3 and 4.
[7] The Mozambique GHSA portfolio completed implementation in June 2023; thus, no data are reported for PY6.
[8] In PY5Q4, data could not be collected from five facilities. This data collection resumed in subsequent quarters. Senegal GHSA support for IPC activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[9] Tanzania GHSA support for IPC activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[10] 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[10]	Uganda[11]
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
PY6Q3	N/A	100% (13/13)	100% (20/20)	N/A	N/A	100% (6/6)	100% 16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q4	N/A	100% (13/13)	100% (20/20)	N/A	N/A	100% (6/6)	100% (16/16)	N/A	100% (7/7)	N/A	N/A	N/A

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon extended support for to one additional facility at the request of the facility director.
[3] In PY5Q4, CQI assessments and meetings were not conducted at any facilities; these resumed in subsequent quarters.
[4] No CQI activities were planned in PY6.
[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, 2 new facilities were added and support began; improvement can be seen in Quarters 3 and 4.
[7] In PY6Q1, Koutiala health center did not implement CQI activities, due to competing priorities. MTaPS continued to sensitize for CQI plan implementation; in PY6 Quarter 2, the health center resumed CQI activities.
[8] Mozambique GHSA support for IPC activities concluded in June 2023; therefore, PY5Q4 and subsequent data are not reported.
[9] In PY5Q4, data could not be collected from five facilities. Data collection and activities resumed in PY6, targeting six facilities. Senegal GHSA support for IPC activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[10] Tanzania GHSA support for IPC activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[11] 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	Ethiopia[4]	Kenya[5]	Mali[6]	Mozambique[7]	Nigeria	Senegal[8]	Tanzania[9]	Uganda[10]
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
PY6Q3	N/A	100% (13/13)	100% (20/20)	100% (12/12)	N/A	100% (6/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q4	N/A	100% (13/13)	100% (20/20)	100% (12/12)	N/A	100% (6/6)	100% (16/16)	N/A	100% (7/7)	N/A	N/A	N/A

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon extended support for to one additional 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] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[5] 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, 2 new facilities were added, and support began, improvement can be seen in Quarter 3 and 4.
[6] 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 Quarter 2.
[7] Mozambique GHSA support for IPC activities concluded in June 2023; therefore, Quarter 4 and subsequent data are not reported.
[8] In PY5Q4, data could not be collected from five facilities. Data collection and activities since resumed in PY6. Senegal GHSA support for IPC activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[9] Tanzania GHSA support for IPC activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[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[10]	Uganda[11]
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
PY6Q3	N/A	N/A	N/A	100% (20/20)	100% (12/12)	N/A	100% (8/8)	100% (16/16)	N/A	100% (7/7)	75% (3/4)	100% (10/10)	N/A
PY6Q4	N/A	N/A	N/A	100% (20/20)	100% (12/12)	N/A	100% (8/8)	100% (16/16)	N/A	100% (7/7)	N/A	N/A	N/A

[1] Bangladesh GHSA support for AMS activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY5Q4, MTaPS only had budget to implement CQI in four facilities. In PY6Q1, MTaPS provided supportive supervision to three facilities; in Quarter 2, all facilities received visits and implemented activities as planned. GHSA activities completed in March 2024 for PY6; thus, no Quarter 3 and 4 data are reported.

