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

Improved Access. Improved Services. Better Health Outcomes.

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FISCAL YEAR 2024
QUARTER 3
(APRIL–JUNE 2024) REPORT

USAID
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FISCAL YEAR 2024
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PROJECT OVERVIEW

Program Name:		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
Reporting Period:		Fiscal Year 2024 Quarter 3 (April–June 2024)
Activity Start Date and End Date:		September 20, 2018–March 19, 2025
Name of Prime Implementing Partner:		Management Sciences for Health
Contract Number:		7200AA18C00074
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 Proximity Medicine (Côte d'Ivoire)

DNAM	*Direcção Nacional de Assistência médica* [National Directorate of Medical Assistance] (Mozambique)
DNF	National Directorate of Pharmacy (Mozambique)
DOH	Department of Health (Philippines)
DOHS	Department of Health Services (Nepal)
DPCB	Disease Prevention and Control Bureau (Philippines)
DPM	Directorate of Pharmacy and Medicine (Mali and DRC)
DPML	Directorate of Pharmacy, Medicines, and Laboratories (Cameroon)
DPS	*Division Provinciale de la Santé* [Provincial Health Division] (DRC)
DQA	data quality assurance
DQSHH	Directorate for Quality, Security, and Hospital Hygiene (Senegal)
DRC	Democratic Republic of the Congo
DR-TB	drug-resistant tuberculosis
DTC	drug and therapeutics committee
DTG	dolutegravir
EAC	East African Community
eAMS	electronic asset management system
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 practices
GPVP	good pharmacovigilance practice
GRP	good regulatory practice
GSDP	good storage and distribution practices
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	One Health Tool
OP	operational plan
OSH	occupational safety and health
PBF	performance-based financing
PCPD	Pharmacy and Clinical Pharmacy Directorate (Jordan)
PCR	polymerase chain reaction
PD	Pharmaceutical Division (Philippines)
PEA	political economy analysis
PERAC	pharmacovigilance expert review and advisory committee
PIES	provider integration and engagement system
PMDT	programmatic management of drug-resistant TB
PMS	post-market surveillance
POPCOM	Commission on Population and Development (Philippines)
PPB	Pharmacy and Poisons Board of Kenya
PPE	personal protective equipment
PPM	pooled procurement mechanism
PPS	point prevalence study/survey
PPSSP	*Programme de Promotion de Soins de Santé Primaires* (DRC)
PQM+	Promoting the Quality of Medicines Plus

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

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

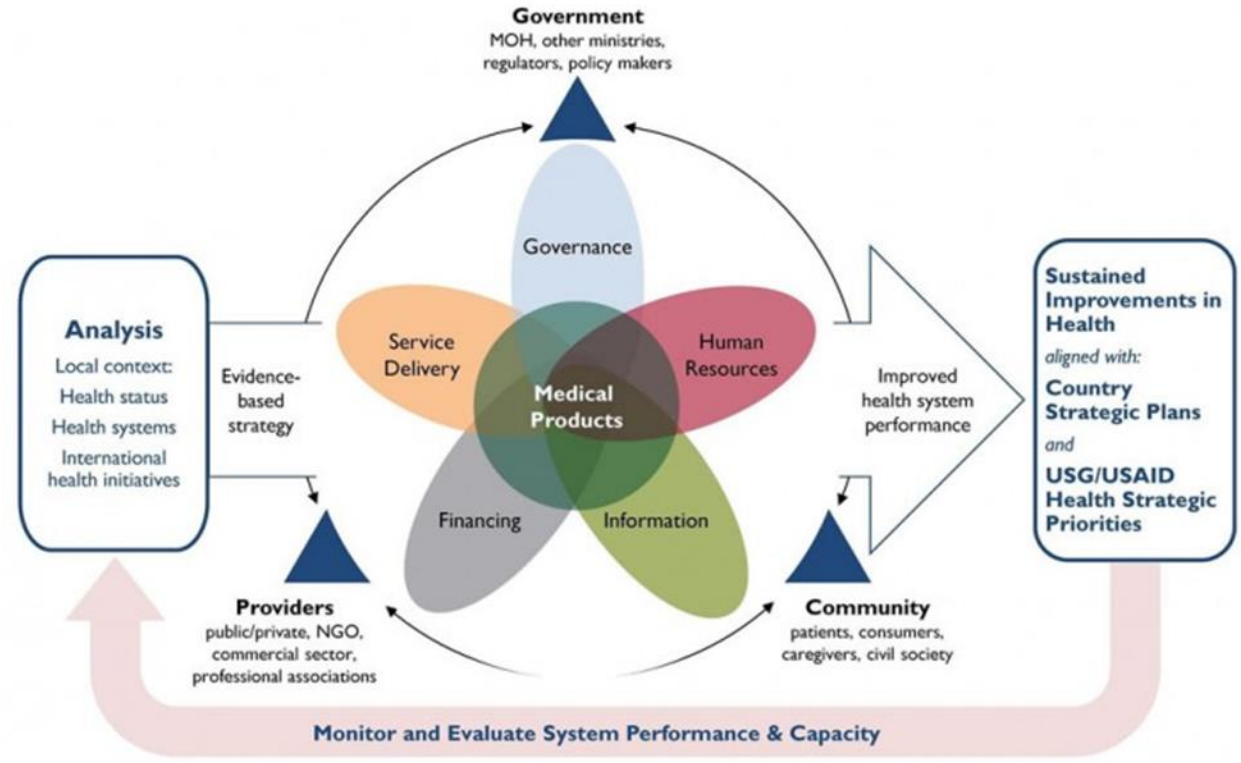


Figure 1. USAID pharmaceutical systems–strengthening approach

D. ABOUT THE REPORT

This report presents activity progress and achievements by portfolio for the third quarter of fiscal year 2024 (April–June 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 Q3, FY24.

CUMULATIVE PERFORMANCE TO DATE

Interventions to strengthen aspects of pharmaceutical governance take time to yield results. In this section we highlight our experience over the life of the project in select country contexts.

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

Mali

Increasing transparency within national regulatory authorities is fundamental to helping such entities mature. From December 2021 to April 2022, MTaPS aided the DPM in training data entry teams on using the PROMED[3] platform, registering 5,518 dossiers. In FY22, MTaPS supported 2 CNAMM meetings, examining 786 dossiers, including 103 for MNCH products. MTaPS helped update the Directory of Registered Medicines in Mali, listing 3,606 valid registrations. Mali can now demonstrate improvements in the processes used to register and review medical product dossiers, which is necessary to ensure the quality of medicines.

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

Evidence-based legal and standards documentation underpins the integrity of all activities in the pharmaceutical system, and national governments must be able to implement these standards to ensure

[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.
[3] PROMED is software in use for registration of medicines.

the availability of quality medicines. In this quarter we highlight Jordan and its focus on improving the procurement of medicines, and Nepal with its focus on strengthening the NRA through multiple activities.

Jordan

MTaPS completed drafting the FA SOPs, which were submitted to the National Committee for Procurement Policies for review and approval. MTaPS engaged the private-sector pharmaceutical suppliers in the FA planning process. MTaPS also completed the final draft of the procurement negotiation SOPs with an annex specifically focused on negotiations within the FA settings. Jordan is moving toward more effective use of resources for purchase of medicines.

Nepal

MTaPS supported the DDA in updating new policies, the law, regulations, norms, and standards for the Government of Nepal. An updated NMP and revised Drug Act—with relevant codes, guidelines, and regulations—were finalized. The Code on Sale and Distribution—including GPP, GSDP, GHPP, and Hospital Pharmacy Services Guidelines—is in place. Guidelines and SOPs for the registration of medicines and health technologies and products were updated, and QMS quality policy was developed and approved, which included a new document repository system and implemented the first internal quality audit to assess compliance with ISO certification standards. As a result, the DDA is in a stronger position to monitor and maintain the quality of medicines.

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

Uganda

MTaPS conducted a PEA in Uganda to engage a complete range of stakeholders to examine the factors that influence domestic financing of FP products and associated supply chain costs in Uganda. The PEA enabled a systematic interaction with all stakeholders to understand their role more deeply and what was important to them. Through the results, the MOH, USAID, and other stakeholders are now better informed about the factors that influence priority setting, financing, and procurement allocations for FP commodities, essential medicines, and health products as well as possible entry points and interventions. 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.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

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

Rwanda

MTaPS is enhancing the regulatory framework of the Rwanda FDA, specifically focusing on pharmaceuticals for HIV/AIDS, MNCH, and FP/RH programs. In support of the QMS, efforts are underway to prepare for an external quality audit for ISO 9001: 2015 certification, aimed at improving

the quality and efficiency of Rwanda FDA's operations. MTaPS presented its support plans and engaged with various partners to collaborate on enhancing Rwanda FDA's capacity, promoting stakeholder engagement. In addition, MTaPS supported a dossier assessment workshop to evaluate and clear medicines, adhering to WHO recommendations.

Jordan

To continue increasing the transparency of the medicines procurement system, MTaPS supported GPD in automating FA procedures by identifying user interface data elements, clarifying system roles, and creating an authentication list. Automation aims to institutionalize FA SOPs, enhancing efficiency, data accessibility, transparency, and governance in Jordan's procurement activities. Further, MTaPS assisted GPD in finalizing FA standard bidding document (SBD) drafts, ensuring accuracy and compliance before submission for national endorsement. The SBDs aim to establish transparent procurement processes, promoting fairness and reducing risks such as legal challenges, costs, inefficiencies, and potential fraud. Finally, MTaPS helped GPD draft a supplier performance evaluation policy, currently under review. Once approved and endorsed, it will mandate public sector compliance, enhancing procurement by identifying top suppliers and improving contract outcomes through informed decision-making. Jordan is a great example of how multilayered interventions are required to increase the transparency of the procurement system as a whole.

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

Tanzania

MTaPS provided technical support to Tanzania Medicines and Medical Devices Authority (TMDA) to develop the first GSDP guidelines based on the TMDA GSDP regulations of 2021. This effort was followed by a workshop held from April 16 to 26, 2024, to gather stakeholder input before the guidelines are validated by the TMDA. The guidelines will be used by all stakeholders across the country (public and private) to improve the quality of the pharmaceutical supply chain, ensuring proper handling, storage, and distribution of medical products from the manufacturer to the end user while preventing the infiltration of substandard or falsified products into the supply chain.

Rwanda

To continue strengthening the medical products regulatory framework capacity of Rwanda FDA, in May 2024, MTaPS participated in a WHO-led CIP meeting, presenting planned support to Rwanda FDA until September 2024. The meeting also addressed the remaining four institutional development plans from the May 2024 WHO GBT evaluation and discussed priority activities for Rwanda FDA. MTaPS is preparing a contract for an external quality audit to certify Rwanda FDA on ISO 9001: 2015, scheduled to start in mid-July, enhancing the quality and efficiency of Rwanda FDA's operations. In addition, to improve the capacity to register medical products, from March 27 to April 30, 2024, MTaPS supported Rwanda FDA in a dossier assessment workshop to address WHO's recommendations. The workshop involved 80 participants (including 36 women), evaluating 337 dossiers, 171 summaries of product characteristics, and 207 product information leaflets. The evaluation used full, reliance, and abridged assessment principles, with MTaPS providing orientation and training.

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

Bangladesh

MTaPS collaborated with a2i (the organization overseeing the Muktopaath government eLearning platform), to better analyze and share data with stakeholders on participation and user completion rates. The aim of this approach is to use data to show gaps in access and completion of eLearning which, when shared with relevant government entities, can be used to prioritize outreach and follow-up by affected departments to drive further learning. Course participation is rising, with 2,648 certificates issued as of June 15, 2024. MTaPS encourages stakeholders to promote the courses within their departments to ensure practical application of the knowledge.

BEST PRACTICES/LESSONS LEARNED

- Effective improvements in pharmaceutical governance systems involves regular engagement with the range of stakeholders within that system. For example, improving efficiency of procurement systems in Jordan has been possible through engagement of a cross-sectional range of government departments and the private sector, while applying a PEA approach in Uganda revealed significant insights from a range of stakeholders which will serve as entry points to increase PSCM financing.

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

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

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

Strengthening pharmaceutical systems requires incremental improvements over time. For example, to strengthen pharmaceutical regulatory systems, MTaPS performed assessments and reviewed previous assessments to determine the ML of the regulatory system in countries and co-created and implemented development plans to address the gaps identified. MTaPS worked with NRAs in Bangladesh, Mozambique, Nepal, and the Philippines to implement a QMS for efficient delivery of regulatory services and streamlined registration systems by applying GRP and electronic IMSs. In this section we focus on MTaPS' work to date supporting the African Medicines Agency (AMA), GHSA systems in Kenya, private sector engagement in DRC, and regulatory strengthening work in Rwanda and the Asia region, demonstrating the breadth of MTaPS' involvement across various elements of pharmaceutical systems.

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

African Continent: 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 and a variety of capacity strengthening initiatives for the creation of the 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 the 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. MTaPS has also been working with the AMRH Secretariat to develop, for AMA's consideration, a continental reliance framework and strategy for digitalization of the regulatory IMS. MTaPS has worked with various AMRH technical committees, such as the African Medical Devices Forum, Evaluation of Medical Products, IMS, and Medicines Policy and Regulatory Reforms, to strengthen and harmonize regulatory systems on the continent.

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

Kenya: MTaPS' focus in Kenya has been aimed at increasing the government of Kenya's GHSA capacity specifically in MSC, AMS, and IPC. In this section we provide an overview of the systems-based approach, with multiple activity entry points, used through the project to improve MSC and AMR systems. Through the PY1–5 work plans, MTaPS helped Kenya counterparts improve Kenya's JEE scores by supporting the implementation of 65% (40/62) of the benchmark actions.

By March 2024, in MSC, MTaPS supported the full or partial completion of 50% of capacity level 2 and 3 actions, 100% of level 4 actions, and 80% of level 5 actions. MTaPS focused on national initiatives and four counties (Nyeri, Kisumu, Murang'a, and Kilifi). After transitioning out of Nyeri and Kisumu in late 2023, MTaPS began work in Nairobi and Kiambu in March 2024. Key activities included bolstering MSC structures at both national (NASIC) and county (CASIC) levels, standardizing AMR communication, and developing orientation packages and bulletins for One Health stakeholders. Additionally, MTaPS contributed to the development and review of the NAP-AMR and its M&E framework, alongside CASIC work plans in supported counties.

For AMS JEE scores, MTaPS supported the completion of 75% of level 2 actions, 83% of level 3 actions, 29% of level 4 actions, and 14% of level actions by March 2024. Efforts included enhancing AMS governance, developing the Kenya National Medicines Formulary, reviewing the Kenya Essential Medicines List, disseminating AMS guidelines, training health care workers, and monitoring AMS implementation in focus counties. MTaPS' interventions are geared toward bolstering government capacity to manage AMR and improving health care outcomes through strategic governance, training, and implementation of comprehensive AMS and MSC frameworks.

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

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

Ituri) levels, supported the appointment of key AGCAL officials, increased the engagement of AGCAL within government PSCM mechanisms, and assisted in the development of leadership competencies for AGCAL officials. AGCAL is now better equipped to engage in DRC PSCM system strengthening efforts.

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

Rwanda: MTaPS supported the development of a quality manual and corresponding SOPs, which were later approved by the Rwanda FDA's board. This was followed by an internal audit training of 27 Rwanda FDA staff (17 male, 10 female). MTaPS helped train approximately 815 FDA personnel in various topics including dossier assessments, good manufacturing practices, good review practices, good reliance practices, PV, and QMS, and assisted the development of online e-learning courses in MER and PV, hosted on the Rwanda FDA servers.

Asia Bureau: MTaPS used a mapping exercise to identify 18 key entities (initiatives, networks, and stakeholders) including the ASEAN and the WHO Collaborative Procedure for Accelerated Registration among others, that strengthen pharmaceutical regulatory systems and 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 building plans were developed for these NRAs, toward the achievement of ML 3. 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.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

Selected examples of global and country-based capacity strengthening achievements are highlighted in this section.

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

PSS 101 course: MTaPS finalized and submitted the report on the March 2024 delivery of PSS 101 through USAID University to 33 USAID staff members, which included a range of health care and project management specialists from 9 different countries. The feedback received from USAID and the participants on the course and report will be incorporated into the next delivery, including an increased focus on country experience. MTaPS also continued to advertise the GHeL PSS 101 course, which saw 126 certificates earned this quarter. The GHeL Good Governance course saw 61 certificates earned, and the AMR (part 1) and AMR (part 2) courses saw 355 and 171 certificates earned, respectively. These varied virtual and blended approaches are increasing global access to pharmaceutical strengthening education materials and equipping local actors to undertake transformational changes in their local pharmaceutical systems.

During this period MTaPS also developed and released two PSS animations to simplify the PSS concept and approach in order to reach a wider global audience: Why must we urgently strengthen pharmaceutical systems in LMICs? and How do we strengthen pharmaceutical systems to help improve health outcomes? The animations are available in both English and French, and dissemination is underway to increase global attention to pharmaceutical strengthening needs in LMICs.

Rwanda: MTaPS collaborated with the USAID Ireme project to organize a webinar on digital transformation in the health sector on June 13, 2024. The webinar discussed the digitalization of regulatory functions, including PV, through implementing OpenRIMS-PV and IRIMS at the Rwanda FDA, improving the quality of regulatory services. The aim of the webinar was to increase country-level understanding of the utility of digitization to improve efficiency within pharmaceutical systems.

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

Bangladesh: Following MTaPS' support to date, in Quarter 3, the DGDA regulatory information management system (RIMS) received 16 registration applications, including 10 vaccines, with 8 approved. PViMS recorded 68 AE reports, reviewing 37. ADRAC recommended a boxed warning for Atezolizumab and proposed banning Halothane. DGDA developed 7 COVID-19 vaccine AE case summaries and generated 3 safety recommendations for lenograstim, fluoroquinolones, and proton pump inhibitors. This documented activity demonstrates the improved operation of these pharmaceutical systems within Bangladesh. MTaPS continued to assist DGDA with dossier reviews, risk management plans, and periodic safety updates. Five DGDA officials completed a WHO online inspection course. Key documents and source codes were handed over to DGDA, and a TOT was conducted for DGDA RIMS users. Capacity building for PViMS included training 332 participants and integrating PViMS with WHO-Uppsala Monitoring Center VigiFlow. Efforts aim to improve WHO GBT scores toward achieving ML 3 for DGDA.

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

Burkina Faso: MTaPS has been working to strengthen the functionality of the Technical Secretariat of the One Health Platform, which enables thoughtful interaction of all stakeholders to address GHSA issues in Burkina Faso. In April 2024, the IHR self-assessment workshop was organized by the DPSP and was attended by stakeholders concerned by the 19 areas of the IHR. Participants came from the sectors of health and public hygiene, agriculture, animal and fisheries resources, environment, water and sanitation, energy, mining and quarrying, higher education, research and innovation, defense and security, etc., as well as technical and financial partners such as MTaPS, Country Health Information Systems and Data Use, GHSC-PSM, Emergency Centre for Transboundary Animal Diseases of the FAO, Deutsche Gesellschaft für Internationale Zusammenarbeit, WHO, UNICEF, and USAID. Results of the self-assessment indicate a score of 2 for MSC on AMR, 2 for optimal use of antimicrobial medicines in human health, and 3 for optimal use of antimicrobial medicines in animal health and agriculture. Workshop recommendations included strengthening MSC on AMR at all levels, and the adoption of the NAP-AMR.

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

Rwanda: MTaPS continued working with the IRIMS software developer, SoftClans, to update IRIMS user manuals and guides in line with ongoing enhancements to IRIMS functionalities. In addition, MTaPS trained 8 Rwanda FDA IT team members (2 male and 6 female) on IRIMS management and administration. MTaPS has also updated the IRIMS transition plan, outlining all the stages necessary to facilitate the transition and handover of the system to the Rwanda FDA. Furthermore, MTaPS has

developed a 12-week system roadmap that aims to address critical issues, enhancing the system operationalization. The plan is under review by the Rwanda FDA. Through IRIMS, 77 out of 106 tickets reported through the help desk were resolved and closed during the quarter.

***Asia Bureau**:* MTaPS Asia Bureau, in collaboration with the WHO Bangladesh office, engaged the Bangladesh DGDA to organize and implement a training on Good Clinical Practice on June 2–4, 2024, in Bangladesh. The training targeted DGDA personnel involved in clinical trials oversight, patient safety activities, and regulatory inspections. A total of 22 (4 female, 18 male) participants attended the training that focused on building the skills and competency on the conduct of clinical trials inspections, design of clinical trials, and participants' safety. The training's aim was to build strong functional competencies in the regulation of clinical trials that will enable DGDA to regulate medical products effectively.

MTaPS also continued to engage with SEARN and Southeast Asia Regulatory Office (SEARO) to develop a capacity building action plan through consultative meetings—SEARN working group meetings were held on April 23, May 7, and June 3 to discuss and review the development of the action plan and SEARN capacity building work plan. A draft capacity building action plan has been finalized and shared with SEARN/SEARO for feedback, which focuses on development of regulatory capacity in product registration, regulatory inspection, laboratory analysis, and vigilance as per the WHO competency mapping framework.

BEST PRACTICES/LESSONS LEARNED

- Effective stakeholder engagement has been a key driver in consolidating the support provided by MTaPS to NRAs, including Tanzania Medicines and Medical Devices Authority and DPML. By identifying the right stakeholders and building a strong working relationship with regulatory authorities, activities aimed at ensuring access to high-quality, safe, and effective medical products have been successfully implemented.

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 technical assistance to ministries, MTaPS endeavors to cultivate institutionalized and sustainable capacities, recognizing their pivotal role in realizing UHC, sustainable development objectives, and fostering self-reliance.

CUMULATIVE PERFORMANCE TO DATE

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

Bangladesh

In PY1, MTaPS enhanced versions of the UIMS and the **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 stockout rate below 1% for commodities at SDPs.

During the second year of the Program (PY2), MTaPS effectively broadened the coverage of the **eAMS** to encompass all 61 DHs nationwide.

Through collaboration with the NTP, a phased transition plan was devised to integrate storage systems for TB medicines. MTaPS supported the NTP by evaluating and integrating 478 out of 484 peripheral storage systems for TB medicines into the UHC network. They ensured all 868 TB sites adopted the electronic TB Manager (**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 (HTP), 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 between 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 this quarter, significant progress has been made with the **DAMS-2** (**OpenRIMS**) project. The DDA, supported by MTaPS, has devised a phased approach for the pharmacy and wholesale module implementation. The initial phase prioritizes public notification and data migration from existing systems to DAMS-2. Subsequent phases will focus on implementing renewal, registration, and modification processes for both pharmacy and wholesale modules, along with product and manufacturer registration modules. To ensure sustained development and support for the system, USAID has assigned FHI 360 (EPIC Preventive and Social Medicine/Community Medicine [PSM]) the responsibility of overseeing the handover process and continuing the software development life cycle for at least nine months. This ensures the project's stability and long-term success. Furthermore, server installation at the National Information Technology Center (NITC) and networking tasks at the DDA have been successfully completed.

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, a total of 224 warehouses, spanning central (7) and regional (28) units, LGUs (64), and SDPs (125), were equipped with operational eLMIS. Continuously collaborating with various agencies such as the Philippine Business for Social Progress (PBSP), the Global Fund's principal recipient, and the 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 recently added. A TOT session for provincial health personnel (PHPs) was conducted from February 27 to March 1, 2024, attended by 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 (PDH) identifying RHUs ready for implementation. Currently, eLMIS is operational across 224 sites, facilitating stock assessment and Procurement and Supply Chain Management (PSCM) decisions, with a high-level eLMIS dashboard deployed for DOH.

Rwanda

To increase the efficiency of the Rwanda FDA's regulatory functions, MTaPS provided technical support in customizing the **IRIMS** to the FDA's requirements and implementing it with training for internal and external users. MTaPS collaborated with 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 Rwanda FDA. MTaPS supported the integration of IRIMS with the digital certificate platform through RISA and facilitated a service-level agreement (SLA) for system maintenance with the developer.

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.

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

Bangladesh

For patient safety, MTaPS evaluated over 4,500 adverse event (AE) reports, leading to more than 35 regulatory decisions since PY1. It assisted the DGDA in developing a pharmacy inspection strategy in PY2 and launched an electronic inspection and licensing system in PY3. By PY4, MTaPS supported the DGDA in achieving the highest GBT score for PV function and updated national PV guidelines, endorsed by the MOHFW in PY5. In PY5, they trained staff on the strategic plan and implemented the Regulatory Information Management System (**RIMS**) for online registration of vaccines and biosimilars and the Pharmacovigilance Management System (**PViMS, OpenRIMS-PV**) for online AE reporting. In PY6, the DGDA approved 18 biosimilar products using RIMS.

Mozambique

Using the **PViMS, OpenRIMS-PV,** 105 patients reported a total of 149 AEs. Among the reported AEs, the most frequently recorded ones included headache, insomnia, nausea, and skin rash. The 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. 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 building, particularly on causality assessment, and offered practical training on the use of PViMS. A total of 9 individuals (4 male, 5 female) were trained. In PY4, the PViMS tool underwent an update with the inclusion of treatment and prevention of tuberculosis data collection forms, further enhancing its capabilities and relevance.

Philippines

Since the initiation of the **PViMS, OpenRIMS-PV** rollout in PY3, MTaPS has achieved full coverage, reaching 100% (199) of the targeted TB facilities. Until now, 597 AEs have been reported through PViMS, and causality assessments have been conducted to inform decision-making processes. Furthermore, MTaPS has supported the DOH in analyzing stock information for critical tracer commodities related to TB, FP, and HIV since PY3 (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**. The successful rollout of the system in targeted TB facilities, covering 100% (199) of the facilities, has led to the reporting of 597 adverse events since its inception in PY3 (FY21).

Rwanda

In strengthening the RIMS for both active and spontaneous PV, **PViMS**, now known as the digital public good **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 antiretroviral therapy (ART) regimens. From June 2021 to April 2024, 2,002 (776 serious) AEFIs were submitted by health care providers and reported to Rwanda FDA. Of these, 858 were related to COVID-19 vaccines and were serious AEs, which Rwanda FDA reported to the WHO Uppsala Monitoring Center (UMC) due to PViMS interoperability with WHO's **VigiFlow** using a specialized E2B Release 2 (R2) format. The use of OpenRIMS-PV ensures that medicine safety monitoring reports are quickly received and analyzed by Rwanda FDA, allowing timely regulatory feedback to clients, patients, and health facilities.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

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

Bangladesh

MTaPS helped roll out the DGHS comprehensive **eLMIS** in four districts after its successful implementation at the CMSD. Training involved 66 participants from various health facilities, who began using the system with MTaPS follow-up support. The DGHS MIS unit will oversee the system's operation to ensure smooth functioning and informed decision making in health commodity management. All training materials and user guides were handed over to CMSD and DGHS, with MTaPS providing ongoing on-demand training.

The DGFP eLMIS was introduced to seven Maternal and Child Welfare Centers (MCWCs) in Nilphamari and Gaibandha districts. MTaPS customized the system for MCWCs and conducted training sessions. MTaPS provided follow-up visits and on-the-job training to upazila-level users to ensure they could support MCWC users independently. All MCWCs have entered initial stock as of April 30, 2024.

MTaPS supported the rollout of the **eAMS** at the National Institute of Cancer Research and Hospital (NICR&H), with 147 assets recorded by May 2024. Across district hospitals, 735 assets were added, totaling 10,695 assets in the system, with 356 maintenance tickets raised and 156 resolved. A review meeting on eAMS progress was held in May 2024, and an orientation for system users was conducted. An official memo was issued to ensure the use of eAMS for tracking asset information.

MTaPS shared the scope of work for hiring an information technology (IT) vendor to manage **e-TB Manager** post-program. Training manuals, user guidelines, source code, and database schemes were handed over to the NTP. A meeting reviewed the status of these systems and agreed on procedures for monitoring and data analysis, strengthening NTP's capacity in managing these systems.

Rwanda

MTaPS supported the Rwanda FDA MIS team members (6 female) to manage and administer the **IRIMS**. MTaPS continued working with the IRIMS software developer to update user manuals and guides in line with ongoing enhancements to IRIMS functionalities. They also updated the IRIMS transition plan and developed a 12-week system road map to address critical issues, enhance system operationalization, and hand over to the Authority. During Quarter 3, 77 out of 106 tickets reported through the helpdesk were resolved. The helpdesk system monitors and archives issues raised by, and support provided to, IRIMS internal and external users at Rwanda FDA, assisting with future system reviews and knowledge transfer. Furthermore, MTaPS improved engagement with and monitoring of IRIMS by conducting

weekly update meetings with Rwanda FDA, contributing to knowledge transfer and the Authority's ownership of IRIMS.

MTaPS collaborated with the USAID Ireme project to organize and conduct a webinar on June 13, 2024, on the role of digital transformation in the health sector in Rwanda. In the webinar, MTaPS discussed how digitalization of regulatory functions, including PV, through the *implementation* of **OpenRIMS-PV** and **IRIMS** at Rwanda FDA, has improved the quality of regulatory services provided by Rwanda FDA to its clients.

Cameroon

On April 3, 2024, MTaPS supported the DPML to organize a 1-day meeting to define and approve the options and functionalities that the DPML expects from the OpenRIMS homologation digitalization tool. This meeting gathered 20 participants (12 female) coming from the DPML and the IT department of the MOH. Participants carried out a mini assessment of the DPML's IT equipment and prepared a detailed description of all the DPML's expectations related to the configuration of the OpenRIMS tool.

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

Bangladesh

MTaPS handed over IT systems, including **e-TB Manager**, **eLMIS**, **DGDA RIMS** (OpenRIMS), **PViMS** (OpenRIMS-PV), and the DGDA web portal, to the NTP and the DGDA. Transition plans were acknowledged, with stakeholders committing to the systems' sustainability. Plans for other systems such as eAMS, DGFP eLMIS, and DGHS comprehensive eLMIS were finalized for handover next quarter. MTaPS will support the implementation of remaining activities in the transition plans.

MTaPS assisted the DGDA with the Corrective and Preventive Action (CAPA) plan, receiving 16 registration applications for vaccines and reviewing 68 AE reports. Regulatory decisions included a boxed warning for Atezolizumab and a proposed ban on Halothane. The DGDA developed COVID-19 vaccine adverse event summaries and safety recommendations and received technical assistance on various reviews. Five DGDA officials completed a WHO inspection course. MTaPS handed over documents and source code for DGDA systems as part of the transition plan.

Rwanda

MTaPS further updated **OpenRIMS-PV** to meet the WHO requirements of the E2B R3 (currently supporting R2) standard for the direct upload of AE reports into **VigiFlow**. This update ensures that OpenRIMS-PV is interoperable with VigiFlow for integration with the global database **VigiBase** at the UMC, enhancing Rwanda FDA's PV reporting process to the UMC and facilitating PV data access and use. Additionally, MTaPS supported Rwanda FDA in developing an abstract titled "Strengthening Pharmacovigilance in Rwanda by Introducing PViMS for Spontaneous Reporting of Adverse Drug Effects," which was approved for presentation at the 2024 conferences of the International Society of Pharmacovigilance (ISoP) chapters in Africa and Canada.

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

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

BEST PRACTICES/LESSONS LEARNED

- Any PMIS tool, once introduced, requires on average anywhere from 12 to 18 months to become fully functional.. This includes establishing a proper troubleshooting and maintenance structure, providing ongoing development and updates, and ensuring user supervision facilitated by the system developer and the respective government authority.
- Regular supervision and troubleshooting are essential for users of new electronic systems to ensure streamlined and continuous functioning. This need varies depending on the users' capacity and local context, even after initial training.
- Collaborative efforts demonstrate that pilot projects require sustained support and adaptation to local conditions.
- Scheduling activities with implementing partners can be a challenging task that requires constant flexibility to accommodate changing circumstances and needs.

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

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

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

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

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

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

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

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

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

In **DRC**, MTaPS successfully advocated 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. The more advanced use of HTA allows countries to negotiate prices and manage market access for new technologies.

Supported through the **Asia Bureau** and **Cross Bureau** portfolios, MTaPS conducted a systematic review of over 18,000 resources. MTaPS collaborated with 16 authors from 10 institutions to develop the HTA roadmap document for policy action in LMICs. In **Asia**, MTaPS wrote a report exploring the feasibility of an HTA hub or collaborative institution in the region, stemming from a survey and interviews of over 50 stakeholders in Asia. This led to a partnership with Health Intervention and Technology Assessment Program (HITAP) and Health Intervention and Policy Evaluation Research–National University of Singapore (HIPER-NUS) on the support to improve the HTA ecosystem in Asia. MTaPS supported the participation of seven country representatives (Vietnam, Timor Leste, Indonesia, India, Cambodia, Philippines, and Lao PDR) to 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 also finalized the HTA Institutionalization Canvas, adapted from Osterwalder's business model canvas. MTaPS designed an organized session at the upcoming HTA International (HTAi) Conference titled "Advancing Health Technology Assessment (HTA) Worldwide: Insights from Global Initiatives," highlighting the work establishing and strengthening priority setting and resource allocation in Ethiopia, Indonesia, and the Philippines.

In **Indonesia**, MTaPS supported MOH in redefining the criteria for selecting HTA topics and drafted the HTA Topic Selection Operational Manual. MTaPS successfully encouraged a wider range of stakeholders to submit topics, from 19 topics in 2022 to 46 HTA topics for 2023, and 131 HTA topics for 2024—increasing the breadth of lifesaving technology options to be evaluated for coverage to Indonesians. MTaPS also organized a capacity building session with HTA researchers from 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 "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**, the MTaPS-supported HTA Method Guide for Clinical Equipment and Devices was finalized and shared with local stakeholders in a three-day workshop in Manila. This is the first specialized HTA methods guide in the country, supporting the Government of 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 Technical Specifications Bank, which would facilitate the Philippines in developing its own essential medical devices list.

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

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

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

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

In **Bangladesh**, MTaPS worked with MOHFW and others to adopt the international standard to track PE, resulting in a consensus with the HEU on a methodology for tracking MNCH commodities and initiated activities for its implementation. MTaPS supported the PE tracking exercise, documented standard processes on PE tracking for MNCH, and disseminated the progress of the work with the HEU with the participation of WHO and Data International. MTaPS assisted the HEU to complete the PE tracking exercise and develop the standard processes on PE tracking and customization of PE tracking training modules for MNCH commodities following the SHA 2011 guideline and the country context.

With continued MTaPS advocacy, the HEU managed to include the PE tracking budgetary provision in the government's next Health Sector Program Operational Plan. It is an important milestone towards institutionalization of PE tracking to the HEU.

In **Indonesia**, MTaPS conducted a system-wide landscaping of existing and potential PE data sources and produced a summary document. MTaPS also collaborated with the Indonesian health accounts team to compile existing PE data from available national sources and drafted a final report on the implementation of the 2022 PE tracking. MTaPS facilitated a meeting on future management of data for PE tracking, including data cleaning, validation, mapping, and analysis, as well as the need for a PE tracking team decree. MTaPS also facilitated the PE tracking training workshop, which resulted in the development of the 2023 PE tracking implementation plan.

To support **COVID-19 immunization costing**, MTaPS reviewed 530 articles across 3 databases and conducted 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 as well as country efforts to target sub-populations for vaccination. These activities feed into the MTaPS-adapted Harvard/COVAX costing model to estimate the cost of delivering COVID-19 vaccines under various scenarios. In **Malawi**, MTaPS collected vaccine delivery expenditure data in 4 districts through surveys and interviews in the national offices and 20 facilities and analyzed the COVID-19 costing data. MTaPS disseminated findings of vaccine delivery costing in Malawi at the Immunization Economics Special Interest Group Pre-Congress Session of the International Health Economics Association congress in Cape Town.

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

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

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

In the **Philippines**, MTaPS supported identifying and allocating resources for PSCM through the NSP 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 NSP. MTaPS also supported the DOH in developing guidelines for framework agreements to ensure that quality health commodities are procured efficiently. MTaPS facilitated a learning session on quantification of health commodities and on quantification systems, processes, and tools. The estimated quantities and budgets will be used for the DOH's application for multi-year contractual authority for FP and TB commodity procurement. This allows flexibility in the quantity of commodities, reducing the possibility of overstock or stockout.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

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

No further activities planned for PY6

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

MTaPS delivered the HTAi organized session "Advancing Health Technology Assessment (HTA) Worldwide: Insights from Global Initiatives"—with speakers Christian Suharlim, Daniel Erku (Ethiopia), Agusdini Banun (Indonesia), Catherine Manuela Lee Ramos (Philippines), and Oresta Piniazhko (Ukraine)—to participants at HTAi in Seville, Spain. Session participants called the session an "inspiring worldwide experience," and appreciated how MTaPS helps "countries doing a great job."

Left to right: Oresta Piniazhko, Daniel Erku, Catherine Manuela Lee Ramos, Agusdini Banun, and Christian Suharlim. June 17, 2024. Photo credit: Anna Bezruk, USAID SAFEMED program

Oresta Piniazhko, Director of HTA Department Ukraine, speaking to a full room at the MTaPS-organized HTAi session. June 17, 2024. Photo credit: Anna Bezruk, USAID SAFEMED

In **Asia**, MTaPS continues to work with HITAP and HIPER-NUS to support the improvement of the HTA ecosystem in Asia. MTaPS also presented their work at the Priorities 2024 conference, highlighting work advancing HTA in Asia, which received a competitive and prestigious award.

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

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

In **Bangladesh and Indonesia**, MTaPS worked with countries' health financing teams to prepare an interactive webinar on July 11, 2024, showcasing the application of the PE tracking methodology, process, and tools in each country.

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

No further activities planned for PY6.

BEST PRACTICES/LESSONS LEARNED

- Progress on advancing a subcontract with new partners can be slow. Support is needed to align expectations and administrative requirements and allow new partners to be part of the MTaPS program. In **Thailand**, MTaPS works closely with HITAP to obtain the Unique Entity Identifier and support their documentation needs.
- To sustain gains from MTaPS activities, the program should plan and prioritize public dissemination through the organized session at the HTAi conference, award-winning presentations at the Priorities conference, and Pharmaceutical Expenditure Tracking webinars.

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; this requires integration with other objectives, including reliable data for decisions (objective 3) that address finances and the evidence-based selection of medicines and health technologies (objective 4), stewardship to allocate resources efficiently (objective 1), and institutionalizing best practices to improve pharmaceutical care (objective 2) and patient safety.

CUMULATIVE PERFORMANCE TO DATE

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

Bangladesh: MTaPS facilitated the development of a long-term procurement strategic plan and standardized lists of medical equipment and reference prices for tertiary hospitals. Additionally, MTaPS supported the development of a strategy for regular revision of these lists and prices, which included creating a checklist for monitoring procurement performance using standard indicators. Furthermore, MTaPS conducted a capacity assessment of procurement entities and provided key recommendations for improvement. MTaPS also promoted the use of FP data for decision making, ensuring that FP warehouses maintain a stock-out rate below 1% at SDPs from May 2019 to September 2023, thereby saving financial resources. MTaPS also supported the NTP in evaluating peripheral storage systems for TB medicines and developing a phased transition plan. This effort successfully integrated 478 out of 484 peripheral stores managed by IPs, previously located outside UHC facilities, into the UHC network. MTaPS is supporting the establishment of eAMS in one selected tertiary hospital as a pilot to enable the HSD to begin rolling out the system to other tertiary hospitals. MTaPS' continuous advocacy for ensuring the availability of commodities expedited the DGFP procurement process of 77 million condoms, with around 20 million being supplied to the central warehouse in March 2024.

Philippines: MTaPS significantly contributed to various supply chain initiatives, including the development of a three-year supply chain strategy and roadmap, designing inventory strategies, analyzing stock information for key commodities, and delivering supply chain e-Learning modules. MTaPS supported the estimation of long-term requirements for TB, HIV, and FP commodities to guide budgeting and procurement. Additionally, MTaPS supported the inclusion of TLD and preexposure prophylaxis in the National Formulary, updating and finalizing the warehouse operation manual (WOM), and training staff across different levels to implement its use effectively. Moreover, MTaPS finalized the WOM addendum, detailing inventory control SOPs aiming to minimize rejection and overstock at lower supply chain levels. This initiative targets reducing the supply chain carbon footprint and enhancing climate risk management.

Jordan: MTaPS assisted the JFDA and MOH in achieving procurement reforms to facilitate supplier market entry and product availability. The GPD, with MTaPS support, developed FA guidelines and

procurement negotiation guidelines and trained public-sector procurement personnel. Additionally, MTaPS assisted the PSD to complete a comprehensive assessment of the pharmaceutical supply chain, whose findings informed the PSD's Operational Plan 2023–2025. MTaPS also supported the development and approval of six priority SCM policies, FA SOPs, and procurement negotiation SOPs.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

Rwanda: To improve pharmaceutical services, MTaPS partnered with the MOH, Rwanda FDA, and the NPC to create pharmaceutical service accreditation standards and a comprehensive implementation plan. These standards were subsequently approved by the MOH, and MTaPS helped disseminate them with medicine safety information to 440 participants, including 145 females. Additionally, to improve pharmaceutical management in HCFs through MTCs, MTaPS supported the development of an MTC operational manual, tools, and SOPs and oriented 313 HCPs, including 113 females, on these materials.

SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED

Bangladesh: MTaPS has strengthened Bangladesh's PV by implementing PViMS in hospitals and among MA holders, providing TOT, and creating PV units to institutionalize PV-related initiatives. In addition, MTaPS helped in developing and implementing risk management and investigation procedures, supporting periodic evaluation of ADE safety data and submission of findings to WHO-Uppsala Monitoring Center. To further strengthen PV in the country, MTaPS assisted in customizing PViMS based on users' feedback; updating the PV organogram with TOR, job descriptions, and competency assessment of PV personnel; and screening of risk management plans (RMPs) and generation of PSURs. As a result of these efforts, the DGDA has achieved and maintained the highest GBT score for PV function.

Jordan: MTaPS has supported the MOH to establish and implement a targeted spontaneous reporting system on the safety of COVID-19 vaccines. The support included analyzing data, generating reports, and creating key messages. The messages were then disseminated by the national PV center to increase public confidence in vaccine safety and to encourage 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 implementation of ASM for TLD and TPT; training ANARME, IP, staff on the protocol for surveillance, data management, and analyses in PViMS, including causality assessment; and report writing. Additionally, provincial and district PV focal persons were trained, and they then cascaded the 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 review of the findings with representatives from USAID.

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

Philippines: MTaPS supported implementation of PViMS for active TB medicine surveillance in all 199 TB facilities in the Philippines. The system has recorded 597 AEs so far, 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 Rwanda FDA in the institutionalization of PV through development of the PV national plan; capacity development of FDA personnel, National Pharmacovigilance Advisory Committee and AEFI committee members; creation of IEC materials; adoption of PViMS and active surveillance of DTG-based antiretroviral regimens; causality assessment of reported AEs; development of a costed multiyear national PV plan; and revision of the draft communication strategy to address GBT subindicators (VL02.02, VL06.01, VL06.02, and VL06.03). Updates were made to the OpenRIMS-PV (PViMS) user manual and other relevant documentation. Focal PV members from Rwanda FDA, and others from the ICT team, received training on the updated OpenRIMS-PV (PViMS). Efforts to support the interoperability of PViMS with VigiFlow are ongoing.

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 built the capacity of TMDA staff on the assessment of PSURs and RMPs for ARVs and other medicinal products.

SUB-OBJECTIVE 5.4: AMR CONTAINMENT SUPPORTED

Jordan: MTaPS played a significant role in operationalizing the NAP-AMR (2018–2022), conducting an AMR/AMS stakeholder analysis, and implementing AMS programs in two pilot HCFs. In response to an *Acinetobacter* outbreak in 2022, MTaPS supported the MOH—IPC department in developing a national policy to combat multidrug-resistant organisms, thereby institutionalizing the AMR response. MTaPS supported the launch of a certified IPC training course and helped IPC focal persons obtain IPC certification, with certified trainers now cascading the IPC training. Additionally, with MTaPS' support, various protocols, audit tools, and key performance indicators (KPIs) on the rational use of antibiotics in ICU infections, surgical procedures, and urinary tract infections were developed and monitored for implementation using a CQI approach by the MOH PCPD. The PCPD was also supported to lead the first national IPC assessment in dental units. To strengthen human resource capacity for AMR containment, MTaPS collaborated with the national HCAC to develop training curriculum on priority IPC needs identified by the MOH National Advisory Committee for IPC and to train more than 200 IPC focal points from the MOH, hospitals, and primary health care units. To raise awareness about AMR, MTaPS collaborated with the MOH School Health Directorate and the Ministry of Education to develop and disseminate AMR awareness messages in schools and to incorporate them into the NAP-AMR. MTaPS-supported CASS, such as educational workshops, aimed at raising AMR awareness in schools.

Rwanda: Following the launch of the first NAP-AMR (2020–2024), MTaPS collaborated with MOH, Rwanda FDA, and other stakeholders to develop a multisectoral AMR communication strategy. MTaPS Rwanda also facilitated the integration of the AWaRe categorization of antibiotics into the NEML and assisted in developing an MTC manual and an accompanying training guide and job aids.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

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

Bangladesh: MTaPS collaborated with the CMSD and the MIS unit of the DGHS to roll out the DGHS comprehensive eLMIS in four selected districts. HFs in these districts are now using the system with ongoing MTaPS support, facilitating daily tracking of transactions and stock status to minimize disruptions. This quarter, DGFP introduced its eLMIS at seven MCWCs in the Nilphamari and Gaibandha districts. They are now regularly using the system to receive commodities, capture dispensed quantities, and prepare logistics reports, allowing upazila-level management to determine accurate supply quantities. MTaPS also provided technical support to initiate the use of eAMS at the National Institute of Cancer Research and Hospital tertiary hospital, where 147 assets and 1 repair ticket were recorded as of May 2024. DHs entered 735 assets and raised 7 maintenance tickets this quarter. Since the eAMS began at DHs, 10,695 assets have been recorded, with 156 out of 356 maintenance tickets resolved. The National TB Reference Laboratory and 5 regional TB reference laboratories entered 537 assets, with 1 maintenance ticket resolved out of 4 raised. MTaPS oriented the quantification and early warning system (EWS) subgroup members working at the TB Central Warehouse on data management using the e-TB Manager and TB eLMIS. This facilitates cross-checking of TB patients and stock data against data on dispensed quantities, helping to generate accurate real-time data for quantification and the EWS. MTaPS is supporting the NTP in revising SOPs for more efficient and uniform PSCM activities.

Jordan: The Automation Advisory Committee and the IT unit of the GPD, with MTaPS support, are leading the development of automated FA procedures to enhance efficiency, data accessibility, transparency, and governance in procurement. MTaPS identified user interface data elements, clarified roles and responsibilities, identified main system users, and created an application authentication list through biweekly meetings. The FA standard bidding document (SBD) draft underwent further review to ensure accuracy and compliance. The FA SBDs aim to establish a consistent and transparent procurement process, promoting fairness and mitigating risks such as fraud, legal challenges, and higher costs.

SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED

None to report this quarter.

SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED

Bangladesh: Sixty-eight AE reports for drugs and vaccines were received through PViMS; 37 were then reviewed. The ADRAC recommended a boxed warning for atezolizumab due to the risk of aplastic anemia and proposed banning of 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 the ADRAC for the identified risk associated with the use of lenograstim, fluoroquinolones, and proton pump inhibitors. As part of implementation of the transition plan for sustainable implementation of the systems by the DGDA, MTaPS handed over the relevant documents and source codes for RIMS, PViMS, and the DGDA web portal to the DGDA.

Rwanda: MTaPS supported Rwanda FDA in developing an abstract on PV that was accepted for presentation at the 2024 conferences of the ISOP chapters in Africa and in Canada.

SUB-OBJECTIVE 5.4: AMR CONTAINMENT SUPPORTED

Jordan: AMS committees of the Al-Salt and Mafraq hospitals, with MTaPS support, audited the facilities' adherence to antibiotic prophylaxis and treatment protocols using compliance checklists and KPIs. Results were shared in committee meetings, and recommendations were made to improve adherence. The RMS central Quality Directorate of the MOH and the central AMS committee disseminated the antibiotic prophylaxis and treatment protocol KPIs to all RMS hospitals. In collaboration with the HCAC and with support from MTaPS, 28 IPC focal persons (17 female) from MOH hospitals completed the HCIP training course and received certification, enhancing IPC human resource capacity. These certified individuals then led a cascaded IPC training workshop for 100 senior nursing staff from all MOH neonatal ICUs, demonstrating effective capacity transfer.