[3] In 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 PY5Q4, data reports were not obtained for three facilities. In PY6, activities and data collection resumed as planned.
[5] Ethiopia GHSA support for AMS activities concluded in September 2023; therefore, PY6 data are not reported.
[6] In PY5Q4, all facilities had active AMS committees; however, 2 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, 2 new facilities were added. Data collection began in PY6 Quarter 3 and continued in Quarter 4.
[7] In PY6Q1, Point G hospital and the Gavardo health center did not implement AMS activities due to competing priorities. MTaPS and the DPM encouraged CQI implementation to improve AMS, and in Quarter 2, activities resumed as planned.
[8] Mozambique GHSA support for AMS activities concluded in June 2023; therefore, Quarter 4 and subsequent data are not reported.
[9] In PY5Q4, AMS training was completed in one facility. PY6 activities are a continuation of the PY5 work plan, in PY6Q1, one additional facility completed AMS training; however, no improvement plans were created. In PY6Q2 and Q3, progress was made in three facilities. Senegal GHSA support for AMS activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[10] Tanzania GHSA support for AMS activities concluded in June 2024; therefore, PY6Q4 data are not reported.
[11] Uganda GHSA support for AMS 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]
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
PY6Q3	N/A	N/A	N/A	100% (20/20)	50% (6/12)	N/A	100% (8/8)	100% (16/16)	N/A	100% (7/7)	75% (3/4)	100% (10/10)	N/A
PY6Q4	N/A	N/A	N/A	60% (12/20)	50% (6/12)	N/A	100% (8/8)	100% (16/16)	N/A	100% (7/7)	N/A	N/A	N/A

[1] Bangladesh GHSA support for AMS 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 Quarter 2, all facilities received visits and implemented activities as planned. GHSA activities concluded in March 2024 for PY6; thus, there are no Quarter 3 and 4 data.
[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 PY5Q4, data reports were not obtained for three facilities. In PY6Q4, data reports were not obtained from eight facilities in time for MTaPS reporting.
[5] In PY6Q2, six facilities did not share the CQI report; thus, data were unable to be collected and verified. In PY6 Quarters 2 and 4, due to budget, only six facilities could be monitored.
[6] Ethiopia GHSA support for AMS activities concluded in September 2023; therefore, PY6 data are not reported.
[7] In PY5Q4, all facilities had active AMS committees; however, 2 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, 2 new facilities were added. Data collection began in PY6 Quarter 3 and continued in Quarter 4.
[8] 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 Quarter 2, activities resumed as planned.
[9] Mozambique GHSA support for IPC activities concluded in June 2023; therefore, PY5 Quarter 4 and subsequent data are not reported.
[10] 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 PY6 Quarters 2 and 3, progress was made in three facilities. PY6

activities are a continuation of the PY5 work plan. Senegal GHSA support for AMS activities concluded in June 2024; therefore, PY6Q4 data are not reported.

[11] Tanzania GHSA support for AMS activities concluded in June 2024; therefore, PY6Q4 data are not reported.

[12] Uganda GHSA support for AMS activities concluded in September 2023; therefore, PY6 data are not reported.

ANNEX 3. QUARTERLY COVID-19 INDICATORS, FY24Q4[17]

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	July-September 2024
	Rwanda	10
	Total	**10**
Sex	Male	4
	Female	6
	Unknown sex	0
Technical area*	Storage, handling, delivery, and waste management of COVID-19 vaccines	0
	Planning and organizing COVID-19 vaccination sessions	0
	AEFI monitoring for COVID-19 vaccination	0
	Recording and monitoring COVID-19 vaccination	0
	Communication with the community about COVID-19 vaccination	0
	Other	10

*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	July-September 2024
	Kenya	9
	Rwanda	4
	Total	**13**
Technical area	Risk communication and community engagement	1
	Surveillance, rapid response teams, case investigation	0
	Laboratory systems	0
	Case management	0
	IPC	0
	Coordination and operations	9
	Vaccines	3

[17] The following countries have approved COVID work plans and completed activities during PY6 Quarter 3: 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	July-September 2024
	Kenya	4
	Total	**4**
USG support	Direct support	0
	Indirect support	4
Severity of event*	Minor	N/A
	Moderate	N/A
	Serious/severe	N/A