In collaboration with the MOH, MTaPS completed the IPC assessment in 600 public and private dental clinics and centers. The assessment evaluated IPC practices and HCPs' knowledge of IPC policies and guidelines and identified gaps in both the public and private sectors. The results will help standardize IPC practices and address disparities hindering effective IPC measures. Additionally, MTaPS supported HCAD in refining the AMR social media posts for public dissemination, aiming to improve community understanding of IPC and AMR principles and promote rational use of antibiotics. MTaPS also supported the expansion of the AMR CASS activities by training 14 SHD heads of departments (5 women) and 40 health service providers (30 women) from 14 HADs. So far, the CASS activities are in an additional 98 schools, reaching a total of 5,034 students (4,288 females).

BEST PRACTICES/LESSONS LEARNED

None this quarter.

3. PROGRESS BY HEALTH AREA/FUNDING STREAM

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

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

EFFECTIVE MSC-AMR: EXAMPLES FROM TWO COUNTRIES

Through PY1–PY5 in Côte d'Ivoire, MTaPS fully or partially supported 100% (4/4) of capacity level 2, 75% (3/4) of capacity level 3, and 100% (4/4) of capacity level 4 WHO MSC-AMR benchmark actions (2019 version). MTaPS helped the country to establish an MSC mechanism for AMR containment by leveraging government authorizations to institutionalize MSC-AMR bodies. Through decrees drafted with MTaPS' support, the government formalized the OHP to address public health threats, including AMR, and established DTCs in HCFs. Additionally, MTaPS supported the establishment of the AMR TWG through the national MSC Group (MCG), including finalizing the TOR and guidance manual for this body and its subcommittees. Furthermore, MTaPS strengthened the capacity of HCFs to implement IPC and AMS interventions by promoting data-driven decision making and developing at least 15 reference documents to guide interventions and practices.

In **Senegal**, MTaPS fully or partially supported 50% (2/4) of capacity level 2, 75% (3/4) of capacity level 3, 100% (4/4) of capacity level 4, and 40% (2/5) of capacity level 5 WHO MSC-AMR benchmark actions (2019 version). MTaPS helped revitalize the OHP's AMR TWG to facilitate MSC-AMR. To strengthen the country's capacity to respond to public health threats, including AMR, MTaPS helped develop a multisectoral National Action Plan for Health Security (NAPHS), based on the electronic IHR e-SPAR assessment. Furthermore, MTaPS helped operationalize the NAPHS by developing annual and quarterly action plans through multisectoral workshops and meetings. To further facilitate long-term implementation of AMR interventions, MTaPS supported the assessment of the NAP-AMR (2017–2022) implementation to identify achievements, barriers, and opportunities and is currently supporting the finalization of the new NAP-AMR (2024–2028).

IPC IMPROVED AND FUNCTIONAL

In **Tanzania**, MTaPS supported 80% of capacity level 2 and 100% of capacity levels 3, 4, and 5 WHO IPC benchmark actions fully or partially based on the 2019 JEE (version 2) of the tool, advancing the country toward sustainable IPC capacity. MTaPS helped the MOH develop IPC indicators, including for HAI surveillance, and integrate them into the DHIS2, which established a real-time IPC reporting system and institutionalized IPC and HAI M&E. To strengthen and sustain human resource capacity for IPC,

MTaPS assisted the MOH to revise and disseminate national IPC guidelines, review the IPC training curriculum, orient 61 tutors, and establish an IPC e-Learning course for HCPs. MTaPS also supported IPC programs in 10 HCFs through ongoing assessments, training, mentorship, and supportive supervision, which contributed to improvements in WASH, hand hygiene, and HAI reduction, enhancing patient safety and AMR containment.

As of March 2024, MTaPS fully or partially supported the completion of 80% (4/5) of capacity level 2 actions, 100% (6/6) of capacity level 3 actions, 80% (4/5) of capacity level 4 actions, and 60% (3/5) of capacity level 5 actions for IPC in **Kenya** according to the 2019 WHO benchmark tool. MTaPS activities focused on strengthening IPC governance structures at the national and county levels, developing and reviewing reference documents at the national and subnational levels, applying standardized IPC assessment tools, sustaining IPC training through relicensure-linked CPD courses delivered through professional bodies, and using CQI techniques to implement and monitor IPC/WASH interventions in focus counties and HCFs.

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED: EXAMPLES FROM TWO COUNTRIES

In **Nigeria**, MTaPS fully or partially supported 100% (4/4) of capacity level 2, 50% (3/6) of capacity level 3, and 29% (2/7) of capacity level 4 WHO AMS benchmark actions (2019 version). MTaPS supported the AMR TWG to develop a national One Health AMS policy and strategy that provides a framework for long-term implementation of AMS interventions across human and animal health sectors. To facilitate standardized monitoring and evaluation of AMS, MTaPS helped the AWaRe TWG to apply WHO AWaRe categorization to antibiotics and to integrate them into the NEML. At the state level, MTaPS supported AMS programs in 3 HCFs in Enugu State and 4 HCFs in Kebbi State through assessments, training, mentorship, and supportive supervision overseen by state AMS/IPC hybrid committees. Additionally, laboratories in Enugu and Federal Medical Center Birnin-Kebbi began developing hospital antibiograms to guide empirical antibiotic prescription.

In **Burkina Faso**, MTaPS fully or partially supported 50% (2/4) of capacity level 2, 67% (4/6) of capacity level 3, and 14% (1/7) of capacity level 4 WHO AMS benchmark actions (2019 version). MTaPS has been instrumental in strengthening the regulation of antimicrobial use in the human and animal health sectors. Collaborating with the FAO and other partners, MTaPS supported the DGSV to draft and disseminate antimicrobial use guidelines and a ministerial order regulating antimicrobial use in the animal sector. MTaPS supported the General Directorate of Access to Health Products (*Direction Général de l'Accès aux Produits de Santé*), Directorate of Hospital Pharmacy (DPH), and the *Direction de l'Information Pharmaceutique et de l'Usage Rationnel des Produits de Santé* in implementing AMS programs in 10 MTaPS-supported HCFs, including assessments, training, mentorship, and supervision. Additionally, MTaPS worked with the DPH to audit antibiotic use in 3 regional hospitals to identify gaps for targeted actions, including antimicrobial use policies and standardized guidance. MTaPS' capacity-strengthening initiatives, such as training and mentorship, have helped create a pool of AMS experts and trainers. These experts, along with a developed trainers' guide, are aiding in the sustainability of AMS training.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

GLOBAL THOUGHT LEADERSHIP

This quarter, MTaPS presented six abstracts at the Global Health Security Conference in Sydney, Australia, from June 18 to 22, 2024, including three oral presentations, two poster presentations, and one skill-building workshop, encompassing MSC-AMR, IPC, and AMS. Additionally, one abstract on AMS was presented at the 34th European Congress of Clinical Microbiology and Infectious Diseases in Barcelona, Spain, from April 27 to 30, 2024. Three abstracts related to MTaPS/Kenya's GHSA work (one each on MSC, IPC, and AMS) were presented at the 4th International One Health Conference in Nairobi from April 24 to 26, 2024. MTaPS also published seven technical briefs highlighting IPC and AMS best practices and experiences.

EFFECTIVE MSC-AMR

Strengthening MSC governance structures and functions:

In **Burkina Faso**, MTaPS supported the Directorate of Population Health Protection (DPSP) in facilitating a five-day workshop to conduct a self-assessment on IHR implementation using the 2023 version of the WHO benchmarks tool, to identify gaps, and to develop actionable recommendations, which showcased its enhanced capacity for self-evaluation.

Capacity building for implementing AMR containment activities:

MTaPS supported the University of Buea in **Cameroon** to assess the functionality of its e-Learning platform for AMR training and found it accessible and user-friendly but identified some gaps, particularly low awareness among potential users. Subsequently, MTaPS supported an awareness event to promote the platform, reaching 107 (56 female) students and lecturers. The functional platform is a critical step in sustaining AMR training. In **Côte d'Ivoire**, MTaPS supported the IPC TWG to launch an e-Learning platform for IPC and AMS that will facilitate long-term training of HCWs. MTaPS also supported the first online training session for 150 HCWs from supported facilities. Of these, 54 HCWs completed the AMS course and 94 completed the IPC course and earned diplomas. MTaPS also supported initiatives in the **DRC** that identified the Faculty of Pharmaceutical Sciences of the University of Kinshasa as the most appropriate host for the AMR e-Learning platform. The faculty will now expedite the setup of host servers, marking a crucial milestone in sustaining AMR training efforts.

Holding multisectoral meetings or activities:

In **Côte d'Ivoire**, MTaPS supported the multisectoral technical committee 5 (MTC5) to lead a meeting of 20 participants (7 female) to review the DTC supervision report that identified gaps and recommended actions to enhance DTC capacities. Additionally, with MTaPS assistance, multisectoral technical committee 4 (MTC4) led a quarterly meeting for 11 participants to monitor IPC implementation over the past two quarters. These MTC4- and MTC5-led meetings show enhanced capacities in monitoring IPC and AMS, respectively. MTaPS **DRC** supported a meeting by the National Pharmaceutical Regulatory Authority (ACOREP) to validate the data collected during the annual Tripartite AMR Country Self-Assessment Survey (TrACSS). In **Mali**, MTaPS supported Kati Hospital's IPC committee in celebrating Global Hand Hygiene Day to raise awareness of the importance of hand hygiene. The program also supplied informational materials and supplies for hand hygiene. The event was attended by 143 people (73 female), including government officials. In a meeting organized and led by the

MOH in **Tanzania**, MTaPS provided updates on AMS implementation in supported facilities. Additionally, MTaPS attended the 27th MCC meeting, where it presented the program's updates for the past year, and the M&E framework drafted by MTaPS support was presented and discussed. The framework will be further improved based on the meeting discussions and recommendations.

Drafting or updating multisectoral policies, plans, or guidelines:

MTaPS supported the ACOREP in **DRC** to review the NAP-AMR (2018–2023) and used the findings to guide the drafting of the new NAP-AMR (2024–2028) and its M&E framework. This was during a 10-day workshop that brought together 22 participants (4 female). In **Kenya**, MTaPS collaborated to help validate the Murang'a CASIC work plan (2024–2026), while Kiambu and Kilifi CASICs reviewed their respective work plans, providing a framework for AMR containment interventions at the subnational level. MTaPS conducted WHO costing and budgeting tool training for officials in Nairobi, Kiambu, and Kilifi Counties to strengthen their capacity to cost out, allocate, and use resources well. Furthermore, MTaPS supported the PPB in piloting the antimicrobial consumption tool among stakeholders such as importers and local manufacturers, wholesalers/distributers, health facilities, and community pharmacies. This is a critical step in institutionalizing antimicrobial consumption surveillance in the country. In **Nigeria**, the new NAP-AMR (2024–2028) was finalized and validated, and it is now awaiting launch.

IPC IMPROVED AND FUNCTIONAL

Strengthening facility IPC governance structures and functions:

In **Côte d'Ivoire**, MTaPS supported the MTC4 to conduct a repeat IPCAF-Minimum Requirement assessment in the 20 targeted HCFs, findings of the assessment found improvements in all HCFs. Results from the repeat assessments were used to refine the facilities' IPC CQI plans, demonstrating the enhanced capacity of HCFs for monitoring IPC and utilizing data for decision making. Baseline IPC assessments to identify weaknesses and intervention priorities were conducted for HCFs in **Kenya** in the new counties of Kiambu and Nairobi. In **Mali**, MTaPS supported the DGSHP to lead the WASH IPC Task Force coordination meeting with the goal to review results from the recent national IPCAT2 assessment and recommend priority interventions to improve performance. Additionally, MTaPS also supported the DGSHP to monitor the implementation of IPC CQI plans in 16 supported HCFs through a virtual review meeting. MTaPS **Nigeria** mentored 2 MTaPS-supported state IPC focal persons (one in each state) to support state-level governance and to sustain IPC monitoring at the HCFs. MTaPS **Senegal** aided 2 of its supported facilities in conducting IPCAF assessments and used the results to update their improvement plans. In **Tanzania**, MTaPS supported the MOH to follow up on implementation of the IPC M&E framework at the 10 MTaPS-supported facilities and other HCFs focusing on quality data reporting into the DHIS2.

Developing and implementing IPC policy and guidance documents:

MTaPS supported the Directorate for the Fight against Disease, Epidemics, and Pandemics in **Cameroon** to organize a 3-day workshop for 22 MOH staff to revise and validate data collection tools for HAI surveillance. MTaPS **Kenya** helped initiate a meeting to draft wound management guidelines and disseminate the National IPC Guidelines, HAI Surveillance Guidelines, and the National Guidelines on Safe Management of Health Care Waste in MTaPS-supported counties and HCFs.

Developing individual and local training capacities:

IPC experts and trainers in **Kenya**, established through previous MTaPS-supported initiatives, trained 35 members (26 female) of IPC committees from Mater Misericordiae and Ruiru Level 4 hospitals in Nairobi and Kiambu Counties. The training addressed IPC capacity gaps identified in the IPC baseline assessment. The MTaPS **Mali** team oriented the USAID-funded Keneya Sinsi Wale project staff on the structures to implement IPC programs in Mali and the existing e-Learning platforms to transfer capacity and sustain IPC implementation. In **Nigeria,** MTaPS finalized the manuscript for the HAI surveillance systematic review and meta-analysis in the country, which identified areas to strengthen HAI surveillance. In **Senegal**, MTaPS supported level 3 Hôpital Général Idrissa Pouye (HOGIP), Hôpital Général Fann, and Hôpital Général Abass Ndao to collect and analyze data on HAI, surgical site infection, and biomedical waste management and to write their first research articles for scientific publication.

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Developing and implementing AMS policies, plans, and guidance documents, including AWaRe classification:

MTaPS **Cameroon** supported two workshops to revise and validate the national STGs for common bacterial infections. In **Nigeria**, MTaPS supported the Federal Ministry of Health and the NEML Committee to finalize the revised NEML, which incorporated AWaRe categorization of antibiotics.

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

MTaPS supported the DPH in **Burkina Faso** to conduct a point prevalence survey on antibiotic use at the *Centre Hospitalier Régional* (CHR) of Banfora. The results and recommendations were shared with the hospital DTC to take action to improve antimicrobial use. In **Côte d'Ivoire**, MTaPS supported preparatory meetings for the upcoming point prevalence survey on antibiotic use. So far, the tool for selection of assessors and training materials have been finalized with MTaPS support. The MTaPS **Kenya** team helped conduct baseline AMS assessments of two HCFs in the newly added counties of Kiambu and Nairobi to inform interventions.

Strengthening individual and local capacity:

In **Kenya**, MTaPS held initiation meetings with Mater Misericordiae Hospital (Nairobi) management to develop a road map outlining AMS interventions to be implemented in the additional HCFs. Later, MTaPS helped revitalize and train the two supported facilities' MTCs in the new counties of Kiambu and Nairobi.

BEST PRACTICES/LESSONS LEARNED

- Integrating AMR topics into existing e-Learning platforms is more cost-effective than creating new platforms, offering benefits such as leveraging existing user buy-in and availability and accessibility and functionality of the existing platform. This approach enabled over 140 participants in Côte d'Ivoire to enroll in and complete AMR diploma courses in a single quarter, thanks to the existing platform's pre-established systems and functionality.
- There is a need for countries to expand global awareness initiatives, such as World Hand Hygiene Day and World AMR Awareness Week, from central to subnational and grassroots levels to enhance their impact on daily AMR and IPC practices. Subnational entities can address local issues,

creating a multiplier effect by reaching more people cumulatively. For instance, in Mali, celebrating the World Hand Hygiene Day at the regional level reached 143 people involved in AMR containment in just one region.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

	Activity and Description
Global	▪ Finalize and submit three draft manuscripts for peer review and publication. ▪ Support countries in PY7 work planning
MSC	▪ Organize meetings to evaluate progress of NAP-AMR implementation (Cameroon [CM]) ▪ Continue to strengthen the e-Learning platforms, mainly by finalizing them and increasing their publicity and enrollment (Democratic Republic of the Congo [CD], CM) ▪ Transfer oversight of facility activities to national TWGs (CD) ▪ Launch subnational activity work plans (Kenya [KE]) ▪ Finalize and launch the AMR mobile app (KE) ▪ Conduct targeted webinars and sensitization sessions (KE) ▪ Launch the NAP-AMR (Nigeria [NG]) ▪ Organize knowledge-exchange workshops (NG) ▪ Hold an end-of-project event (Tanzania [TZ])
IPC	▪ Collaborate with national counterparts to conduct facility supervision (CM, Côte d'Ivoire [CI], KE, Mali [ML], NG) ▪ Support national stakeholders to finalize, launch, and disseminate the SOPs on wound management (KE)
AMS	▪ Support the dissemination of STGs (CM) ▪ Collaborate to conduct facility supervision (CM, CI, KE, NG) ▪ Support point prevalence surveys in MTaPS-supported facilities (CI) ▪ Help finalize STGs (CD) ▪ Support to finalize and launch the antimicrobial consumption tool (KE) ▪ Support to finalize national AMS plan (CD) ▪ Coordinate a validation workshop for AMS modules and mentorship toolkit (NG)

B. COVID-19

COVID-19 RESPONSE AND VACCINE INTRODUCTION

In May 2023, WHO declared that COVID-19 no longer represented a global health emergency. Most MTaPS countries have completed the activities related to COVID-19 response and support for vaccinations. The governments are looking into health system improvements based on the innovations and lessons from the pandemic response and building on the OHP. The countries that completed and closed COVID-19 activities before start of Quarter 2 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 3 of PY6. In these countries, MTaPS supports the integration of COVID-19 experiences into national pandemic preparedness programs, supports national medicines regulatory authorities to attain higher maturity levels, and enhances PV systems for vaccine safety, active safety monitoring, and investigation of reported adverse events.

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

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

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

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

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

CUMULATIVE PERFORMANCE TO DATE: KEY HIGHLIGHTS FROM THE COUNTRIES THAT COMPLETED ACTIVITIES BEFORE THE START OF YEAR 6/QUARTER 3

In **Bangladesh:**

- More than 5,000 HCWs from more than 1,200 HFs learned how to protect themselves and patients and to mitigate the spread of COVID-19 through IPC and WASH training.
- MTaPS assisted the government with the development and deployment of a COVID-19 vaccine LMIS (vLMIS) to manage COVID-19 vaccine inventory and distribution. Uninterrupted access to vaccines

ensured 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 reports from the COVID-19 online AEFI reporting system generated around 18 regulatory recommendations, such as a 30-minute post-vaccination waiting period and pre-vaccination blood pressure and diabetes screening at the vaccination sites to prevent or monitor adverse events. The COVID-19 vaccine PV system provided crucial information to reduce vaccine-related complications and increase public trust. As a result, the national vaccination coverage rate soared to over 82%.

In **Burkina Faso:**

- During the initial pandemic response, MTaPS and the MOH focused on rapid COVID-19 IPC and waste management training for 888 HCWs; updating and disseminating SOPs, training materials, and informational IPC and waste management posters contributed to mitigation of COVID-19 transmission and improved pandemic response in the future. The development of related e-Learning materials enabled remote learning and future pandemic preparedness as well.
- COVID-19 vaccination was successfully rolled out with MTaPS supporting vaccine deployment planning (85 microplans revised) and training of 585 vaccination agents in vaccine administration and AEFI reporting and management.

In **Cameroon**:

- Just-in-time training of 1,288 health workers 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 (70% of supported facilities were in compliance).
- COVID-19 vaccination mass campaign and COVID-19 vaccination in hard-to-reach areas organized in Center, Littoral, and West regions to increase vaccination coverage with 683,589 doses administered.
- 140 health actors from 37 private and faith-based private HFs trained on vaccination practices, including COVID-19 vaccination administration, to increase COVID-19 vaccination service provision.

In **Ethiopia:**

- National Preparedness and Response Plan and 24 guidelines and SOPs for COVID-19 developed to improve country preparedness and response at the national and HF levels.
- To help hospitals improve supply of hand hygiene products to combat the spread of COVID-19 infection, MTaPS developed a local solution to produce alcohol-based hand rubs and eliminate the shortages in the supply of this crucial IPC product.
- In collaboration with the Ethiopian Public Health Institute (EPHI), MTaPS developed and rolled out COVID-19 IPC training materials for HCWs. Using these materials, 447 trainers were trained on IPC for COVID-19. These trainers went on to train nearly 2,500 health professionals working in 122 isolation, quarantine, and treatment facilities.

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, preventing shortages and overstocking.
- MOPH-developed guidelines on laboratory data management and integration into 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. MTaPS directly trained 289 (237 male, 52 female) master trainers and HCWs from 41 HFs at the district level on implementation of and monitoring compliance with the IPC guidelines, including for cleaners, ambulance drivers, and morgue attendants.
- Enhanced waste management systems implemented nationwide, reducing the risk of infection transmission and ensuring safer handling and disposal of COVID-19–related waste, 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 the training of 182 HCWs on the use of AEFI emergency kits.

In **Mozambique:**
- More than 6,600 HCWs received training on COVID-19-related IPC and WASH, and COVID-19 e-Learning modules were developed to support ongoing education, skill enhancement, and preparedness to effectively manage and mitigate the spread of COVID-19.
- 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 (69 male, 61 female) in Maputo City and Maputo Province on COVID-19 vaccination–related IPC and waste management, thus enhancing the safety and efficiency of the national vaccination campaign.

In **Nigeria:**
- Comprehensive mechanism for involving private community pharmacies and other private HCPs 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 District Health Information Software (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:**

- Tracking system for mechanical ventilators and medical devices from hospitals established and transitioned to DOH Supply Chain Management Service, which will monitor the equipment and devices annually.
- COVID-19 vaccine management integrated into eLMIS to promote logistics data consistency and COVID-19 vaccine supply chain efficiency.
- More than 15,600 learners completed COVID-19-related IPC, HCWM, and emergency supply chain courses developed by MTaPS through the DOH Academy's e-Learning 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 **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 HFs 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:**

- Improved compliance with COVID-19 IPC standards among HCWs, enhancing the safety of both staff and patients during the pandemic through 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 use of the SOPs to improve compliance and safe provision of services.
- Trained 1,022 HCWs, including 94 regional and council health management team specialists, in COVID-19 vaccine PV.
- 910 COVID-19 vaccine AEFIs (including 6 severe cases) reported to the Tanzania Medicines and Medical Devices Authority (TMDA) with MTaPS' support (September 2022–July 2023) and facilitated TMDA's follow-up response and helping to assure safety and trust in COVID vaccines.
- The AEFI reporting system was enhanced with COVID-19 support to address the immediate needs of the COVID-19 vaccination program, but it was subsequently leveraged for reporting AEFI from other vaccines and ADEs, which has improved the safety of pharmaceutical services.

In **Uganda:**

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

QUARTER 3/YEAR 6 HIGHLIGHTS FROM THE MTAPS COUNTRIES THAT CONTINUED TO IMPLEMENT ACTIVITIES THIS QUARTER

Côte d'Ivoire carried out its second JEE of the IHR's capacities in December 2023 that revealed limited capacity to prepare for and respond to public health risks. To address these limited capabilities, Côte d'Ivoire initiated the revision of the National Health Security Plan (PANSS 2024–2028). MTaPS, in collaboration with WHO, provided technical and financial support to conduct a national workshop attended by 56 participants from the human, animal, and environmental sectors, representing the directorates and departments of the various ministries involved in health security, to assess and prioritize the strategic activities, and draft the PANSS 2024–2028. The participants used the WHO Strategic Toolkit for Assessing Risks (WHO-STAR) to identify and map health risks at the human-environment-animal interface, and defined multisectoral interventions to enhance emergency preparedness. MTaPS also continued to provide technical support to the OHP with three deliverables, including the annual 2024 operational action plan of the OHP, the report of the monitoring committee meeting, and the OH strategic plan.

In **Kenya**, USAID MTaPS supported PPB to implement the enhancements of the Pharmacovigilance Electronic Reporting System and the Clinical Trials Registry and enhance national human resource capacities in PV, expanding them to the county level. In Kirinyaga and Tharaka Nithi Counties 59 HCWs (29 male, 30 female) were trained on the investigation of serious ADRs. In addition, MTaPS supported PPB to convene a virtual engagement of other PV stakeholders (including HCWs, public health programs, and marketing authorization holders); a total of 1,030 participants were trained (569 male, 461 female) through collaboration with the Pharmaceutical Society of Kenya (PSK).

MTaPS also continued to assist PPB on its progression to the GBT ML3 status and participated in regular biweekly review meetings with USAID, PQM+, Afya Ugavi, and PPB. In addition, USAID MTaPS supported PPB to convene a ML3 stakeholders meeting on June 26, 2024. More than 40 participants (24 physical and more than 16 online) representing over 8 institutions, donors, and implementing partners were in attendance to review the status of implementation of ML3 Institutional Development Plans (IDPs), identify any remaining weaknesses and gaps, and develop implementation matrix/action plan for the pending IDPs.

In **Rwanda**, MTaPS continued to strengthen clinical trials compliance by conducting a training from June 24 to 27, 2024, for nine (six male, three female) Rwanda FDA clinical trial staff. This was initiated as a response to a recent WHO GBT assessment conducted in April 2024 for Rwanda FDA's journey to ML3. In addition, three safety reports—a development safety update report (DSUR), PSURs, and an evaluation form for investigational brochure templates were developed for Rwanda FDA.

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

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

Indicator and Disaggregation		Q3 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	1,120	12,817
Sex	Male	620	6,866
	Female	500	5,759
	Unknown sex	0	192
CV.1.3–4 Number of health workers who are remunerated by the US Government (USG) to support workload required for COVID-19 vaccine delivery in the reporting period			
	Number of people remunerated	351	8,488
Cadre	Clinical	174	1,047
	Community/law	0	271
	Data management	30	1,882
	Supervision and logistics	147	5,288
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	16	9,406
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	4	153

[4] The countries that implemented COVID activities during PY6 Quarter 3 were Côte d'Ivoire, Madagascar, Kenya, and Rwanda.

COVID-19 IMMUNIZATION COSTING

OVERVIEW

LMICs have been facing an incredibly challenging vaccine rollout and COVID-19 vaccine delivery, and the cost to deliver these vaccines is highly uncertain. According to WHO, as of June 2023, just 37% of Africa's population had completed their primary vaccination series, compared with a coverage of 70% at the global level.[5]

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

There are some resources, such as tools and guidance developed by WHO and its partners, 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

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.

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

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

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

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

Global surveys

Global estimates require assumptions, which would benefit from in-country intelligence. MTaPS conducted online surveys of health experts working in each of its countries to gather real-time COVID-19 vaccine delivery data, including human resources, types of delivery sites/methods, availability of supplies, capacity of cold chain, implementation of demand generation campaigns, and integration of vaccine services into the health systems. Two surveys, completed in November 2021 and May 2022, identified evolving trends in vaccine delivery at the country level. MTaPS conducted a third online survey of health experts working in each of its countries to gather real-time COVID-19 vaccine delivery data throughout the changing dynamics of the pandemic. 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 study and the global surveys were presented at the Immunization Economics Special Interest Group (SIG) Pre-Congress Session of the International Health Economics Association (IHEA) Congress in Cape Town in July 2023 and to USAID in September 2023. The findings of two rounds of global surveys were published by the journal *Vaccine* in September 2023.

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

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

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

Findings from the costing work in Malawi is under final review and will be submitted in July 2024.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Submit the results of the Malawi costing study to journal.	July 2024
Complete remaining COVID-19 activities in Côte d'Ivoire, Kenya, and Rwanda	September 2024

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

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE INCREASED

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

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

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

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

Following the PY2 mapping of challenges in registering MNCH medical products in 9 countries, MTaPS supported Mozambique's regulatory authority, ANARME, IP, to build capacity of 13 assessors from ANARME, IP in the assessment of bioequivalence studies for generic oral medicines, including MNCH medicines. MTaPS also helped ANARME, IP to increase the visibility and transparency of registration procedures through a workshop with 70 manufacturers, importers, and distributors. In PY4, MTaPS held a regional knowledge exchange with regulators from SADC member states and selected manufacturers of MNCH medicines on the optimization and prioritization of MNCH medical product registration. A follow-up ZAZIBONA special session on joint review of MNCH medicines was held in Tanzania in October 2023, facilitated by MTaPS, WHO, and the ZAZIBONA coordinators. Four maternal health products (misoprostol tabs, tranexamic acid injection, magnesium sulphate injection, and calcium gluconate injection) were reviewed by the group representing 15 SADC countries, and outstanding questions were prepared for the manufacturers after review of the technical files. MTaPS has developed an advocacy document for NRAs to prioritize the registration of MNCH medicines in their countries.

Additionally, to strengthen the regulation of MNCH medical devices and ensure their quality, safety, and effectiveness, MTaPS supported the AMDF to develop a guideline on specific considerations for regulating MNCH medical devices, which was disseminated across the continent through a virtual orientation hosted by AMDF. 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 medical device assessors from 10 African countries. The participants appreciated the opportunity to review technical files of 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 regulation of medical devices, with a focus on MNCH devices to position them 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 of two TMDA staff to the Saudi Food and Drug Authority, 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 both build their capacity to mentor and build the capacity of the visiting regulators.

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

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

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

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

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

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

practices in subnational procurement of MNCH commodities in the public sector (a summary was also included in the 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 countries to estimate their needs and facilitate completion of the commodities gap analysis table required for GF funding requests. MTaPS participated in the mock Technical Review Panel for malaria in Dakar and Ethiopia, engaging with countries submitting funding requests in windows 2 and 3. MTaPS worked with seven countries (Angola, Ethiopia, Gambia, Kenya, Liberia, Madagascar, and Rwanda) to consider including nonmalaria iCCM commodities in their GF funding request, and three countries 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 a technical resource document for the quality assurance of medical oxygen from the source throughout the distribution chain, to delivery to the patient, through a consultative process. The document was disseminated in a well-attended virtual event 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 of medical oxygen can be modified and/or improved. The workshop resulted in a draft QA framework for medical oxygen systems in Rwanda.

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

In PY1, MTaPS updated a set of job aids and dispensing envelopes for HCPs and caregivers to promote adherence to correct treatment protocols for amoxicillin dispersible tablets (WHO-recommended first-line treatment for pneumonia in children under 5 and, in combination with gentamicin, for possible serious bacterial infections in newborns). Following preparations in PY3, MTaPS, in collaboration with UNICEF, USAID, GHSC-PSM, and PQM+, held a series of consultative meetings in PY4 with wide stakeholder engagement to address bottlenecks in access to and appropriate use of amoxicillin and gentamicin. Key points are summarized in a call-to-action paper that provides actionable solutions for countries, and it 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.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

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

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

Building capacity for regulating medical devices in a region, with a focus on MNCH medical devices: Following the exchange visit of two assessors from TMDA to the Saudi Arabia FDA in February, MTaPS worked with the TMDA representatives to document their key learnings and action points. MTaPS is also working with the TMDA to finalize the report of 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 visiting regulators. The report is under review by the leadership of the TMDA medical devices department.

Supporting the streamlining of registration of MNCH medicines at the continental level: MTaPS documented the side meeting on prioritizing registration of MNCH medicines, cohosted by AUDA-NEPAD and MTaPS, at the 6th Biennial Scientific Conference on Medical Products Regulation in Africa (SCOMRA) in Egypt in December 2023 and finalized the document to help NRAs advocate for prioritization of registration of MNCH medicines, considering feedback from the SCOMRA side event meeting. Both have been shared with AUDA-NEPAD, and MTaPS is following up to determine the next steps in dissemination and action and whether follow-up is needed with the Africa CDC on the development of a priority list for registration on the continent.

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 continued discussions with the Clinton Health Access Initiative and GHSC-PSM on developing a caffeine implementation guide and is following up regarding country learning for the guide.

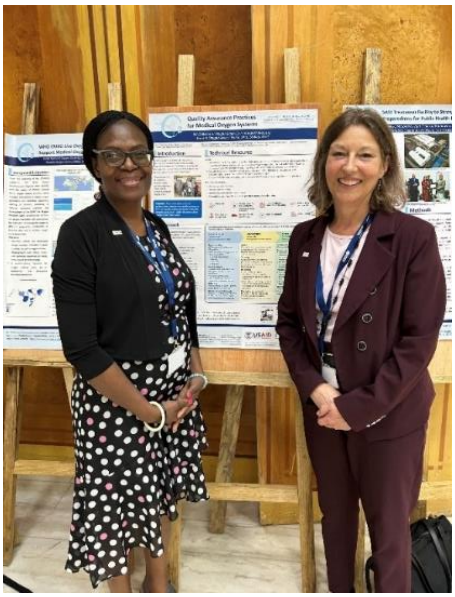
Supporting countries in defining actions to improve uptake of amoxicillin and gentamicin: MTaPS held conversations with USAID, implementing partners, and the MOH in Madagascar about the potential to support the country in raising the profile of access to and use of amoxicillin. The team held a preliminary call with partners to discuss the agenda and other logistics for an in-country workshop. MTaPS is working with in-country partners to begin compiling data for a situation analysis.

Promoting improvement in QA of oxygen: Kate Kikule and Jane Briggs from MTaPS attended the WHO meeting "National Oxygen Scale-Up Framework: Road to Oxygen Access" in Dakar, Senegal in May. During the meeting, MTaPS presented a poster on the QA resource document and the work supported in Rwanda. MTaPS also communicated the importance of QA for oxygen and the MTaPS technical resource during plenary and breakout discussions. Kate and Jane held productive conversations with partners and shared the resource for uptake in other countries. The technical resource has already been used in Pakistan to develop national guidelines on medical oxygen, demonstrating the opportunity for countries to use it and develop strategies or guidelines.

MTaPS also organized a lunchtime huddle on oxygen for MNCH, as there are widespread challenges in access to oxygen particularly for newborns and children. Participants proposed that a global advocacy statement be produced around the need to focus on resourcing existing investments correctly so that oxygen is accessible for babies, children, and mothers.

Additionally, MTaPS has been invited to participate in the development of a WHO-led document on regulatory considerations for medical oxygen.

Jane Briggs and Kate Kikule of MTaPS with Leah Greenspan and Melissa Bochnowicz of USAID Washington in Dakar, Senegal. Photo credit: MTaPS


Kate Kikule and Jane Briggs presenting the MTaPS poster on oxygen quality assurance in Dakar, Senegal. Photo credit: MTaPS

BEST PRACTICES/LESSONS LEARNED

None this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Support TMDA to finalize the report of the twinning visit and share with USAID	July 2024
Disseminate the advocacy document on the prioritization of registration of MNCH medical products	September 2024
Conduct the in-country workshop on amoxicillin in Madagascar and compile data for a situation analysis	August 2024
Hold follow-up conversations with partners about the QA of oxygen, including the possibility of holding mini-webinars on the QA resource document for interested countries	September 2024
Develop the caffeine implementation guide	December 2024

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

OVERVIEW

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

MTaPS' strategic approach is based on the understanding that implementing a systems strengthening approach in a country will lead to better commodity security. If MTaPS effectively engages with the various entities in a country—including the private sector, providers, and other community stakeholders—through targeted advocacy and evidence-based 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 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 in the provision of FP and essential medicines and mitigates risks associated with the engagement of private-sector pharmacies. MTaPS developed country case reports from three high-income countries (Spain, Sweden, and the United Kingdom) and three LMICs (Namibia, Ghana, and South Africa) 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 FOSTER 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 last-mile people of childbearing potential. This effectiveness evaluation was paired with a concurrent implementation evaluation, making it a Type 2 Hybrid Design. The evaluation had three key objectives:

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

For the intervention, we developed the application on OpenSRP for the integrated management of FP services and commodities among CBDs. The tool included functionalities for client identification and registration, service provision, FP method selection and counseling, tracking dispensing and unmet need, scheduling of follow-ups, client referrals, stock management, and reporting. We trained 104 CBDs from the intervention arm of the study—divided into four cohorts—in two-day sessions and provided each CBD with a configured tablet and accessories. During the six-month post-intervention period, the team supported the CBDs through monthly supervisory visits in coordination with their affiliated 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. An initial analysis was conducted.

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

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

Kaduna State, 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 and efficiency of engagement of best practice 3PL and lead logistics service providers for outsourcing the distribution of health commodities, including FP products, in Kaduna State. Although the documents focus on Kaduna State, the general approaches can easily be modified to be used in any state for any single element of the supply chain or the entire end-to-end supply chain operations. In addition, MTaPS facilitated two face-to-face advocacy and learning workshops in Nasarawa, Nigeria, involving 38 (10 female and 28 male) stakeholders from NPSCMP, the MOH, and state and development partners. The workshops were used to create awareness, strengthen local capacity, and advocate for more effective and efficient leveraging

of private-sector capabilities to support public-sector health commodity logistics management. The resources developed for national- and state-level use were also validated during the workshops. They are available online and were shared with Nigerian government counterparts and Africa Resource Centre Nigeria.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

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

After the initial analysis and drafting of the endline report, MTaPS received feedback from the USAID CSL team and submitted a revised version to USAID in June. Based on the feedback, the team redid the analysis to include a set of linear regression models to estimate unadjusted and adjusted effects of the intervention on primary and intermediary outcomes. 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 had 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 level 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 record keeping and workflow efficiency. The MTaPS team also began drafting a manuscript on the evaluation design and findings and is developing abstracts on the activity for target conferences.

ACTIVITY 2: DISABILITY INCLUSION IN THE HEALTH SYPPLY CHAIN WORKFORCE

MTaPS responded to the USAID CSL team's feedback on the draft manuscript for the study conducted to understand the status of disability inclusion in the health supply chain labor market in LMICs. The MTaPS team resubmitted the manuscript to USAID in May for review before finalization and submission for peer review.

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

MTaPS created generic versions of the service specifications and the performance management plan originally developed specifically for the Kaduna State Health Supply Management Agency. The existence of generic versions of the two resources will greatly facilitate their adaptation by other states and countries. To facilitate the dissemination of all of the resources developed during both phases of this activity, MTaPS designed and developed a webpage dedicated to the activity. This webpage provides a summary of the processes followed, milestones achieved, links for resources, and recommendations for future considerations. Furthermore, MTaPS collaborated with USAID's CSL team to present at a USAID CSL technical meeting (Topical Tuesday) on April 9, 2024, sharing the objectives, achievements, and challenges of this activity with the wider USAID CSL team. MTaPS also shared the resources developed

through this activity with Africa Resource Centre Nigeria and the NPSCMP; the latter disseminated the resources to the state health supply chain management teams. This activity is now complete.

BEST PRACTICES/LESSONS LEARNED

- OpenSRP may be a useful strategy to strengthen the FP supply chain and clinical service delivery in rural areas. Further, given that CBDs hold volunteer functions that are critical in the health system, digital applications like OpenSRP appear feasible and assistive and could be a motivating factor for CBDs.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
OpenSRP: Finalize endline report	July 2024
OpenSRP: Submit draft manuscript on evaluation design and findings to USAID for review	August 2024
Disability inclusion in the health supply chain workforce: Finalize manuscript for submission	July 2024

E. OFFICE OF HEALTH SYSTEMS, CROSS BUREAU

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

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

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

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

MTaPS has advanced the global PSS learning agenda through several efforts, including launching the PSS 101 and Good Governance courses on the USAID-supported GHeL platform. Through the GHeL, the program issued 8,656 certificates between October 2022 and June 2024 to participants across the globe for completing PSS 101 (1,530 certificates); Good Governance in the Management of Medicines (1,003 certificates); Antimicrobial Resistance (Part 1) (4,134 certificates); and Antimicrobial Resistance (Part 2) (1,989 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 170 global conference abstracts and has published 24 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 successfully launch a web-based platform for improving PV systems in the region. The platform will allow member states to share PV data and support the strengthening of PV systems in the region. MTaPS also completed a case study in Bangladesh to identify gaps in the integration of IPC/WASH critical conditions into the quality of care and quality improvement tools and processes. In PY5, MTaPS developed a chapter entitled "Institutional and Individual Capacity Building in Pharmacovigilance" for inclusion in a book on PV, which is with the publishers.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

ACTIVITY 3.3.1: PSS 101 COURSE

MTaPS finalized and submitted the report on the March 2024 delivery of PSS 101 through USAID University. The feedback received from USAID and the participants will be incorporated into the next delivery. MTaPS also continued to advertise the GHeL PSS 101 course, which saw 126 certificates

earned this quarter. The GHeL Good Governance course saw 61 certificates earned, and the AMR (Part 1) and AMR (Part 2) courses saw 355 and 171 certificates earned, respectively.

MTaPS developed and released two PSS advocacy animations: Why must we urgently strengthen pharmaceutical systems in LMICs? and How do we strengthen pharmaceutical systems to help improve health outcomes? The former highlights key challenges such as substandard and falsified medicines, shortages of medical products, and high out-of-pocket costs. The latter explains the comprehensive approach required to strengthen pharmaceutical systems. It describes the various factors that must be considered in strengthening a pharmaceutical system to ensure appropriate use of safe, effective, quality-assured, and affordable medical products and related services, with the overall goal of improving health outcomes. The animations are available in both English and French, and dissemination is underway.

ACTIVITY 3.3.2: MTAPS CLOSEOUT ACTIVITIES

Sub-activity 3.3.2.1: Journal special issue

The publishing agreement with Taylor & Francis, the publisher of the *Journal of Pharmaceutical Policy and Practice* (JoPPP), was finalized this quarter. Four manuscripts are ready for submission and four others are under development. MTaPS will submit the articles on a rolling basis through September 2024.

Sub-activity 3.3.2.2: Francophone PSS Skills Exchange

MTaPS held the Francophone PSS Skills Exchange April 22–24, 2024, 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 issued certificates to 64 participants who attended all three sessions. The French language PSS resources page is now available on MTaPS' website and includes technical briefs, slide decks, and recordings on each of the nine topics covered during the sessions. The report on the delivery is being finalized.

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

MTaPS held a virtual planning meeting with the Global Fund team in May to discuss holding a virtual technical exchange session.

Sub-activity 3.3.2.4: Global event participation

MTaPS participated in several global conferences this quarter. At the Priorities 2024 Conference May 8–10 in Bangkok, Thailand, MTaPS delivered eight presentations (seven oral, one poster) on HTA. In June in Cape Town, South Africa, MTaPS held a half-day workshop at the SAPICS Conference entitled "How to Systematically Strengthen Pharmaceutical Systems to Support Health Supply Chain Effectiveness". The workshop, which brought together 39 (22 female) supply chain managers and other health systems stakeholders, introduced participants to the concept of PSS and how supply chains fit in the context of pharmaceutical systems. At the Global Health Security Conference in Sydney, Australia, in June, MTaPS organized a skills building workshop and delivered six presentations (three oral, three poster). The workshop provided participants with practical guidance on combating AMR in resource-constrained settings.

Kofi Aboagye-Nyame, MTaPS Program Director, discusses linkages between health supply chains and pharmaceutical systems with participants at the PSS Skills Building Workshop at SAPICS 2024. Photo Credit: Tamara Hafner

MTaPS is preparing to participate in the upcoming International Society of Pharmacovigilance (ISoP) Africa Meeting in Kampala, Uganda, in July, with two oral presentations and five posters. MTaPS also had five abstracts accepted as posters to the ISoP 2024 Annual Meeting in Montreal, Canada, in October. We submitted four abstracts to the PharmaConnect Africa Conference, scheduled for August in Lusaka, Zambia, and we are developing abstracts for the Global Health Supply Chain Summit, planned for November in Lagos, Nigeria.

EXTENDED YEAR 5 ACTIVITIES

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

MTaPS continued to collaborate with various AMRH TCs and health organizations across the continent to improve medical products regulatory processes and advance the harmonization agenda. MTaPS is planning to participate in the upcoming Evaluation of Medicinal Products (EMP) TC meeting in Yaoundé, Cameroon, in August, where the draft of the AMRH continental framework document will be presented. The feedback will be incorporated and the final document presented to the AMRH steering committee at the annual AMRH meeting in Maputo, Mozambique, in November 2024. AMRH has secured funds from the Bill and Melinda Gates Foundation to support a pilot of the reliance mechanism in the EAC and IGAD Regional Economic Communities and from the European Union to support the harmonization agenda.

MTaPS also received feedback from USAID and the AMRH on the strategy to digitize the regulatory information management system (RIMS) and revised the draft accordingly. Jointly with PQM+ and in collaboration with the AMRH Secretariat, MTaPS prepared for a virtual stakeholder workshop April 25, 2024. MTaPS and PQM+ compiled all feedback from participants to ensure that all issues were

addressed in the strategy. Further discussions on the strategy document took place at the AMRH IMS TC meeting May 7, 2024, in Namibia. The AMRH IMS TC expressed interest in the strategy and is looking forward to advocating its uptake among AMRH member countries.

ACTIVITY 3.3.1: MEASURING PSS, INCLUDING ACCESS TO MEDICINE

Website development of PSSInsight.org has been completed by the vendor. The website has been handed over to MTaPS and is undergoing internal technical review and finalization. MTaPS is arranging a demo of the website for USAID. MTaPS also completed the zero draft of the manuscript on the tool development and piloting and is revising it for submission as part of the JoPPP series.

ACTIVITY 3.3.4: PSS LEARNING SERIES WEBINARS

MTaPS held the final two webinars in the PSS Learning Series in April 2024. The third webinar in the series was held April 17, 2024, with 131 participants and focused on *Sustainable Local Manufacturing and Resilient Health Supply Chains: The Critical Role of Strong Regulatory Systems*. The fourth webinar in the series, *Identifying Key Enablers for Digitalization of RIMS,* was held April 18, 2024, and had 93 participants. Overall, the series saw 516 participants across the four webinars (47.3% female), which included 414 unique participants. The team submitted a report on the webinar series to USAID in May 2024.

Throughout the webinar 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. The webinars highlighted the importance of investments in pharmaceutical systems and the need to remember that these investments often require a long timeframe to yield substantive results. The series also emphasized the need to shift from viewing medicines as primarily an input commodity to considering the various structures and processes and their interactions within the broader health system that help ensure access to and appropriate use of quality-assured medicines.

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

MTaPS received ethical approval on May 31, 2024, from the National Institute for Medical Research in Tanzania. The team also completed the list of organizations and sampling for data collection.

Dissemination of the HPHC tool assessment findings in Bangladesh continues to be on hold as MTaPS has been unable to obtain approval from the relevant directorates due to ongoing changes in leadership. MTaPS will be working with USAID Washington and the local Mission in the next quarter to reengage the authorities with the hope of holding the workshop.

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 manuscript has been completed and submitted to JoPPP as part of the PSS series. The corresponding technical report is being finalized.

ACTIVITY 5.4.1: TESTING BEHAVIORAL NUDGES FOR AMS

The full first draft of the manuscript has been completed and internally reviewed. The team revised the draft, which has been submitted to USAID for review.

BEST PRACTICES/LESSONS LEARNED

- The behavioral nudge study showed that behavioral nudges are a feasible and cost-effect approach for producing immediate improvements in antimicrobial prescribing adherence at the facility level. However, prolonged intervention may be necessary to sustain the improvements.
- The NPSU study concluded that it is essential to have a legislative framework that at a minimum identifies one NPSU as responsible for pharmaceutical policy and governance, serving as the steward for the national pharmaceutical system. As such, the recommendation is that NPSUs should at a minimum have four broad sets of functions: pharmaceutical policy and governance, medicine regulation, pharmacy practice regulation, and PSCM.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
PSS 101: Finalize dates for two course deliveries	July 2024
Journal special series: Continue work on articles and submit on rolling basis	July–September 2024
Francophone PSS Skills Exchange: Submit report on delivery	July 2024
Support AUDA-NEPAD in the ongoing creation and operationalization of AMA: Prepare for participation at EMP TC meeting in Yaoundé, Cameroon	July 2024
PSS Insight: Arrange a demo with USAID	July 2024
PSS Insight: Start outlining PSS Insight guide for stakeholders	July 2024
HPHC tool implementation: Carry out data collection in Tanzania	July 2024
NPSUs: Finalize and submit technical report	July 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 in discussions of gender activities and areas of possible collaboration and learning. In addition, the GWG has been used to discuss and get feedback on document development and utility. 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. These gender-specific indicators will be used going forward and will assist the entire program in measuring progress.

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 inputs from the SMT and disseminated to all program staff to assist their gender-inclusive activities into third-year work plans. Last was a presentation entitled "Transforming Health and Pharmaceutical Policies to be Gender Inclusive," given by the MTaPS gender advisor during a biweekly MTaPS staff meeting in August 2020. This presentation gave an overview of what a gender-inclusive policy entails across distinct levels within a health system and why it is a critical element of gender mainstreaming, and it provided context-specific examples of how gender-inclusive policies fit across MTaPS' five program objectives. Each of the above

key activities built on and increased MTaPS' gender capacity and learning within the program as well as integrated MTaPS gender indicators.