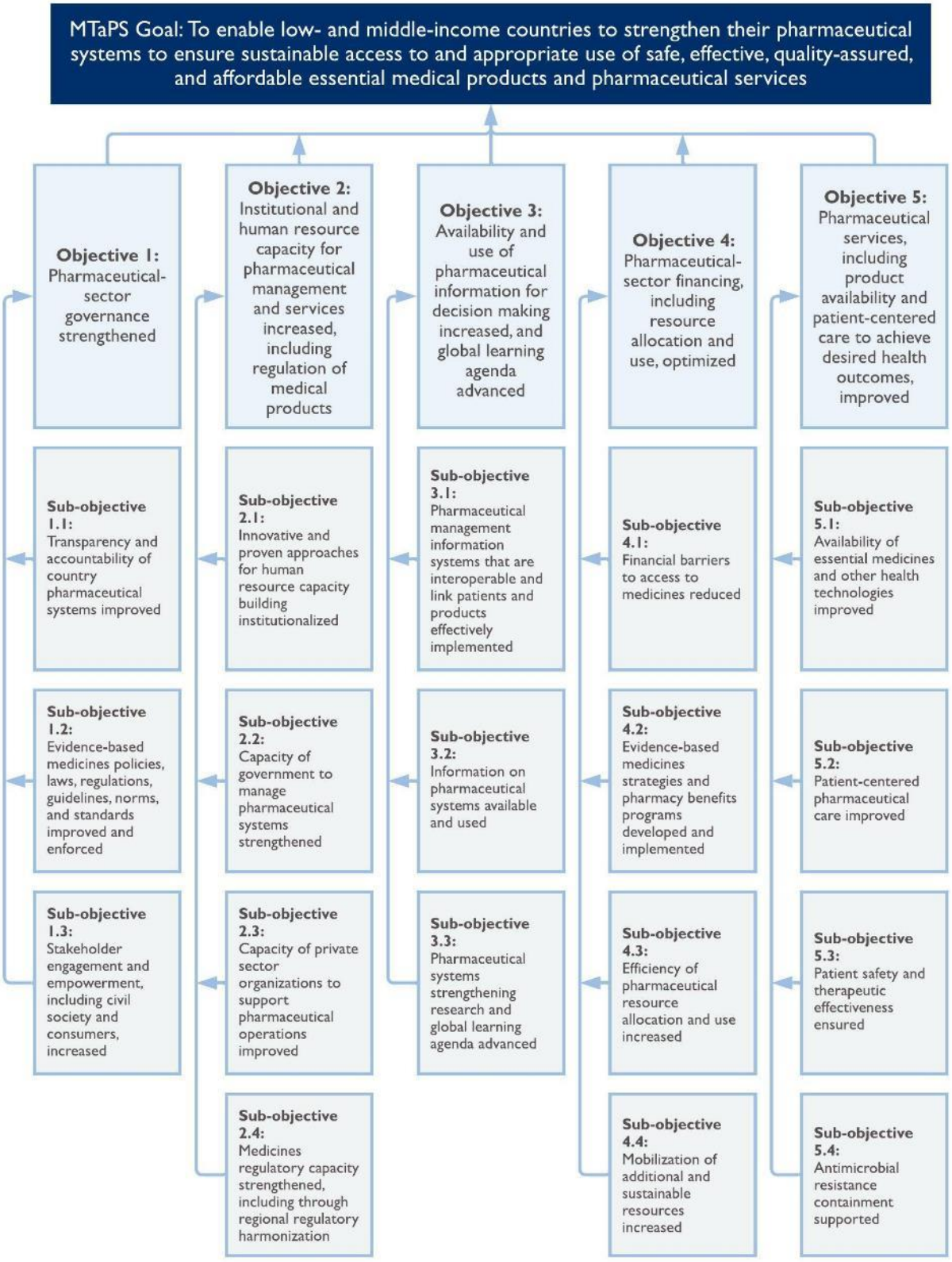
*In Kenya, data on severity of events are not available from the government.