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

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

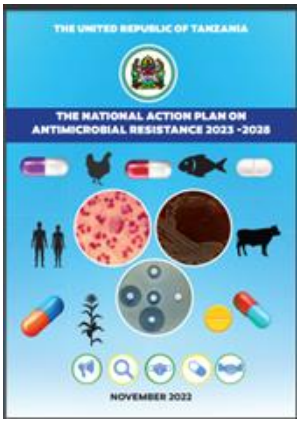
- Lawry LL. Creating sex/gender-responsive health supply chains: COVID-19 reminds us again. https://www.mtapsprogram.org/news-blog/creating-sex-gender-responsive-health-supply-chains-covid-19-reminds-us-again/
- Lawry LL. The importance of being gender responsive for COVID-19 vaccine introduction: build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

To reinforce the necessity of sex and gender integration in PSS, 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.linkedin.com/feed/update/urn:li:activity:6998747695725121536/
- Lawry LL. I bang my head less often: reflections on integrating gender in pharmaceutical systems strengthening. https://www.mtapsprogram.org/news-blog/i-bang-my-head-less-often-now-reflections-on-integrating-gender-in-pharmaceutical-systems-strengthening/?fbclid=IwAR1GHhEdSTaRV4uiY7BOncHx-pVSFRnb3f-aoa94L5wGZKkjn00oCih2bV8

The year consisted of finalizing/publishing technical documents 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

Program Year 6 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.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

Quarter 3 included drafting and editing of quarterly reports and finalization of the end-of-project report for the gender portfolio. The gender advisor worked on closing out the gender portfolio for July 2024.

BEST PRACTICES/LESSONS LEARNED

- MTaPS should expand sex, gender, and PSS module access to all staff and partners to improve understanding of how sex and gender impact PSS.
- Refresher training on sex and gender impact on PSS is valuable.
- Sex and gender are an integral and vital part of PSS to ensure health equity—MTaPS and MSH should continue to keep sex and gender at the forefront of all pharmaceutical projects.
- Gender activities should be tracked by all countries on a centralized spreadsheet to ensure all PSS projects can report gender activities accurately.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Participation in biweekly staff, quarterly technical, and expanded COR meetings	July 2024
PSS Skill 101 participation	2024 (TBD)

4. PROGRESS BY COUNTRY

A. BANGLADESH

FIELD SUPPORT ACTIVITIES

OVERVIEW

The goal of MTaPS in Bangladesh is to strengthen pharmaceutical systems to ensure sustainable access to and appropriate use of safe, efficacious, quality-assured, and affordable medical products and related pharmaceutical services to the population, aligned with the GOB's health objectives and commitment to achieving UHC. MTaPS' overall strategic approach is to support the GOB and its strategic partners in strengthening pharmaceutical services and the 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 capacities—and in PY4 updated its reference prices. The program updated the specifications of the MSR list in PY2 and assisted the MSR List Updating Committee in developing a strategy for regularly reviewing standard reference prices in PY3. In PY4, with TA from MTaPS, the procurement oversight bodies of the MOHFW and DGHS started implementing a paper-based system to monitor procurement performance using standard key performance indicators through quarterly assessments. 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 FP warehouses to ensure uninterrupted availability of FP commodities and maintained a stock-out rate below 1% at SDPs from May 2019 to September 2023, thereby saving financial resources. MTaPS 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. This effort integrated 478 of 484 peripheral stores managed by IPs, previously located outside Upazila Health Complexes facilities, into the Upazila Health Complexes network.

Continuing its support, MTaPS ensured that all 868 TB sites nationwide adopted the e-TB Manager for case management and report generation, significantly bolstering the NTP's capability in TB data management. In PY3, enhancements to e-TB Manager enabled electronic reporting of aDSM 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, facilitating easier analysis and enabling timely decision making.

MTaPS, in collaboration with the NTP, rolled out the eLMIS for TB commodities in all 64 districts and 485 sub-districts (upazilas) countrywide. For improved patient safety, MTaPS supported the evaluation of 4,500+ AE reports received manually and through PViMS, 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 and launched an electronic inspection and licensing system in PY3 in

collaboration with the Better Health in Bangladesh project. In PY4, MTaPS supported the DGDA in achieving the highest GBT score for PV function as documented in the WHO assessment report, developed good PV practices guidelines; and updated the national PV guideline, which was endorsed by the MOHFW 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 assisted with training on the DGDA's strategic plan, followed by dissemination, and implementation of the Regulatory Information Management System (RIMS) for online registration of vaccines and biosimilars and PViMS for online AE reporting. In PY6, the DGDA approved the registration of 18 biosimilar products using the DGDA RIMS. In PY1, MTaPS conducted a situational analysis to identify potential gaps, proposed interventions, and areas of collaboration and support to improve efficiency in resource allocation, utilization of services, and pharmaceutical financing in coordination with the MOHFW and other stakeholders. In PY4, the MOHFW's HEU developed standard processes for pharmaceutical expenditure (PE) tracking and conducted PE tracking for selected MNCH commodities. In PY5, training on PE tracking was conducted for government staff, including the HEU, using customized modules based on existing procedures, and a PE tracking institutionalization plan, including a list of local champions, was developed in Q2 PY6 as part of the National Health Accounts.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED

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

After a significant hiatus caused by the vacant chair position, the quarterly meeting of the Procurement and Logistics Management Cell (PLMC) was convened May 28, 2024, at the Health Services Division (HSD), MOHFW. The meeting was chaired by the recently appointed Additional Secretary (Dev.), HSD. As the chair was a new participant in the meeting, the following points were discussed: PLMC objectives, PLMC revitalization process, the reason the PLMC was nonfunctional, PLMC activities performed so far, and TA provided by MTaPS. The new Additional Secretary was oriented to PLMC roles. It was also highlighted that the linkage between the DGHS Procurement Monitoring and Evaluation Cell (DPMEC) and the PLMC has been established. This linkage will contribute to accelerating procurement processes and minimize the back-and-forth communication between the MOHFW and DGHS to make decisions on procurement packages. The DPMEC will coordinate and provide routine input to procuring entities to sustain the improved procurement functions.

MTaPS facilitated a five-day TOT on "Basic Public Procurement Rules" for 15 DGHS mid-level officers involved in procurement to strengthen the DPMEC, including an overview of public procurement acts (2006) and public procurement rules (2008); how to assess training needs, develop training curriculum, plan and prepare training modules, and craft messages; and basics on mind mapping. The DPMEC will hold monthly meetings to review the procurement status of procuring entities, record meeting minutes with discussed points and follow-up actions, and send performance reports of each procuring entities to the DGHS. TOT participants will train other DGHS officials from the national and sub-national levels, including on-the-job training and technical support.

In collaboration with the DGHS, MTaPS facilitated a three-day training on the electronic government procurement (e-GP)—an online platform used by procuring agencies and procuring entities to carry out procurement activities (https://www.eprocure.gov.bd)—as a step toward sustainability of the platform. The training was attended by 18 participants (4 female, 14 male), including the line director, directors, deputy directors, assistant directors, program managers, deputy program managers, and medical officers from different OPs under the DGHS who are involved in procurement. Sessions covered key aspects of the procurement process, including preparation of the annual procurement plan, contract signing, the e-GP system, procurement management, complaint and appeal, and the role of delegation of financial power in procurement. All procuring entities under the DGHS will carry out procurement activities using the e-GP web portal, and the DPMEC will monitor the procurement activities of these procuring entities. These activities will contribute to the DGHS achieving the government target of completing 100% of procurements through the e-GP by 2026.

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

After successfully implementing the DGHS comprehensive eLMIS at the CMSD in PY5, MTaPS collaborated with the CMSD and the MIS unit of the DGHS to roll out the system in four selected districts. Basic training on the system operation was completed with 66 participants (1 female, 65 male) from 4 DHs, 4 District Reserve Stores, 1 100-bed hospital, 4 Upazila Health Offices, and 20 Upazila Health Complexes. After the training, the HFs started using the system with follow-up visits and on-the-job support from MTaPS. The MIS unit of the DGHS will maintain supervision, monitoring, and regular follow-up to ensure smooth system functioning with technical support. The eLMIS will facilitate the day-to-day tracking of transactions and stock status of health commodities in the facilities, thereby contributing to informed decision making to minimize stock disruption. All developed training sessions, exercises, and user guides on the DGHS comprehensive eLMIS will be provided to the CMSD and MIS unit of DGHS as part of the handover process. MTaPS will continue to offer on-demand on-the-job training to help users become proficient with the eLMIS.

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

The DGFP reached a significant milestone in logistics management by introducing the DGFP eLMIS at the service delivery level. For the first time, the DGFP eLMIS has been extended to seven Maternal and Child Welfare Centers (MCWCs) in the Nilphamari and Gaibandha districts with the approval from the Director General of the DGFP. MTaPS provided TA on the customization of the existing system for MCWCs and facilitated technical sessions on the DGFP eLMIS. All MCWCs have entered initial stock as of April 30, 2024. They receive FP and other health commodities through the system from upazilas (i.e., higher level) and capture data on dispensed quantities regularly using the system. Additionally, all of these HFs prepared the monthly logistics report for May 2024 through the system, enabling upazila-level management to analyze the reports and determine the next supply quantities accurately. MTaPS has been conducting follow-up visits to provide on-the-job training and constructive feedback to DGFP eLMIS users at the upazila level to equip them with the skills to provide technical support to users at the MCWC level without requiring further assistance from MTaPS.

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

MTaPS is providing technical support for the rollout of the eAMS at the National Institute of Cancer Research and Hospital—a designated tertiary-level hospital—through the Hospital Service Management Unit of the DGHS, including asset information being collected, verified, and entered in the system. As of May 2024, 147 assets have been recorded in the system at the hospital, with one repair ticket raised and not yet resolved. Additionally, all DHs have entered 735 assets into the eAMS during this quarter, bringing the total to 10,695 assets available in the system. Since the inception of the eAMS, DHs have raised 356 maintenance tickets, including 7 in this quarter, with 156 resolved so far. On May 8, 2024, MTaPS organized a meeting to review the progress of the eAMS implementation in the National TB Reference Laboratory (NTRL) and Regional TB Reference Laboratories (RTRLs) with NTP HQ officials and USAID representatives. To date, 537 assets from the NTRL and five RTRLs have been entered into the eAMS, with four maintenance tickets raised and one resolved. MTaPS organized an orientation session on the eAMS for system users from NTRL and RTRLs. Following the orientation session, the line director of the TB-Leprosy and AIDS Sexually Transmitted Diseases Programme (ASP) issued an official memo on June 9, 2024, instructing all concerned parties to ensure the use of information from the eAMS, which will facilitate tracking location, status, repair, and maintenance needs of assets in the labs.

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 oriented the quantification and EWS sub-group members working at the TB Central Warehouse on data management using e-TB Manager and the TB eLMIS to facilitate cross-checking of TB patient and stock data against logistics data, which might help to generate accurate and real-time data for quantification and EWS. MTaPS is supporting the NTP in revising the SOPs to guide officials to perform PSM-related activities more efficiently and uniformly.

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

MTaPS is actively engaging with stakeholders and regularly sharing eLearning course usage data to monitor and improve course participation. Data are collected in Excel from the Muktopaath platform and analyzed to identify participants by gender and location, monitor participation and completion rates, and identify related gaps among intended users. Notably, the number of users is increasing (2,648 people obtained certificates as of June 15, 2024) as the courses are open to everyone and not just the target audience from relevant government entities. MTaPS encourages stakeholders to promote these courses within their departments.

OBJECTIVE 2: PHARMACEUTICAL REGULATORY SYSTEMS STRENGTHENED

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

This quarter, the DGDA RIMS received 16 registration applications, including 10 vaccines, from 11 marketing authorization holders (MAHs), with 8 applications approved. In PViMS, 68 AE reports for drugs and vaccines were received and 37 were reviewed. The ADRAC recommended a boxed warning

for atezolizumab (risk of aplastic anemia) and proposed banning halothane (risk of death) to the drug control committee.

The MTaPS Bangladesh team delivers the documentation and source code of the DGDA RIMS, PViMS, and DGDA web portal to DGDA officials as part of the handover ceremony on June 11, 2024, Dhaka, Bangladesh. Photo Credit: Md Kaium, Videographer and Photographer, DGDA

As part of the CAPA plan, the DGDA developed seven COVID-19 vaccine AE case summaries reviewed by the national expert committee and generated three safety recommendations through ADRAC for the identified risk of lenograstim, fluoroquinolones, and proton pump inhibitors use. The DGDA received TA from MTaPS on reviewing eight dossiers for registration and evaluating a risk management plan for HepaVax-B injection and a PSUR for HPVax injection. Five DGDA officials completed a WHO online inspection course under MTaPS' guidance. These initiatives aim to strengthen the DGDA's regulatory system and contribute to achieving WHO GBT ML3. On June 11, 2024, MTaPS Bangladesh handed over the documents and source codes for the DGDA RIMS, PViMS, and DGDA web portal to the DGDA as part of the transition plan.

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 shared with the NTP the SOW for preparing tender documents, criteria for payment, and the contract modality to hire an IT vendor to manage and maintain e-TB Manager and the TB eLMIS after MTaPS closes. On June 9, 2024, MTaPS officially handed over the training manuals, user guidelines, source code, and database scheme of e-TB Manager and the TB eLMIS as part of transition of the systems to the NTP. At the NTP's monitoring and evaluation working group meeting, MTaPS presented the status of e-TB Manager and TB eLMIS upgrades made so far and revisited and agreed on procedures to monitor system operations and analyze data for decision making. This effort strengthened the capacity of NTP supervisors and partners in managing the systems and providing feedback on their functionality and performance.

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

During the handover of eTB Manager, TB eLMIS, DGDA RIMS, PViMS, and DGDA web portal, NTP and DGDA representatives acknowledged receipt of the systems and transition plans and committed to ensuring the resources and structures for their sustainability. MTaPS discussed the planned activities and actions that stakeholders agreed to continue implementing after the program closes. Transition plans for the other MTaPS-developed systems (i.e., eAMS, DGFP eLMIS, DGHS comprehensive eLMIS, STG and AMR portal) have been finalized and will be handed over to the DGFP and DGHS next quarter. Meanwhile, MTaPS will be supporting those directorates to implement the remaining activities proposed in the plans.

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

OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED

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

The activity is completed.

BEST PRACTICES/LESSONS LEARNED

An electronic system requires a reasonable time to be functional along with the proper troubleshooting and maintenance structure/resources, ongoing development/updating, and supervision of users facilitated by the system developer and respective government authority. For example, in collaboration with the DGFP, MTaPS introduced the DGFP eLMIS in seven MCWCs of two districts from March to May 2024 on a pilot basis. Users of the DGFP eLMIS at these centers needed regular supervision and troubleshooting for a certain period, depending on their capacity and local context, in addition to training to ensure streamlined and continued functioning of the system.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Provide technical assistance to the MOHFW and the DGHS to improve procurement functions of different procuring entities. *Conduct second batch training on e-GP for members of DPMEC of DGHS. Provide TA to conduct the orientation program on the Procurement Handbook.*	July–Sept. 2024
Activity 1.2.1: Assist the DGHS and CMSD in implementing the comprehensive eLMIS in selected districts as part of transition plan. *Continue follow-up visits and on-the-job training to ensure data quality and regular use of eLMIS.*	July–Sept. 2024
Activity 1.2.2: Assist the DGFP in implementing the DGFP eLMIS in selected MCWCs as part of the transition plan. *Continue follow-up visits to ensure data quality and regular use of DGFP eLMIS at the MCWC level. Provide on-the-job training and mentoring on the process of using the system independently.*	July–Sept. 2024
Activity 1.2.3: Assist the DGHS to roll out eAMS in selected tertiary-level hospital as part of the transition plan. *Assist tertiary hospitals in entering equipment information in eAMS. Assist district and national-level managers in using eAMS data for decision making.*	July–Sept. 2024
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. *Assist in revising and finalizing the PSM SOPs, organizing and conducting TB eLMIS training for remaining TB units, and revising TOR for quantification and EWS sub-group committee.*	July–Sept. 2024
Activity 1.3.1: Strengthen the use of the eLearning courses in collaboration with a2i of ICT division. *Continue collaborating with a2i and stakeholders and share usage data to help them take necessary actions to increase participation.*	July–Sept. 2024
Activity 2.1.1: Assist DGDA to implement CAPA plan and scale-up of DGDA RIMS and PViMS toward attaining the DGDA's ML3. *Continue TA to the DGDA in troubleshooting DGDA RIMS and PViMS use and addressing the outstanding Institutional Development Plan of WHO GBT in the regulatory system, MA, and PV functions.*	July–Sept. 2024
Activity 3.1.1: Assist the NTP in ensuring the functioning of TB eLMIS and e-TB Manager. *Review the use of tools and share findings with NTP; conduct joint monitoring visits with the NTP, enhancing features as per requirements and hiring the IT vendor for maintenance of e-TB Manager and TB eLMIS.*	July–Sept. 2024
Activity 3.2.1: Support the transition of MTaPS-developed IT systems to the relevant stakeholders. *Finalize and hand over the transition plans to respective stakeholders.*	July–Sept. 2024
Activity 5.1.1: Assist the HEU to increase capability on pharmaceutical expenditure (PE) tracking toward institutionalization. *Review the draft deliverable. Follow up with HEU for implementation of the PE tracking institutionalization plan and provide back up support as needed.*	July–Sept. 2024

Table 2. Quarter 3, FY24, Activity Progress, Bangladesh—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Provide technical assistance to the MOHFW and the DGHS to improve procurement functions of different procuring entities. **Activity Description:** MTaPS will provide TA to the MOHFW and its key directorates to strengthen the pharmaceutical system, including the procurement of health commodities.	1.1	Training on e-GP for the DGHS was held April 28–30, 2024. MTaPS facilitated a five-day (May 4–8, 2024) TOT on "Basic Public Procurement Rules" for DGHS officials involved in procurement to strengthen the DPMEC. Fifteen (3 female and 12 male) health professionals from the DGHS who are involved in procurement activities attended the training. The quarterly progress meeting of the PLMC was held May 28, 2024, at the HSD, MOHFW.
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	Training on the DGHS comprehensive eLMIS was held April 21–22 and 24–25, 2024, for four selected districts, including 4 DHs, 4 District Reserve Stores, a 100- bed hospital, 4 Upazila Health Offices, and 20 Upazila Health Complexes, totaling 33 facilities and 66 participants (1 female and 65 male).The objective was to enhance users' capabilities in daily eLMIS operations and establish a national logistics system for informed decision making. As of June 26, 2024, 31 facilities have started eLMIS activities (e.g., providing initial stock, receiving, issuing, dispensing). Challenge: Due to some unavoidable circumstances, the procurement of oral pills is getting delayed, resulting in a significant stock-out in stores and SDPs. The DGFP is planning to procure a small quantity of oral pills through emergency procurement from the revenue funding, which is still not finalized.
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	Training on the DGFP eLMIS was held May 18–19, 2024, for 26 participants (13 female and 13 male) from 7 MCWCs within the Gaibandha and Nilphamari districts. Implementation of the system enables entry of regular dispense records and generation and submission of monthly logistics reports more efficiently than the manual preparation and submission of hard copies to the upazila level as used before. The DGFP eLMIS can track medical equipment quantities and the functionality status of assets and enables capturing real-time stock status at the facility level.

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.2.3: Assist the DGHS to roll out eAMS in selected tertiary-level hospital as part of the transition plan. **Activity Description:** MTaPS will support the establishment of an eAMS in one tertiary hospital as a pilot. Based on that experience and lessons learned, the 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	The Hospital Service Management-DGHS identified nine underperforming DHs in terms of the operation of the eAMS and organized three-day training sessions in six hospitals. MTaPS facilitated technical sessions in five of those for 94 participants, with 697 new assets entered in the eAMS. To review the progress of the implemented eAMS activities in the NTRL and RTRLs, MTaPS organized a review meeting on May 8, 2024. Twenty participants (6 female, 14 male) from the NTP attended the event, including the director, line director, deputy director, program manager, assistant director, deputy program manager, and other senior officials and USAID representatives. After the meeting, the line director for TB-Leprosy and ASP issued an official notification to NTP officials at the labs and headquarters assigning responsibility for streamlined eAMS operation at the NTRL and RTRLs. MTaPS organized a day-long training on the eAMS to orient the NTP officials on effective data utilization with 20 participants (5 female, 15 male) from NTP-HQ, NTRL, and the five RTRLs. As a result, the NTRL and all RTRLs started using the eAMS in their facilities.
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.	1.2	MTaPS was actively involved in reviewing five of eighteen PSM SOPs in two meetings held so far with the NTP and other IPs, including for the quantification process of first-line, second-line, and TPT drugs. A series of meetings will be held to finalize the remaining SOPs by September 2024. Additionally, quantification of TPT drugs using QuanTB became easier since individual TPT information is routinely entered in e-TB Manager and real-time stock data is readily available in the TB eLMIS. MTaPS participated in the NTP's quarterly PSM Working Group meeting to revise the TOR for the quantification and EWS sub-group, include additional members and management of TB e-LMIS-related activities by the same group. As part of system strengthening, MTaPS shared the status of activities performed by users in the TB eLMIS, which enabled the NTP to understand how to analyze data generated by the system and better monitor its functionality. The NTP sent a letter to the CMSD with the estimated number of commodities to be procured in the next three years using the Global Fund grant. Part of this estimation—the second-line and TPT drugs—was determined using QuanTB. This will help the CMSD allocate appropriate funds for Custom Duty (CD)/Value Added Tax (VAT) and help the NTP mitigate difficulties related to fund allocation in CD/VAT-related issues. MTaPS is coordinating with the CMSD and NTP to streamline the port clearance process. A USAID team visited Nilphamari and Rangpur districts to observe the functionality of MTaPS-supported interventions. The Acting Office Director of USAID's mission expressed satisfaction with the government's ownership of the system and advocated for its continued use.

<table>
<tr><th>Activity</th><th>MTaPS Objective(s)</th><th>Activity Progress</th></tr>
<tr><td>Activity 1.3.1: Strengthen the use of the eLearning courses in collaboration with a2i of ICT division.

Activity Description: MTaPS will collaborate with stakeholders to analyze the data generated by the Muktopaath eLearning platform for all MTaPS-supported courses to monitor user enrollment trends, course completion rates, and attainment of certificates.</td><td>1.3</td><td>The numbers of participants enrolled and certificates issued for the four eLearning courses as of June 30, 2024, are:
<table>
<tr><th>eLearning Course</th><th>Participants Enrolled</th><th>Certificates Issued</th></tr>
<tr><td>Basic Logistics Management Training</td><td>3,899 (M-2,692, F-1,175, Other-32)</td><td>1,017 (M-687, F-326, Other-4)</td></tr>
<tr><td>e-TB Manager Basics</td><td>1,238 (M-1,041, F-192, Other-5)</td><td>299 (M-263, F-35, Other-1)</td></tr>
<tr><td>Procurement Basics</td><td>2,002 (M-1,568, F-417, Other-17)</td><td>609 (M-504, F-101, Other-4)</td></tr>
<tr><td>Infection Prevention and Control</td><td>3,358 (M-2,076, F-1,272, Other-10)</td><td>871 (M-623, F-246, 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 provide technical guidance and mentoring to the DGDA to implement outstanding CAPA plan/GBT requirements in the national regulatory system, specifically for the MA and PV functions, and will address feedback from the implementation of the DGDA RIMS and PViMS regarding their expansion and transition to the government.</td><td>2.1 & 2.2</td><td>TOT was conducted for DGDA RIMS users, including 13 MAHs, DGDA regulators, WHO, and PQM+. As of June 12, 2024, 11 MAHs had submitted 42 registration applications, with 18 approved. A list of master trainers was identified and approved by the DGDA, and workflow development for unintroduced vaccines and biosimilars is in progress. Capacity building for PViMS included DGDA officers, 80 MAHs, several hospitals, WHO, and PQM+. As of June 12, 2024, 332 AE reports were captured from 16 sources, with 246 reviewed and several regulatory decisions made. A list of master trainers was approved, and PViMS integration with the WHO-UMC VigiFlow is underway. The CAPA plan addressing the 2021 WHO GBT assessment for regulatory system, MA, and PV is being implemented, with two SOPs for the DGDA RIMS and PViMS in development. In April 2024, WHO assessed the DGDA's readiness for a formal benchmarking assessment, and the report shows further improvement is needed in the DGDA’s inspection process and enforcement. These efforts aim to increase WHO GBT scores toward the DGDA achieving ML3.</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 its use for decision making.</td><td>3.1</td><td>MTaPS attended the divisional monthly meetings of the District Surveillance Medical Officer in Khulna and Rangpur on May 11 and 13, 2024, respectively. During these meetings, MTaPS demonstrated how to analyze data in the TB eLMIS and provided on-the-job training to monitor functionality of the system by district-level supervisors. The meetings were attended by divisional TB experts, District Surveillance Medical Officers, MIS officers, program officers, and NGO district managers. MTaPS plan to attend the meetings in the remaining six divisions next quarter.

On June 9, 2024, the training manuals, user guidelines, source code, and database scheme of e-TB Manager and the TB eLMIS were officially handed over to Dr. Md. Mahafuzer Rahman Sarker, the line director for the TB-Leprosy and ASP at the NTP, with participation of a USAID representative. MTaPS and the NTP continued working together in the latest updating of system features to meet user needs.</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 stated in the transition plans for MTaPS-developed systems.	3.2	MTaPS handed over e-TB Manager, TB eLMIS, PViMS, RIMS, and DGDA Web Portal to the respective government stakeholders. The remaining systems will be handed over next quarter.
Activity 5.1.1: Assist the HEU to increase capability on pharmaceutical expenditure (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 Q2. MTaPS is finalizing the deliverable and following up with the HEU to implement the agreed institutionalization plan for pharmaceutical expenditure tracking as part of the National Health Accounts.

B. BURKINA FASO

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

Burkina Faso has a clear strategy in place to ensure the availability of, access to, and appropriate use of quality-assured antimicrobials in the human and animal health sectors. MTaPS' support is focused on building structures that ensure the enforcement and compliance of monitoring of existing regulations, policies, and guidelines, including the recently updated infectious diseases STGs and EML. Such enforcement is needed to address the sale and use of antibiotics without prescription. MTaPS follows a sustained, systematic approach to train, coach, and mentor health workers in both the human and animal sectors to be good stewards of antimicrobials and to monitor their practices. This approach requires strong central- and facility-level governance and stewardship mechanisms, such as establishing DTCs in more HCFs and capacitating those that already exist to provide supportive supervision in their facilities and promote AMS practices. In FY24, in addition to activities to strengthen facility-level DTCs, MTaPS is supporting the OHP TS and the OHP's AMR technical committee (TC) to strengthen governance and effective MSC on AMR and to optimize the use of antimicrobial medicines in the human and animal sectors.

CUMULATIVE PERFORMANCE TO DATE

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

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

Additionally, MTaPS supported the Directorate of Hospital Pharmacy (DPH) to establish and train DTC members in 10 selected HCFs. A total of 250 DTC members (190 male, 60 female) received AMS training. Each DTC developed an action plan to implement and oversee AMS activities in its respective facility. The DTC members conducted a situational analysis on the causes of inappropriate antibiotic use in their facilities. The results of the situational analysis are being used to strengthen the functioning of

DTCs in Burkina Faso. To address the inappropriate use of antibiotics, MTaPS supported the General Directorate of Access to Health Products (*Direction Général de l'Accès aux Produits de Santé* [DGAP]) and the DPH to develop training modules based on the facility-level infectious disease STGs and trained 350 health professionals (158 female) in the 10 selected HCFs. MTaPS also supported the *Direction de la Qualité des Soins et de la Sécurité des Patients* (DQSS) and DPH in printing and disseminating 500 copies of the STGs.

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

QUARTER 3/YEAR 6 ACHIEVEMENTS AND 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)

From April 22 to 26, 2024, the IHR self-assessment workshop was held in the meeting room of the Chamber of Commerce and Industry of Koudougou. Organized by the Directorate of Population Health Protection (DPSP), this workshop was attended by stakeholders in charge of the 19 respective IHR areas. Participants came from the sectors of health and public hygiene, agriculture, animal and fisheries resources, environment, water and sanitation, energy, mining and quarrying, higher education, research and innovation, defense and security, etc., as well as technical and financial partners such as MTaPS, Country Health Information Systems and Data Use (CHISU), the USAID Global Health Supply Chain Program–Procurement and Supply Management, Emergency Center for Transboundary Animal Diseases (ECTAD)/FAO, *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ), WHO, UNICEF, and USAID.

Results of the self-assessment indicate a score of 2 for MSC on AMR; 2 for optimal use of antimicrobial medicines in human health; and 3 for optimal use of antimicrobial medicines in animal health and agriculture. The workshop recommended the following:

- Strengthening MSC on AMR at all levels
- Adoption of the national action plan to combat AMR

- Signing of the decree on the functioning of the AMR TC and RUA subcommission
- Providing evidence on AMR TC and RUA subcommission meetings with signed reports and scanned attendance lists

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

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

From March 25 to 29, 2024, MTaPS supported the DPH to conduct a PPS on the use of antibiotics at the CHR of Banfora. A total of 186 patients were hospitalized on the day of the survey and among those, 128 patients (84 female) were selected for the study. Of those 128 patients, 93 had received at least one antibiotic, resulting in an antibiotic use prevalence of 72.66%. The prevalence of antibiotic prescription in the pediatric department was significantly higher (38.71%) compared with the surgery (23.66%) and gynecology-obstetrics (22.58%) departments. The reasons for prescribing antibiotics were identified. Sepsis was the main cause (45.61%), followed by gastrointestinal infections (29.82%), bronchopulmonary disease (8.77%), urinary tract infections (7.02%), skin infections (5.26%), and joint and gynecological infections (each accounting for 1.75%). The average number of antibiotics prescribed per patient was 1.4, ranging from 1 to 3 antibiotic treatments. The total number of antibiotic medicines used during the survey was 11. The distribution of antibiotics prescribed according to the AWaRe classification is 51.54% for Access and 48.46% for the Watch group. In terms of medicines, ceftriaxone remains the most widely used antibiotic, followed by gentamycin and metronidazole, as shown in figure 2 below.

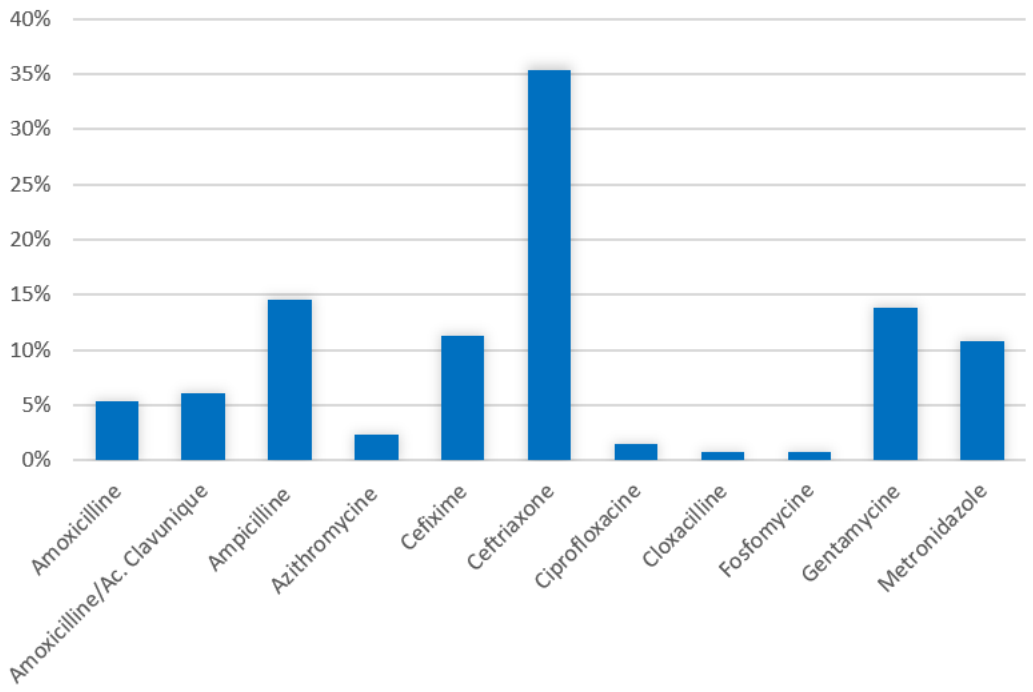


Figure 2. Prescribed antibiotics and proportions

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 why there is a lack of compliance with antibiotic prescribing guides and protocols. The constant turnover of staff, the absence of a DTC subcommittee 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 could explain the PPS findings.

The following recommendations are made:

- Strengthen the functioning of the DTCs by establishing a DTC subcommission for RUA.
- Raise awareness among the public and health workers on RUA.

BEST PRACTICES/LESSONS LEARNED

There are no best practices/lessons learned to report.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

There are no GHSA activities planned for Quarter 4.

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

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Strengthen the functionality of the TS-OHP Activity. **Activity description:** MTaPS, in collaboration with the OHP, will provide technical support to the DPSP. MTaPS' support will consist of preparation and technical participation in the self-assessment related to AMR and to the JEE itself.	5.4	1.1	Self-assessment conducted and completed. Results of the self-assessment indicate a score of 2 for MSC on AMR, 2 for optimal use of antimicrobial medicines in human health, and 3 for optimal use of antimicrobial medicines in animal health and agriculture.
Activity 1.1.2: Improve the institutional sustainability of the AMR-TC and the RUA subcommission.	5.4	1.1	Activity completed at the end of PY6 Q2.
Activity 3.5.1: Strengthen the capacity of the DPH, AMR-TTC, and DTCs to monitor the implementation of AMS interventions in selected health facilities. **Activity description:** MTaPS will support the DPH and the Department of Pharmaceutical Information and Rational Use of Medicines to conduct a second PPS of antibiotic use.	5.4	3.5	PPS conducted and results shared.

PHARMACOVIGILANCE

CUMULATIVE PERFORMANCE TO DATE

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

In October 2021, the medication Pyramax was officially adopted by Burkina Faso 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'Elimination du Paludisme*/Permanent Secretariat for the elimination of Malaria (SP-Palu) to discuss next steps, including the development and approval of the surveillance protocol by the national ethics committee. Then SP-Palu, the NMRA, *Direction du Système d'Information*/Directorate of the Information System (DSI), the Centre-Ouest Regional Health and Public Hygiene Directorate, the US President's Malaria Initiative (PMI), WHO, and MTaPS met to agree on the active surveillance of Pyramax timeline and to address potential challenges. 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.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

There are no Quarter 3 achievements to report.

BEST PRACTICES/LESSONS LEARNED

There are no best practices/lessons learned to report.

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. ▪ Recruitment of consultant, analyst, statistician or biostatistician or data manager ▪ Recruitment of study coordinating researcher ▪ Installation/demonstration of the application with DSI, SP-Palu, *Agence Nationale de Régulation Pharmaceutique* (National Drug Regulatory Agency [ANRP]) ▪ Training of trainers ▪ Training of site agents ▪ Enrollment and follow-up ▪ Supervision	July–September 2024

C. CAMEROON

PRESIDENT'S MALARIA INITIATIVE (PMI) ACTIVITIES

OVERVIEW

The MOPH has adopted artemisinin-based combination therapy as the first-line treatment for malaria, due to the development of resistance to previously extensively used antimalarial combinations. The 2018 WHO Quality of Selected Antimalarial Medicines Circulating in Six Countries of Sub-Saharan Africa (QAMSA) study found that in Cameroon, 37% of the 41 tested antimalarial samples, including artemether/lumefantrine, failed quality testing. This underscores the essential responsibility of 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 Medicine Quality Control, the Health Research Division, and the National Ethics Committee support the regulatory function of the DPML.

To improve its regulatory system, the DPML carried out a self-assessment in 2020 using the WHO GBT. The WHO GBT is a tool designed to assess various regulatory functions and assign a country's regulatory system an ML level 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 is currently operating at ML1, and that it had not fully implemented 167 of the 195 indicators required to reach WHO ML 3, which corresponds to a stable, high-performing, and integrated regulatory system.

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

CUMULATIVE PERFORMANCE TO DATE

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

QUARTER 3/YEAR 6 ACHIEVEMENTS AND 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

During this quarter, MTaPS supported the DPML in organizing a workshop from April 25 to 26, 2024 in Ebolowa to draw up a framework for the pharmaceutical supply management curriculum and training modules to be developed. Seventeen participants (6 women), consisting of pharmacists from the DPML, attended the workshop. The objective of the workshop was to identify training needs, the scope, actors targeted for the training, and to define the overall training vision and training modules. During the workshop, the facilitator utilized PowerPoint presentations, small group sessions, and plenary sessions to better identify needs and to agree on the training modules. As a next step, the facilitator will begin to draft the training modules and curriculum.

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

On April 3, 2024, MTaPS supported the DPML in organizing a one-day meeting to define and approve the options and functionalities that the DPML expects from the OpenRIMS homologation digitalization tool. This meeting gathered 20 participants (12 women) from the DPML and the information technology (IT) department of the MOH. Participants carried out a mini-assessment of the DPML's IT equipment and prepared a detailed description of the DPML's expectations related to the configuration of the OpenRIMS tool.

BEST PRACTICES/LESSONS LEARNED

- Scheduling activities with implementing partners is a tedious exercise that requires constant flexibility.

ACTIVITIES & EVENTS FOR NEXT QUARTER

Activity & Description	Date
Activity 1.4.1: Support the development of continuous professional development training curricula, including e-Learning modules in supply chain management ▪ Organize a workshop to validate the supply chain management training curriculum ▪ Organize an SCM training module review workshop ▪ Organize an SCM training module validation workshop	July 2024
Activity 2.1.1: Support the MOPH to implement OpenRIMS for the electronic submission and evaluation of pharmaceutical products registration applications ▪ Organize a workshop for OpenRIMS user training and testing	July 2024

Table 4. Quarter 3, FY24, Activity Progress, Cameroon—GHSA

Activity	PMI Result(s)	Activity Progress
Activity 1.4.1: Support the development of continuous professional development training curricula, including e-Learning modules in supply chain management	2.4	▪ Consultant recruited to develop training modules ▪ Agreement on the scope of the training and modules developed
Activity 2.1.1: Support the MOPH to implement OpenRIMS for the electronic submission and evaluation of pharmaceutical product registration applications	2.4	▪ DPML's IT system assessed ▪ Functionality of the OpenRIMS tool agreed upon ▪ Consultant recruited to work on the configuration of the OpenRIMS

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

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

MTaPS uses the OH approach to strengthen the operationalization of AMR governance in Cameroon by supporting the establishment of IPC and AMS TWGs with 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 June 2023, MTaPS has supported the achievement of 38 (61%) of the 62 total WHO benchmark actions.

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

MTaPS supported 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 (79 female, 95 male) in IPC, CQI of IPC practices in 12 HFs, and the development of a national surveillance protocol to monitor HCAIs. MTaPS also supported the Directorate of Health Promotion (DPS) to evaluate key surveillance attributes and some performance indicators of the HCAI surveillance system. MTaPS equally 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 (134 female, 105 male) in AMS, to conduct CQI of AMS activities in supported HFs, and to classify antibiotics in Cameroon's NEML according to the WHO AWaRe categorization.

MTaPS supported the TS-MCC, OHP, and other relevant technical departments of the MOPH to develop a NAP-AMR monitoring framework for monitoring and tracking implementation progress of the plan across different health sectors. MTaPS also supported the organization of a NAP-AMR evaluation meeting using this monitoring framework. MTaPS partnered with IDDS and AFROHUN to develop course content for a master's degree program in infectious diseases and AMR at the University of Buea (UB) 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 in evaluating 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 aided 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 in conducting 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 that require action and update the national and facility IPC action plans. In addition to the above, MTaPS supported the DPS in leading and organizing 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 in taking ownership over the implementation of their own AMS programs. MTaPS supported the DTCs to implement self-initiated AMS activities and continue to implement a CQI approach with incremental self-improvement targets. In October 2023, MTaPS supported the DPML in organizing a workshop for the restitution of self-initiated activities implemented by DTCs. MTaPS supported the Bafoussam Reference Hospital Center in December in organizing activities marking the celebration of WAAW. MTaPS also supported the development of draft STGs based on Cameroon's previously developed list of antibiotics according to the WHO AWaRe categorization.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.2.1: Help improve institutionalization, ownership, and uptake of AMR-related e-Learning courses through multisectoral efforts

MTaPS supported the UB from June 4 to 5, 2024 in organizing an open house event to sensitize the public on AMR and the availability of the CPD e-Learning courses on the university website. On the first day, an open house event was organized at the university campus, during which participants were sensitized on AMR and availability of an e-Learning platform (short courses and Master's courses) at the UB. They were also encouraged to visit the platform and take courses in which they were interested. A total of 107 people (56 women)—comprising students, lecturers, and invitees from other sectors—attended the event.

Open house event participants with some of the UB officials. Photo credit: Samuel Dissack, MTaPS staff

On the second day of the event, the consultant who developed the UB e-Learning platform conducted an assessment of its functionality. Forty participants (16 women), mostly comprised of UB staff, attended the event. Positive results from the assessment highlighted that: (1) the course content, learning objectives, and training outcomes were well described, and the self-paced approach was prioritized; (2) all courses were in English and displayed on the website interface, and the site was user-friendly; and (3) the platform is widely accessible and adapted for PC, Mac, and mobile app. It presents maximum security and privacy. Some drawbacks that were identified in the assessment are: (1) the UB staff are not familiar with the platform, (2) internet connection is unreliable, and (3) the platform does not allow course administrators to follow learners online.

RESULT AREA 2: IPC

Activity 2.5.2: Help facilitate locally led improvement in the functionality and scale-up of the pilot systems for HCAI surveillance to support AMR containment and pandemic preparedness

From June 10 to 12, 2024, MTaPS supported the Directorate for the Fight against Disease, Epidemics, and Pandemics (DLMEP) in organizing a three-day workshop to revise the data collection tools for HCAI surveillance in Douala. A total of 22 participants (including 11 women) from the MOH (DPML, DPS, National Public Health Laboratory [NPHL], regional delegations, and HFs) attended the workshop. Participants revised the data collection tools for HCAI surveillance, the roles and responsibilities of the different actors of the surveillance system and proposed the flow of data transmission. Participants also validated the revised data collection tool and recommended: (1) the monthly transmission of activity reports and HCAI database to a higher level; (2) the appointment of an IPC focal point in each health district; and (3) the development of the national algorithms for the management of medical conditions.

Some of the participants of the workshop to revise HCAI surveillance tools. Photo credit: Raïssa Malagal, MTaPS

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

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

In April 2024, MTaPS finalized the first draft of the STGs. To review the draft, MTaPS supported the DLMEP in organizing a four-day workshop in Kribi from April 23 to 26, 2024, with the participation of relevant experts from the DLMEP, *Division de la Recherche Opérationnelle en Santé*, Cameroon Field Epidemiology Training Program (CAFETP), National Aids Control Committee, Yaoundé Gynaeco-

Obstetric and Pediatric Hospital, Yaoundé central hospital, and some district hospitals. Seventeen participants, including 11 women, attended the workshop.

From May 21 to 24, 2024, MTaPS supported the DPML in organizing a workshop in Ebolowa to finalize and validate the STGs. Twenty-seven participants (including 15 women) attended the workshop from various MOH departments, such as HFs, CAFETP, Centre Pasteur du Cameroun, NPHL, Cameroon National Order of Pharmacists, Cameroon National Order of Dentists, Cameroon Society of Ophthalmologists, and the Cameroon Society of Gynaeco-Obstetricians. The outcome of the workshop was the validation and approval of the STGs.

BEST PRACTICES/LESSONS LEARNED

- Assessing the functionality of the e-Learning platform established at UB was an enriching exercise that highlighted the advantages and challenges related to the platform.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Support the TS-MCC and the OHP to institutionalize regular review of the status of NAP-AMR implementation using the recently finalized monitoring framework ▪ Support the TS-MCC and the OHP in organizing a second 2-day meeting to evaluate the status of implementation of the NAP-AMR using the NAP-AMR monitoring framework	July 2024
Activity 3.1.1: Support the DLMEP and DPML to develop/update and disseminate national stewardship and clinical/treatment guidelines that include the AWaRe categorization for antibiotics integrated into the NEML last year ▪ Support the DLMEP in printing 200 copies of the validated STGs ▪ Support the DLMEP in organizing a two-day meeting to disseminate the STGs	July 2024

Table 5. Quarter 3, FY24, Activity Progress, Cameroon—GHSA

Activity	MTaPS Objective(s)	GHSA Results(s)	Activity Progress
Activity 1.2.1: Help improve institutionalization, ownership, and uptake of AMR-related e-Learning courses through multisectoral efforts	5.4	1.2	MTaPS supported the UB in sensitizing the public on AMR and the availability of the CPD e-Learning courses on the university website and conducted the assessment of the functionality of the e-Learning platform.
Activity 2.5.2: Help facilitate locally led improvement in the functionality and scale-up of the pilot systems for HCAI surveillance to support AMR containment and pandemic preparedness	5.4	2.5	Data collection tools for HCAI surveillance revised. Defined roles and responsibilities of the different actors of the surveillance system. Data transmission flow proposed.
Activity 3.1.1: Support the DLMEP and DPML to develop/update and disseminate national stewardship and clinical/treatment guidelines that include the AWaRe categorization for antibiotics integrated into the NEML last year	5.4	3.1	STGs finalized and validated

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.

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 a decree in April 2019, the Ivorian government formalized the OHP to institutionalize a national MSC mechanism to address public health threats, including AMR. MTaPS supported the country to establish an AMR TWG to monitor AMR activities. This TWG is connected to the OHP through a national coordinating body called the MSC Group (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 TOR and capacity building plans. MTaPS also supported the AMS TWG to develop and finalize a list of antibiotics based on

the AWaRe classification. The IPC TWG and the AMS TWG identified and selected 3 MTaPS-supported facilities as COEs for IPC and AMS activities. MTaPS assisted the AMR TWG in the deployment of the AMR 2021–2025 M&E system through the development of an AMR 2021–2025 M&E plan, data collection tools, and the training of MTC M&E focal points in the use of these data collection tools. 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. With high scores on the IPCAF and DTC evaluations, MTaPS was able to support the AMR TWG to establish 20 COEs for IPC and AMS activities. MTaPS supported the AMR TWG to validate the decree governing the functioning of drug committees and to finalize the AWaRe categorization of antibiotics.

In November and December 2023, through the AMR TWG, MTaPS 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 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 and for optimizing the use of antimicrobial agents and IPC in human health contributed to the country's achieving a score of 3 for both MSC and AMS and a score of 2 for IPC as assessed by the December 2023 JEE.

MTaPS supported the MTC4 and MTC5 in collaboration with the Directorate of the Pharmaceutical Activity (DAP) to make e-Learning courses for HCPs. As of July 2024, 148 learners obtained their diplomas in IPC and AMS.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

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

On April 11, 2024, MTaPS supported the MTC5 to organize an online coordination meeting. The aim of the meeting was to report on the DTC supervision exercises conducted in 18 HFs on February 26 and March 22, 2024. A total of 20 participants took part in this meeting, including 7 women. MTC5 members shared supervision visit results and made recommendations to improve the DTC capacities.

On May 13, 2024, MTaPS supported the MTC4 in organizing its second quarterly coordination meeting. The Deputy Director General of Health in charge of Public Hygiene chaired the meeting. It was attended by 11 male participants, 9 from the MTC4 and 2 from MTaPS. The purpose of the meeting was to take stock of IPC activities carried out between October 1, 2023, and May 30, 2024. MTC4 members shared the supervision visit results and made recommendations to improve the IPC health committee capacities.

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

On March 27, 2024, with MTaPS support, the IPC TWG organized the official launch ceremony of the online IPC and AMS training platform. For AMS, MTaPS, in collaboration with the DAP, organized the first online AMS training session held on April 19, 2024. Within the 20 HFs supported by MTaPS, 150 members of the DTCs attended the online AMS training. Participants had the opportunity to learn from the following modules: AMR, AWaRe classification, quantity and quality of antibiotic consumption, implementing AMS interventions in a health care facility, and developing an action plan for AMS in a health care facility. Although 150 participants started the course, only 74 completed the coursework, and 54 participants (13 female) obtained a diploma.