Annex Table 3.4. Number of One Health-related meetings or workshops organized with MTaPS support (COV 26)*

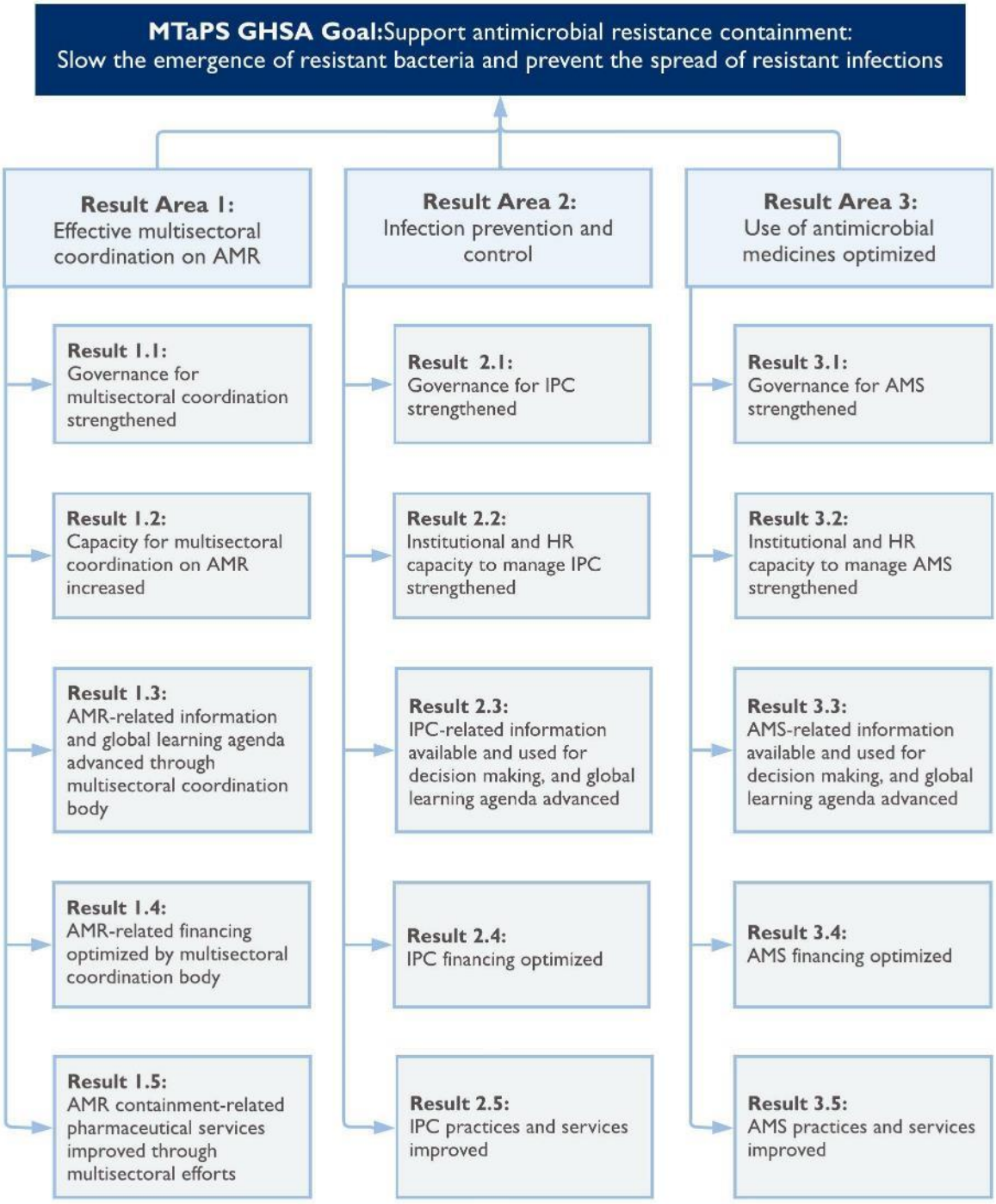
Portfolio/ disaggregation	Country	July-September 2024
	Côte d'Ivoire	2
	Total	**2**

* Côte d'Ivoire received COVID funding via CN240 to implement One Health-related activities in FY24. This indicator was created in FY24 to capture results from these activities.

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