Regarding IPC, 150 participants attended the online course. Participants had the opportunity to learn from the following 10 topics: health care-associated infection prevention and surveillance; concept on detergents, antiseptics, and disinfectants; hand hygiene; processing reusable medical devices; maintenance of premises, furniture, and vehicles; medical waste management; accident with exposure to blood and other biological products; injection safety; standard precautions; and the national infection prevention and control plan (PAN-PCI). Although 150 participants started the course, only 112 completed the coursework, and 94 participants (36 female) obtained a diploma.

Those participants who have not obtained a diploma and/or those who did not complete the program will have to retake the online courses.

RESULT AREA 2: IPC

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

From April 28 to May 11, 2024, MTaPS supported the MTC4, regional IPC focal points, and trainers to supervise and carry out the IPCAF-Minimum Requirement (MR) assessment in the 20 targeted HFs. The assessment results are summarized in figure 3 below.

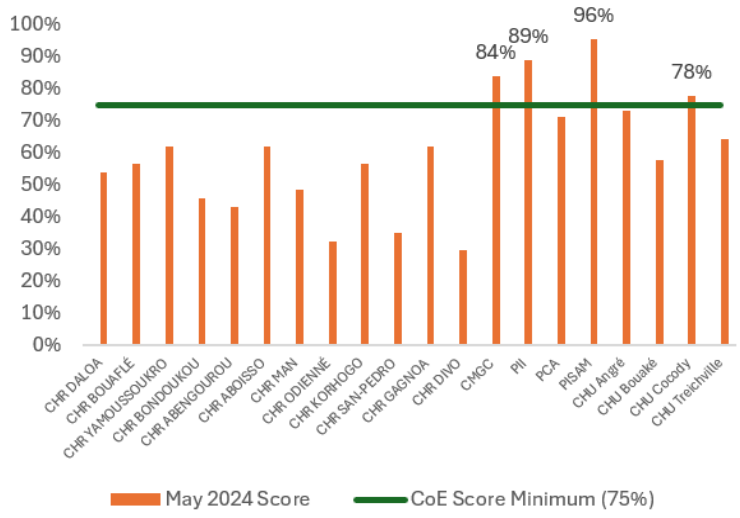


Figure 3. IPCAF-MR assessment result

Although more work needs to be done to reach 100% of IPC practices, Clinique Médicale le Grand Centre (CMGC), Polyclinique Internationale de l'Indenie (PII), Polyclinique Internationale Saint Anne-Marie (PISAM) and Centre Hospitalier Universitaire (CHU) Cocody are the only ones meeting the minimum IPC requirements. To best address observed gaps, each of the facilities has developed and is implementing its own CQI plan.

RESULT 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 HFs, including monitoring the implementation of related policies, guidelines, and standards

During April and May 2024, MTaPS assisted the AMR TWG through the MTC5 to organize 8 meetings to prepare the PPS. The meetings were held at WHO and MTaPS premises. The purpose of these meetings was to revise the PPS budget, establish the PPS timeline, identify facility investigators, and review the training modules. A total of 9 participants (3 female) from WHO, the AMR secretariat, and MTaPS attended the meetings, and 2 participants from WHO headquarters in Geneva also attended. As a result of the various meetings, participants agreed to use Kobo Toolbox for data collection. The data collected will then be analyzed and shared with WHO for record keeping. The next step will be to organize a 2-day workshop to train PPS investigators from the 20 HFs.

BEST PRACTICES/LESSONS LEARNED

None to report this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
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).	July 2024
Activity 2.5.1: Strengthen the functionality of IPC committees in the human health sector and the capacity of HCPs to implement guidelines using multimodal strategies. **Activity description:** IPC committee members to supervise HCPs in the following services: maternity, medicine, surgery, and laboratory in 20 targeted HFs.	July 2024
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.	July 2024

Table 6. Quarter 3, FY24, Activity Progress, Côte d'Ivoire—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	MNCH Result(s)
Activity 1.1.1: Enhance capacity of MCG to monitor implementation of the approved NAP-AMR **Activity description:** Provide technical assistance and coach the AMR national focal point to align the NAP-AMR with the JEE 3.0 results and monitor the NAP-AMR implementation in coordination with the OHP. MTaPS will help the AMR MCG to update the AMR governance manual.	5.4	1.1	NAP-AMR aligned to the JEE 3.0 results. Quarterly meetings organized to monitor the NAP-AMR implementation. MTaPS helped the AMR MCG to update the AMR governance manual. MTaPS continued to support the OHP to organize activities for One Health Day and WAAW. Also, MTaPS continued to support the MTC5 to organize the coordination meetings.
Activity 1.2.1: Support the AMR TWG to use e-Learning platforms to scale up training on AMR/AMS/IPC for health professionals. **Activity description:** Support the AMR TWG to test the IPC and AMS modules and train a cohort of 15 persons in IPC and 15 in AMS from each of the 20 MTaPS-supported facilities.	5.4	1.2	IPC and AMS e-Learning courses available for training of HCPs. 150 IPC committee members and 150 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:** MTaPS will support the AMR TWG to conduct supervision visits in order to reinforce the implementation of IPC minimum requirements in MTaPS supported HFs, focusing on the WHO-recommended multimodal approach.	5.4	2.5	IPC minimum requirement assessed in 20 MTaPS-supported 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:** MTaPS will support the AMR TWG and its MTC5 to conduct PPS in the targeted facilities.	5.4	3.5	In collaboration with WHO and other partners, MTaPS helped the AMR TWG and MTC5 to prepare for the PPS in 20 supported HFs.

E. DRC

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

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

The strategic approach and actions are focused on supporting the critical path to achieving higher capacity levels as outlined in the JEE tool and WHO benchmarks for IHR capacities. In DRC, the goal of achieving good patient outcomes will be met using multidisciplinary and multisectoral collaboration to improve MSC, IPC, and AMS. MTaPS' strategy is to base its activities and implementation on guidance from WHO benchmarks and the JEE tool while relying on other published guidance on best practices; to collaborate with the appropriate partners at the global, regional, and country levels; and to combine planning and implementation with an embedded monitoring and knowledge-sharing element to capture, document, and disseminate experiences and results. Through MTaPS, USAID is contributing to DRC's attainment of higher WHO IHR capacity levels in the AMR and IPC 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 progress has included the establishment of an NC-AMR and the development of a NAP-AMR. MTaPS supported the NC-AMR in establishing three thematic TWGs (or subcommittees) for IPC, the rational use of antimicrobials, and AMR detection and surveillance. MTaPS supported the NC-AMR and the related TWGs to implement the NAP-AMR and achieve progress in the MSC, AMS, and IPC technical areas.

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

adapted IPCAF tool, the DLMA, ACOREP, and the MOH's Directorate of Hygiene carried out the assessment at four farms and four animal health clinics. Based on the results obtained, each facility developed an improvement plan to reduce HCAIs and inappropriate AMU. MTaPS also supported the Directorate of Hygiene in using the WHO IPCAT2 to assess hygiene conditions in the human health sector at the central level and to develop an improvement plan, which is currently being implemented. Similarly, MTaPS supported MOH's Directorate of Hygiene and Provincial Health Divisions of Ituri, Nord Kivu, and Kinshasa to assess IPC practices at 7 MTaPS-supported HFs and to develop remedial action plans. The IPCAF scores for 7 facilities increased in the range of 159 (inadequate) to 667 (advanced) in 2023 and 425 (intermediate) to 736 (advanced) in 2024, indicating stronger facility IPC compliance. Finally, MTaPS supported ACOREP, in collaboration with the *Cliniques Universitaires de Kinshasa* (CUK), *Cliniques Universitaires de Kisangani*, *Hôpital Saint Joseph*, INRB, *Département de Pharmacologie Clinique et Thérapeutique* of the University of Kinshasa, and *Département de Soins de Santé*, in developing the National Guidelines for the Use of Antibiotics in Healthcare Facilities and Services in the Democratic Republic of the Congo, which will serve as the country's standard guidelines for the appropriate use of antibiotics and take into consideration the WHO AWaRe categorization of antibiotics.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

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

From April 21 to 30, 2024, MTaPS supported ACOREP in organizing a workshop to revise the 2018–2023 NAP-AMR and draft a new 2024–2028 NAP-AMR. The 10-day workshop, held in Kisantu (Kongo Central Province), brought together 22 participants (4 female) from the animal health, environmental, agriculture, and human health sectors, including representatives from MTaPS. During the workshop, participants conducted a situational analysis first. From the analysis, participants then drafted the 2024–2028 NAP-AMR along with the monitoring framework. Lastly, they developed the 2024 operational plan. Due to challenges in determining the costs associated with each activity in the new NAP-AMR, the budget work was not finalized. However, WHO plans to enhance the capacity of the national AMR committee in budgeting, using an appropriate tool, during the next quarter.

Activity 1.2.1: Support NC-AMR in conducting joint MSC field support supervision visits in the human, animal, and environmental sectors, and use the supervision findings to conduct the annual Tripartite AMR Country Self-Assessment Survey (TrACSS)

On May 30, 2024, MTaPS supported ACOREP in organizing a meeting for the validation of data collected by the different sectors in relation to the country progress achieved in 2023 to fight against AMR. A total of 15 participants (4 female) from the human health, animal health, agriculture, and environmental sectors attended the meeting. The validated data from the assessment highlighted that MSC has a level C score, indicating a developed capacity.

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

During this quarter, MTaPS met with i+solutions and the faculty of pharmaceutical sciences of the University of Kinshasa to discuss the establishment of the e-Learning platform and to review technical and financial proposals. MTaPS opted to move forward with the Faculty of Pharmaceutical Sciences proposal. MTaPS and the university have agreed on: (1) the Department of Clinical Pharmacology of the University of Kinshasa accelerating the preparation of the site to host the server for the e-Learning platform; (2) MTaPS monitoring the e-Learning platform every two weeks; (3) MTaPS accelerating the recruitment of the consultant to install the platform; and (4) MTaPS monitoring progress in the establishment of the e-Learning platform.

RESULT AREA 2: IPC

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

During the development of the 2024–2028 NAP-AMR that took place in April 2024, MTaPS successfully advocated for ACOREP to integrate IPC activities into the NAP-AMR and the 2024 operational plan. MTaPS also supported the hygiene department of the MOH to prepare the meeting for the dissemination of the national IPC strategic plan, waste management guide, and norms and procedures on water, hygiene and sanitation in HFs, etc. The dissemination meeting will be held on July 9, 2024. The goal of the dissemination is to raise awareness among health care providers to reduce infections and to avoid the misuse of antimicrobials.

BEST PRACTICES/LESSONS LEARNED

- The careful selection of members from various ministries involved in combating AMR enabled the rapid development of a comprehensive NAP-AMR including a programmatic framework, an implementation plan with operational actions, and a monitoring and evaluation framework. Additionally, selecting members ensures that priority actions from each sector are effectively integrated to contribute to the fight against AMR.
- Engaging in joint planning with ministry partners and setting firm timelines and deadlines significantly reduces delays in implementing the work plan.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Provide support to the NC-AMR and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities	August 2024
Activity 1.2.2: Develop and disseminate information, education, and communication materials related to AMR containment through the establishment of an e-Learning platform to continuously train and update NC-AMR members and professionals	July–August 2024
Activity 2.1.1: Support the NC-AMR to institutionalize the regular assessment of IPC practices, including implementing guidelines and regulations in both the animal and human health sectors	July 2024
Activity 3.5.2: Disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics	August 2024

Table 7. Quarter 3, FY24, Activity Progress, DRC—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Provide support to the NC-AMR and the related TWGs (AMS and IPC) to take leadership over the effective monitoring and planning of AMR activities	5.4	1.1	2024–2028 NAP-AMR, including the monitoring framework, developed. Also, MTaPS supported the AMS and IPC TWGs in developing the 2024 operational plan.
Activity 1.2.1: Support NC-AMR in conducting joint MSC field support supervision visits in the human, animal, and environmental sectors, and use the supervision findings to conduct the annual TrACSS	5.4	1.2	MTaPS supported ACOREP in validating the data collected during TrACSS assessment.
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	5.4	1.2	Organization to host the e-Learning platform identified and next steps detailed
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	5.4	2.1	IPC activities integrated into the NAP-AMR. Date of the dissemination meeting agreed upon.

MNCH, FP, RH, AND TB ACTIVITIES

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

During previous years, MTaPS supported the medicines TWGs in 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], and ASRAMES). The provincial medicines TWGs are now fully functional and have taken the lead in ensuring the effective redistribution of an estimated $179,740 in commodities at risk of expiry at CDR ASRAMES in Nord Kivu. They also took the lead to avoid wasting around 95 months' 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 the National Essential Medicines Supply Program (*Programme National d'Approvisionnement en Médicaments Essentiels* [PNAM]) and the Ituri DPS and Nord Kivu DPS in establishing Technical Logistics Management Units (TLMUs) (*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 2 provinces has improved from 40% to more than 85% on average.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

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

On April 10, 2024, MTaPS supported the DPS in Nord Kivu to hold a medicines TWG meeting. A total of 20 participants (1 female) from DPS, Goma HZ, ASRAMES, *Médecins Sans Frontières* (MSF) Hollande, Cordaid, *Université Libre de Bruxelles* Cooperation and *Inspection Provinciale de la Santé* attended the meeting. Four topics were discussed during the meeting:

1. Evaluation of the Q2 distribution plan implementation. The Nord Kivu regional distribution center replenished 21 HZs. The International Committee of the Red Cross and MSF, as well as the Kitoyi HZ management team, replenished 11 HZs in the unsecured areas of Rutshuru, Rwanguba, Binza, Bambo, Birambizo, Kibua, Kibirizi, Masisi, Mweso, Pinga, etc. The remaining two HZs of Itebero and Walikale were not resupplied due to bad road conditions and infrequent flight schedules.
2. Validation of the distribution of IPC PPE and consumables. The TWG members validated the PPE and consumables distribution plan.
3. Validation of construction plans of HFs in the Masereka HZ with the support of the *Projet d'Appui au Développement Intégré du Système de Santé*. The members of the medicines TWG validated the construction and equipping plan of the surgery and intensive care unit at the Masereka and Vuhovi General Reference Hospitals; Manguredjipa Hospital; and the Musienene Hospital renovation plan, including the neonatology unit.
4. Planning of activities to be conducted by the TLMU. TLMU members presented activities that MTaPS will support. These activities include the assessment of inventory management using the Inventory Management Assessment Tool (IMAT), the LMIS data review meeting, and supportive supervision, which aim to improve the quality of data and availability of health commodities in the province.

On June 7, 2024, MTaPS supported the DPS of Ituri to organize a medicines TWG meeting attended by 23 participants (including 4 women) from DPS (*Programme National de Lutte contre le Paludisme*, *Programme National de Lutte contre le SIDA* [PNLS], *Programme Élargi de Vaccination*, *Coordination Provinciale Lèpre et Tuberculose*); HZ offices; and technical and financial partners, including *Association des Gestionnaires de la Chaîne d'Approvisionnement et des Logisticiens* (AGCAL), *Centrale d'Achat et de Distribution des Médicaments Essentiels de Bunia* (CADIMEBU), The Alliance for International Medical Action, Caritas, SANRU, and CORDAID. The meeting covered the following agenda items:

- Progress report on the implementation of malaria RDTs in non–pharmacist-owned retail pharmacies: Twenty-three identified pharmacy outlets have been supplied with RDTs and are now operational and providing malaria diagnostic testing services.
- Availability of health commodities at CADIMEBU: In general, CADIMEBU has adequate stock levels, however, health commodities worth USD 30,646 are at risk of expiry. These include antimalarials, RDTs, and some laboratory commodities that are due to expire because of a short shelf life. To prevent product expiry, the medicines TWG members supported CADIMEBU and the DPS in developing an emergency redeployment plan that considered the consumption rate of the targeted HZs. Other recommendations include the reinstatement of pre-ordering systems to inform adequate resupply of CADIMEBU.
- Distribution of HIV, TB, and malaria commodities: Participants validated the distribution plans and recommended adjusting the quantity according to availability (especially for malaria and TB, which

are understocked) and to reallocate stocks from overstocked HZs to those who have an understock.

- LMIS reporting rate in InfoMED: The average reporting rate of DPS Ituri was 90%. Participants recommended that the TLMU identify and subsequently support HZs with low reporting rates.

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

Activity 3.2.1: Support the UTGLs in strengthening their data collection system to improve the availability, quality, visibility, and use of logistics data for decision making

During this quarter, MTaPS supported the TLMU and MTaPS-supported HZs in organizing a logistics data review meeting in Nord Kivu Province. The objective was to analyze the status and quality of data reported in the InfoMED platform, identify issues, make decisions, and recommend corrective measures. The review was held in Goma at the DPS of Nord Kivu from June 5 to 8, 2024. Nineteen participants (3 women) attended the review meeting. Participants in attendance were from the five HZ management teams (*Équipe Cadre de la Zone de Santé* [ECZS]): the Nord Kivu TLMU, DPS, AGCAL, ASRAMES, and MTaPS. The data review focused on the LMIS data from Goma, Karisimbi, Kirotshe, Nyiragongo, and Rwanguba HZs. Participants identified the root causes of underperformance in HZs and developed an action plan to improve SCM. The improvement plan emphasizes the timeliness and completeness of LMIS reports, managing overstock of FP products, addressing understock of MNCH products, and improving data quality in InfoMED. Specific actions recommended for HZ pharmacists include publishing data before the 20th of each month, strengthening field supervisions at HFs, and increasing the engagement of HZ management teams in improving the availability of health products.

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

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

From May 4 to 13, 2024, MTaPS, in collaboration with GHSC-TA, supported the DPS of Nord Kivu and Ituri in participating in a quantification workshop in Miti-Murhesa. TLMU and *Programme National de la Santé de la Reproduction*, with technical support from MTaPS staff, collected quantification data (consumption, demography, and services) and entered these data into the Quantification Analytics Tool to forecast the need for MNCH and FP products in USAID-supported Ituri and Nord Kivu. Moving forward, MTaPS, in collaboration with GHSC-TA, will support the DPS of Ituri and Nord Kivu in developing supply plans for the USAID-supported HZs in these regions and in conducting biannual reviews of these plans.

Additionally, from May 14 to May 17, 2024, MTaPS supported the DPS of Ituri and Nord Kivu in collecting distribution data and producing distribution plans for a reduced package of contraceptives for 49 CCSs in the USAID-supported HZs of Ituri and for 28 CCSs in Nord Kivu.

Activity 5.1.2: Work with FTO, MIHR, and MSSFPO to support CDR ASRAMES and Centrale d'Achat et d'Approvisionnement en Médicaments Essentiels du Nord Ituri et Haut-Uélé (CAAMENIHU) in managing and distributing essential medicines, including MNCH and FP/RH commodities

During this quarter, MTaPS supported the DPSs of Ituri and Nord Kivu to conduct an inventory management assessment using the IMAT for two CDRs: CADIMEBU (in Bunia) and ASRAMES (in Goma). In Ituri, the inventory assessment took place from April 22 to 24, and in Nord Kivu, the activity was conducted from June 18 to 20, 2024. The figures below show the accuracy of stock at the two CDRs.

Out of 25 products listed for inventory at each CDR, 23 of 25 (92%) physical counts were accurate at CADIMEBU, and 100% of physical counts were accurate at ASRAMES.

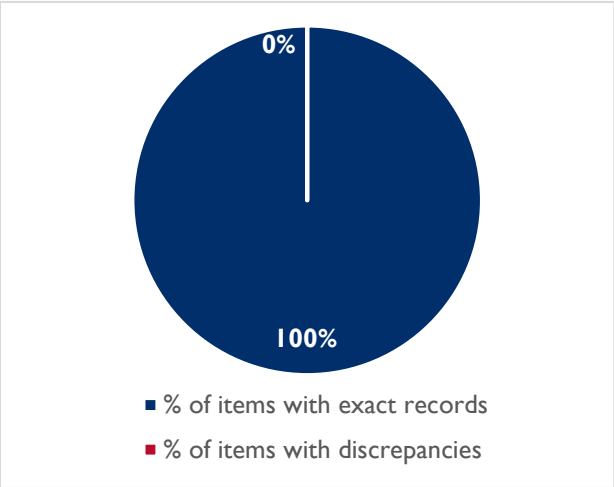


Figure 4. Physical inventory at ASRAMES

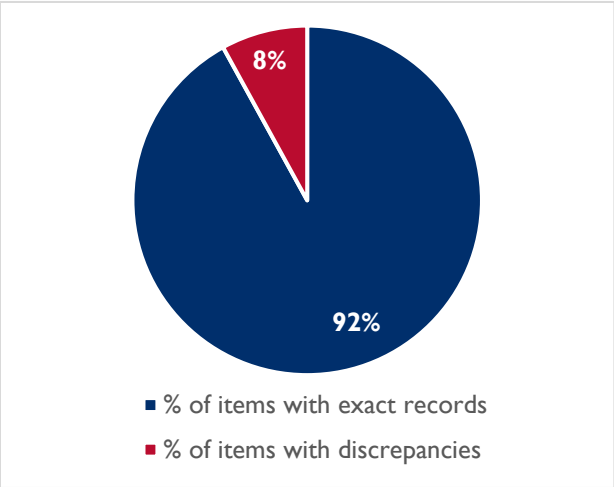


Figure 5. Physical inventory at CADIMEBU

Regarding stock availability during the last 100 days, CADIMEBU recorded stockout of oxytocin injectables (inj.) (33 days); rifampicin/isoniazid/pyrazinamide 75/50/150 mg (95 days); artesunate suppositories 100 mg (14 days); artesunate inj. 60 mg (38 days); malaria RDT (14 days); and artemether/lumefantrine, 20 mg + 120 mg, 6 tablets (62 days). For ASRAMES, there was stockout of dextrose (glucose), 50%, 50 ml (25 days); oxytocin inj. (11 days); and magnesium sulfate inj. (17 days).

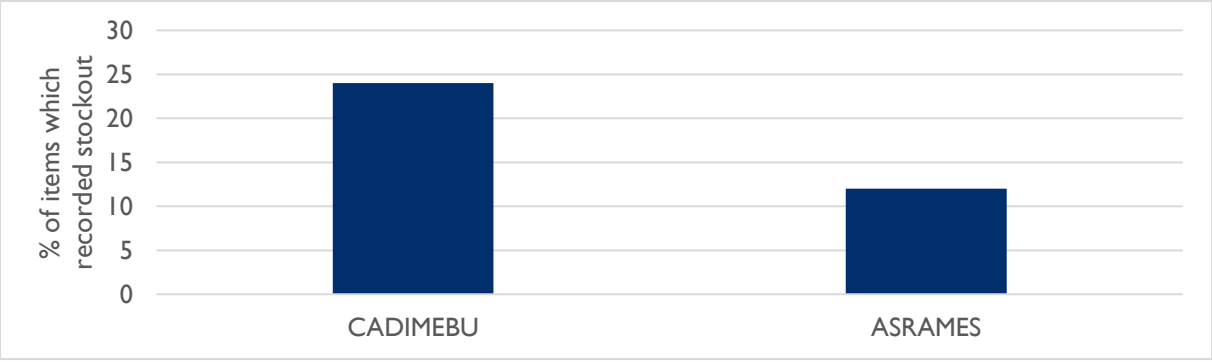


Figure 6. Percentage of items that recorded stockouts during the past 100 days

To address those gaps, participants recommended (1) that CADIMEBU stock products with different batch numbers in one identified area with bin cards and record all transactions in the inventory management software and (2) that CADIMEBU and ASRAMES hold order review meetings to analyze product stock status and place orders on time.

BEST PRACTICES/LESSONS LEARNED

- The first quarterly data review for *Gestion de Stock et Approvisionnement* in Nord Kivu highlighted the critical role of continuous experience sharing and enhanced LMIS practices. A key learning point from this experience is that regular, structured reviews and collaborative discussions among stakeholders significantly contribute to identifying and addressing the root causes of supply chain inefficiencies. For instance, through detailed analysis and open dialogue, participants could pinpoint specific issues such as the timeliness and completeness of LMIS reports, as well as the management of overstock and understock situations.
- Ownership of an action plan is critical for its implementation. The proactive development and commitment to implementing a targeted improvement plan is possible after stakeholders identify the root causes of underperformance and agree on actions, responsibilities, timeliness, and resources to improve the SCM.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

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

Table 8. Quarter 3, FY24, Activity Progress, DRC—MNCH

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
Activity 1.1.2: Support PNAM and DPS in strengthening the functionality of medicines TWGs at the central and provincial levels	1.1	N/A	Medicines TWG held to improve commodity availability
Activity 3.2.1: Support the UTGLs in strengthening their data collection system to improve the availability, quality, visibility, and use of logistics data for decision making	3.2	N/A	Logistics data review meeting organized in Nord Kivu to analyze stock status and data quality
Activity 5.1.1: Work with PNAM, the DPS, and other stakeholders to improve the availability of MNCH and FP/RH products through quantification and forecasting exercises at the provincial and national levels	5.1	N/A	MCH and FP product quantification exercise conducted
Activity 5.1.2: Work with FTO, MIHR, and MSSFPO to support CDRs ASRAMES and CAAMENIHU in managing and distributing essential medicines, including MNCH and FP/RH commodities	5.1	N/A	Inventory management assessment using the IMAT conducted at CADIMEBU and ASRAMES to identify stock accuracy and stockout issues

SUPPLY CHAIN ACTIVITIES

OVERVIEW

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

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

CUMULATIVE PERFORMANCE TO DATE

In December 2022, MTaPS supported the Ministry of the Economy through the Health Economics Technical Committee, in collaboration with other financial and technical partners, in rationalizing the cost structure for health services and products. The aim of this exercise was to reduce the cost of health commodities and services to support the DRC's UHC program. In collaboration with WHO and SANRU, the office of the President of DRC, members from the Prime Minister's office, the MOH, the Ministry of the Economy, the pharmacist professional board, the physician professional board, ACOREP, and civil society members, MTaPS successfully advocated to the government to grant health products "social product status" instead of "business product status." This will reduce or eliminate tariffs and taxes on health products and services de facto, resulting in a significant cost and price reduction. MTaPS is continuing to support stakeholders and ministries 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, including 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 was 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 with the obtention of its MOH registration certificate, its membership certificate for NGOs operating in the health sector, its *personnalité juridique* (legal personality), and the 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 women), mainly pharmacy and medicine students.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

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

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

From May 2 to 17, 2024, MTaPS supported the participation of two AGCAL staff members in a national annual quantification exercise for essential medicines, including MNCH and FP and the development of an FP commodity distribution plan to community sites. The quantification exercise took place in Bukavu. A total of 40 participants (5 female)—from Sud Kivu, Nord Kivu, and Ituri provinces—attended the workshop. The quantification exercise strengthened participant capacity in forecasting and supply planning of health commodities and increased their ability to support the MOH in future quantification exercises.

MTaPS also supported five participants from AGCAL, PNAM PNLS, *Federation des Centrales d'Achat des Médicaments Essentiels*, and *Fonds de Promotion de la Santé* to attend a workshop held in Addis Ababa, Ethiopia from May 13 to 17, 2024. The workshop aimed to build the capacity of participants in the design and implementation of service agreements and contracts in procurement and logistics. Representatives from ten countries—including DRC, Cameroon, Côte d'Ivoire, Eswatini, Ethiopia, Lesotho, Namibia, Sierra Leone, Rwanda, and Malawi—attended this capacity building initiative. The workshop enabled DRC participants to learn from other countries' experiences and expertise in purchasing functions. Private-sector entities were also in attendance, and participants shared private-sector experiences.

Additionally, MTaPS signed consultancy agreements with the AGCAL Executive Director and provincial representatives for Nord Kivu and Ituri provinces to implement and monitor supply chain activities in the two provinces and in Kinshasa.

BEST PRACTICES/LESSONS LEARNED

AGCAL's proactive engagement with diverse stakeholders, including government bodies, civil society organizations, and implementing partners, combined with its active participation in quantification exercises and other TWG meetings has significantly bolstered its credibility as a trusted partner of the MOH, elevating its profile and fostering broader recognition.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 2.3.1: Continue to facilitate the establishment of AGCAL and its integration into the existing supply chain structures at the national and provincial levels	July–September 2024
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	July–August 2024
Activity 2.3.3: Support the development of a national AMS plan	July–September 2024
Activity 3.2.1: Improve PNLS, PNAM, and TLMU leadership, coordination, and ownership of HIV supply chain and consumption data quality improvement	July–September 2024
Activity 5.3.1: Support ACOREP to strengthen the pharmacovigilance system, including for ARV commodities	July–September 2024

Table 9. Quarter 3, FY24, Activity Progress, DRC—SUPPLY CHAIN

Activity	MTaPS Objective(s)	Activity Progress
Activity 2.3.1: Continue to facilitate the establishment of AGCAL and its integration into the existing supply chain structures at the national and provincial levels	2.3	AGCAL staff capacities strengthened on the annual quantification exercise, on human resource management, and implementation of service agreements and contracts in procurement and logistics.

F. JORDAN

FIELD SUPPORT ACTIVITIES

OVERVIEW

In Jordan, MTaPS' overall goals are to improve pharmaceutical-sector governance, institutional capacity for pharmaceutical management and services and patient safety, and to contain AMR. 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 driving significant procurement reforms in Jordan in collaboration with the GPD. Key regulatory actions were advanced, including legislative changes and institutional policy development for the Jordan Food and Drug Administration and the MOH. These efforts encompassed developing guidelines and SOPs for FA implementation and procurement negotiation to enhance supplier market entry, competitiveness, and health product availability. A comprehensive assessment of the pharmaceutical supply chain led to formulation of the PSD Operational Plan 2023–2025 and the establishment of six priority supply chain management policies approved by the MOH Secretary General. MTaPS assisted the MOH and RMS in strengthening their capacity to improve antibiotic use in clinical settings. Protocols were developed and disseminated for antibiotic prophylaxis and treatment for surgical procedures and infections, respectively. The RMS AMR Central Committee developed empirical treatment protocols for common ICU infections, monitored through a CQI approach, resulting in improved adherence to protocols at 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 (ACIPC) and trained over 200 IPC focal points across MOH and RMS hospitals and MOH primary and comprehensive healthcare centers. MTaPS extended its support to dental clinics, finalizing the planning and preparation to conduct a comprehensive IPC assessment in a sample of 600 public and private dental clinics and centers. The SHD and HCAD incorporated an AMR awareness program initiated by MTaPS into the National Action Plan for AMR 2023–2025 and developed digital health messages disseminated through social media platforms.

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

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: STRENGTHEN PHARMACEUTICAL-SECTOR GOVERNANCE

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

GPD completed the identification of the user interface data elements required for the FA automation based on the approved workflows with MTaPS support. The roles and responsibilities within the system were clarified, a list of main system users was identified, and an application authentication list was

created. This was accomplished by facilitating biweekly meetings with the GPD information technology staff and other stakeholders. The Automation Advisory Committee and the IT unit at the GPD, with MTaPS support, continued leading the development of the FA automated procedures. This automation will help institutionalize and sustain the implementation of the FA SOPs by the GPD, thereby enhancing efficiency, data accessibility, transparency, and governance in procurement activities across Jordan.

Activity 1.1.2: Provide technical assistance to the GPD in developing Standard Bidding Documents (SBDs) for the FAs

The FA SBD draft, finalized by GPD last quarter with MTaPS support, underwent further discussions and reviews by department heads to ensure accuracy, compliance, and alignment with organizational objectives as a final step before submission to the National Procurement Policies Committee for endorsement and dissemination. The FA SBDs will contribute to establishing a consistent and transparent procurement process promoting fairness; mitigating risks such as legal challenges, higher costs, reputational damage, technical vulnerabilities, operational inefficiencies, and increased potential for fraud and corruption; and facilitating the selection of the best qualified bidders.

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

In close collaboration with GPD, MTaPS completed the initial draft of the supplier performance evaluation policy, which is currently under final review by focal points appointed by the GPD director. The next steps include addressing feedback from focal points, finalizing the draft policy, and submitting it for approval by the GPD Director. Upon approval, the draft will be sent to the National Procurement Policies Committee for endorsement and subsequently circulated to all public-sector entities, mandating compliance with the policy. Once implemented, this policy will contribute to enhancing contract outcomes by identifying the top suppliers and ensuring procurement efficiencies through well-informed decision-making related to supplier selection, contract management, procurement strategy, risk management compliance, 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

The AMS committees at MOH Al-Salt and Mafraq piloting hospitals led the implementation of the CQI approach through auditing the antibiotic prophylaxis and treatment protocols adherence using the previously developed compliance checklist and KPIs. The MTaPS team attended regular AMS committee meetings at both hospitals. All quality indicators reported to the MOH digital platform by both hospitals will enable decision-makers and hospital leadership to institutionalize the protocols emphasizing the importance of adherence and therefore contributing to rational antimicrobial use at MOH hospitals in Jordan. Adherence to protocols at Al-Salt and Al-Mafraq hospitals in round 4 demonstrated a slight decrease (figure 7) but remained higher compared to round 2. This was due to physician turnover and poor documentation practices in both hospitals. Additionally, some quality officers struggle with electronic templates and Microsoft applications. To address these challenges, hospital AMS committee members will conduct an orientation session for newly hired physicians and circulate the clinical protocols among them. Additionally, the MOH Institutional Development and Quality Control

Directorate (IDQCD) will conduct regular joint field visits with MTaPS to the pilot hospitals, meet with hospital managers, and provide IT training for hospital quality department staff to help address these challenges.

Next quarter, MTaPS will facilitate a lessons learned workshop to showcase the implementation process and key milestones related to antibiotic prophylaxis and treatment protocols. The workshop will be attended by directors from all MOH hospitals. The primary goal is to encourage hospital managers to adopt these protocols beyond the initial two pilot hospitals, extending their use to all MOH hospitals. Ultimately, this initiative aims to enhance rational antibiotic use and reduce AMR in Jordan.

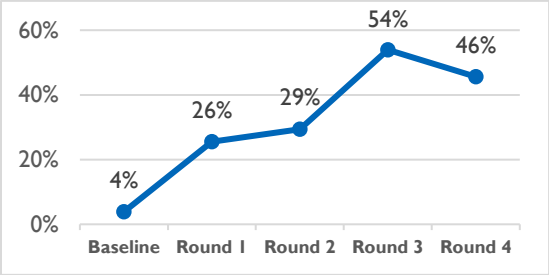


Figure 7. Adherence rate per audit round at MOH Al-Salt and Al-Mafraq hospitals

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

MTaPS participated in two high-level meetings led by the RMS central quality directorate and the central AMS committee. They focused on disseminating the protocols' KPIs across all RMS hospitals to enable enhanced monitoring and compliance evaluation and presenting results of the third-round audit, which demonstrated consistent adherence improvement (figure 8). These meetings underscored the significance of monitoring, evaluation, and feedback to enhance RUA. Additionally, MTaPS held a recognition ceremony for AMS committee members and RMS staff who conducted the orientation workshops on the previously developed ICU infection protocols at 11 RMS hospitals. This ceremony highlighted their efforts and emphasized their roles as advocates for protocol implementation, contributing to AMS promotion, improved RUA, and decreased AMR in Jordan.

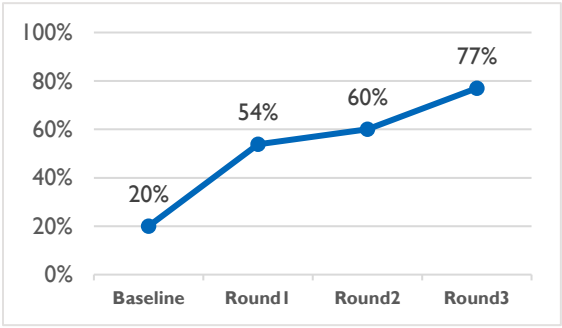


Figure 8. Adherence rate per audit round at RMS Al-Hussien Hospital

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

In collaboration with the MOH infection prevention and control department (IPCD), MTaPS facilitated the NICU-IPC best practice training workshop, utilizing the IPC focal points previously trained through HCIP as trainers, demonstrating capacity transfer. One hundred senior nursing staff from all MOH hospitals participated in the two-day certified CPD program aimed at strengthening their IPC skills. This certification helps institutionalize IPC training and practices within the MOH hospitals. The trainees are now capable of demonstrating IPC best practices and disseminating these practices among their peers,

thus facilitating a potential decrease in health care-associated infection and improving health outcomes among neonates.

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

In collaboration with HCAC, the MOH—with support from MTaPS—enabled 28 IPC focal points (17 female) from MOH hospitals across Jordan to attain certification as infection preventionists after completing the HCIP training course requirements. The trainees are now capable of developing and implementing a comprehensive infection prevention program within their hospitals, contributing to preventing the spread of diseases, reducing the length of hospital stays, and avoiding deaths among vulnerable populations. MTaPS honored the participants in a ceremony with the distribution of certificates.

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

In collaboration with HCAC, the MOH—with support from MTaPS—enabled 50 IPC focal points (37 female) from the 14 health directorates to become HCSIPs. The trained PHC focal points are now qualified to plan and implement IPC programs, monitor and strengthen the implementation of IPC interventions, and prepare their facilities to meet national accreditation IPC standards, thus contributing to improved patient health outcomes in Jordan.

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

In collaboration with the MOH, MTaPS completed the IPC assessment data collection in a sample of 600 public and private dental clinics and centers. The assessment evaluated IPC practices and knowledge of health care providers on IPC policies and guidelines, and captured gaps in the public and private sectors. The MOH collaborated with MTaPS in conducting verification visits to check collected data and monitor the assessment processes and procedures, with no significant issues found. The assessment identified substantial differences in IPC standards, practices, and adherence between the two sectors. Its results will contribute to bridge these gaps by standardizing IPC practices in both sectors and eliminating disparities that hinder the effective application of IPC measures and practices, fostering a more consistent approach to IPC. Additionally, the assessment findings will provide evidence-based recommendations to inform MOH policymaking, enhance IPC practices, and guide informed decision-making to improve public health outcomes.

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

MTaPS continued providing support to the HCAD in refining the AMR social media posts to ensure appropriateness for public dissemination. The posts target various audiences, including health service providers and individuals with diverse educational backgrounds in both urban and rural communities. The health messages aim to improve the community's understanding of IPC and AMR principles and promote RUA. In Q4, the messages will be posted on the HCAD Facebook page and will be broadcasted through digital signage screens available at select PHCs.

MTaPS consultant conducts the IPC assessment using a mobile tool at two dental clinics in Amman. April 25, 2024.

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

MTaPS continued to support the MOH SHD and HADs in leading the expansion of the AMR CASS activities. Fourteen SHD heads of departments (5 female) and 40 health service providers (30 female), representing 14 HADs, implemented the CASS activities in an additional 98 schools (encompassing all governorates of Jordan), reaching a total of 5,034 students (4,288 female). Furthermore, MTaPS disseminated IEC materials with AMR messages (1,600 posters and 10,000 pamphlets in PY6) to support the SHD in expanding CASS activities to additional schools. The IEC materials will be utilized by health educators in CASS sessions at the schools, promoting greater understanding of AMR among students. By investing in awareness of the youth and intervening before inappropriate attitudes become ingrained, MTaPS is 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.

BEST PRACTICES/LESSONS LEARNED

- Continuous engagement of IDQCD and the relevant central directorate is essential for enhancing the capacity of hospital quality departments in data analysis and utilization of electronic data collection tools by equipping staff with the required competencies, skills, and tools to analyze data effectively, make informed decisions regarding compliance to protocols at hospitals, maintain good performance of indicators, and enhance both health care quality and patient outcomes.

- MOH IPCD team engagement in the validation visits conducted by MTaPS during the IPC assessment in dental settings provided valuable technical insights to the MOH. The insights will inform the development of more effective training programs, specifically emphasizing the importance of an observation-based assessment approach. This information will also guide the refinement of IPC policies and guidelines, ensuring that they are practical and based on real-world observations. Involving the MOH in the validation visits also ensured transparency by providing an independent and authoritative oversight of the data collection process; helped verify the accuracy and reliability of the findings as a third-party validator; allowed the MOH to directly observe and confirm the data collection methods and results; ensured the process was followed with integrity and findings are credible and trustworthy; and established the MOH as the leader in the IPC assessment process.
- Involving the MOH SHD representatives in the CASS activity induced their ownership of the program. Furthermore, empowering school health service providers with knowledge, skills, and tools, and giving them leadership roles, will result in CASS sessions tailored to the specific context of the schools and contribute to long-term sustainability of the initiative.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Continue supporting the GPD in automating the FA procedures, finalize the Business Process Modeling Notation document, which describes the automation process and procedures required.	July 2024
Activity 1.1.2: Complete the final draft of the FA SBD and then submit it to the National Procurement Policies Committee for approval and subsequent dissemination.	July 2024
Activity 1.1.3: Finalize final draft of the policy, then submit it to the National Procurement Policies Committee for approval and dissemination.	August 2024
Activity 4.1.1: Salt and Mafraq hospitals will continue leading the CQI cycles. MTaPS will conduct the lessons learned workshop, which will involve representatives from leadership across all MOH hospitals and disseminating related IEC materials.	July–September 2024
Activity 4.1.2: Al-Hussein Hospital AMS Committee will lead the implementation of the CQI approach and conduct regular meetings for the AMS committees. MTaPS will disseminate related IEC materials for 11 RMS hospitals.	July–September 2024
Activity 4.3.2: Support the MOH IPCD in the ongoing implementation of the national IPC dental assessment. This includes cleaning and finalizing the assessment dataset and drafting, finalizing, and launching the assessment report.	July–September 2024
Activity 4.4.1: Digitally disseminate the AMR health messages targeting different sets of community audiences through the MOH social media platforms and PHC screens.	July–September 2024

Table 10. Quarter 3, FY24, Activity Progress, Jordan—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Assist the GPD in institutionalizing FAs by automating priority implementation procedures into its electronic system **Activity description:** Support the GPD counterparts in integrating the FA SOPs into JONEPS	1	The Automation Advisory Committee and the IT unit at the GPD with MTaPS support led the development of the FA automated procedures. The committee completed the identification of user interface elements and authentication lists for the FA priority procedure undergoing automation by GPD.
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 finalized FA SBD advanced draft was completed through a thorough review process led by GPD department heads to ensure accuracy and compliance.
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 initial draft of the supplier performance evaluation policy was completed by GPD with MTaPS support and is undergoing review by GPD-appointed focal points.
Activity 4.1.1: Assist the MOH in implementing the antibiotic prophylaxis/treatment protocols previously developed with MTaPS' support and approved by the Minister **Activity description:** Support conducting of orientation workshops for physicians (including medical residents), nurses, and pharmacists in Mafraq and Salt hospitals	4	The AMS committees at MOH Al-Salt and Mafraq hospitals led CQI implementation by auditing antibiotic protocol adherence with MTaPS support. Indicators reported to the MOH digital platform will help the institutionalization of the protocols for rational antimicrobial use. To address a slight decrease in adherence, AMS committees will orient physicians and address documentation issues identified. IDQCD and MTaPS will conduct joint visits and provide IT training. MTaPS will also host a workshop in PY6 Q4 to advocate for all MOH hospitals to adopt the protocols, aiming to improve RUA and reduce AMR in Jordan.
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 participated in two high-level meetings with the RMS central quality directorate and AMS committee. The first meeting focused on disseminating protocol KPIs across all RMS hospitals for robust monitoring and evaluation. In the second meeting, the third-round audit results were presented showing consistent improved compliance to the protocols. MTaPS also held a recognition ceremony for AMS committee members and RMS staff, highlighting their efforts for implementation of the protocols and AMR containment.
Activity 4.2.1: Collaborate with the MOH to support IPC training for MOH hospitals' NICU nursing staff, utilizing the HCIP-trained IPC focal points as lead trainers **Activity description:** Support the training of selected senior nursing staff from the NICUs of select MOH hospitals	4	In collaboration with the MOH IPCD, MTaPS conducted a CPD-certified NICU-IPC best practice training program using IPC focal points as trainers. The program targeted 100 senior nursing staff from all MOH hospitals over two days. Trainees can now demonstrate and disseminate IPC best practices, which once implemented are expected to reduce health care-associated infection rates and improve neonatal health outcomes.

Activity 4.2.2: Collaborate with the MOH, HADs, and HCAC to support the locally led HCIP training program for hospitals' IPC focal points **Activity description:** Collaborate with the HCAC to provide additional support to the MOH IPCD to capacitate the focal points and create an enabling environment for the implementation of IPC interventions	4	In collaboration with HCAC, the MOH—with MTaPS support—enabled 28 (17 female) IPC focal points from MOH hospitals across Jordan to attain certification as infection preventionists after completing the HCIP training. These professionals can now develop and implement comprehensive infection prevention programs, contributing to disease prevention, reduced hospital stays, and lower mortality rates. MTaPS honored the participants in a ceremony with distribution of certificates.
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	In collaboration with HCAC, the MOH—with MTaPS support—enabled 50 IPC focal points (37 female) from 14 health directorates to become HCSIPs. These PHC focal points can now plan and implement IPC programs, monitor and strengthen IPC interventions, and prepare their facilities to meet national accreditation standards, thus contributing to improved patient health outcomes in Jordan.
Activity 4.3.2: Support the MOH in conducting a national IPC assessment including both MOH and private-sector dental settings **Activity description:** Provide comprehensive technical and logistical support in conducting an IPC assessment in dental clinics and centers across the country	4	In collaboration with the MOH, MTaPS conducted IPC assessments in 600 public and private dental clinics, evaluating IPC practices and knowledge while identifying gaps in the health sectors. The MOH and MTaPS conducted joint visits to verify data and monitor processes with no major issues found. The assessment findings will inform MOH policy with evidence-based recommendations, enhance IPC practices, bridge health sector gaps, and guide decision-making to improve public health outcomes.
Activity 4.4.1: Support the MOH to widely disseminate the finalized AMR awareness health messages for the general population **Activity description:** Support the MOH HCAD to continue the dissemination of health messages digitally targeting different sets of community audiences through the MOH social media platforms	4	MTaPS continued supporting HCAD in refining AMR social media posts for public dissemination. These posts target diverse audiences, including health service providers and individuals in urban and rural communities, aiming to enhance understanding of IPC and AMR principles and encourage RUA. In Q4, these messages will be posted on the HCAD Facebook page and broadcasted through digital signage screens available at select PHCs.
Activity 4.4.2: Support the MOH in raising AMR awareness in additional public schools across the country **Activity description:** Collaborate with the MOH and SHD to support raising AMR awareness among additional school students	4	MTaPS supported MOH SHD and HADs to expand the AMR CASS activities, involving 14 SHD heads and 40 health providers across 14 HDs to reach 98 additional schools, impacting 5,034 students (4,288 female) in Jordan. Additionally, MTaPS distributed 1,600 posters and 10,000 pamphlets to be utilized by health educators in the CASS sessions at schools, expanding activities and enhancing AMR awareness among students. The goal is to promote the responsible use of antimicrobials from an early age, promoting sustainable health practices for future generations.

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 program year 1–5 work plans, MTaPS helped Kenya counterparts improve Kenya's JEE scores by supporting 65% (40/62) of the benchmark actions. In MSC, MTaPS has fully or partially 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 March 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 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 developing and reviewing the NAP-AMR, its M&E framework, and CASIC work plans in MTaPS-supported counties.

As of March 2024, MTaPS has fully or partially supported the completion of 80% (4/5) of capacity level 2 actions, 100% (6/6) 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 HCWM guideline, development of 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 March 2024. MTaPS interventions focus on strengthening AMS governance structures at the national level and in the focus counties and HFs; developing the KNMF; reviewing the Kenya Essential Medicines List with incorporation of the AWaRe categorization of antibiotics; 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.

QUARTER 3 /Y6 ACHIEVEMENTS AND RESULTS

MTaPS provided TA to the CASICs for Murang'a and Kilifi counties to conduct a validation workshop for the Murang'a CASIC work plan 2024–2026 through a county-led meeting held in April 2024. A virtual training for the Kilifi CASIC members on the WHO costing and budgeting tool held in April 2024 was followed by actual costing of the Kilifi CASIC work plan (2024–2026) through a county-led activity in May 2024. Additionally, MTaPS supported the orientation of CASIC members in the counties of Nairobi and Kiambu and provided TA during the development, costing, and validation of their CASIC work plans in several meetings held between April and June 2024.

To strengthen facility AMS structures and to build capacity of AMS teams in the new target facilities in Nairobi and Kiambu, AMS baseline assessments were conducted, and MTaPS supported an MTC and AMS training for the Mater Misericordiae Hospital (Nairobi) MTC/AMS committee members and for Ruiru Level 4 Hospital (Kiambu) teams in May 2024.

To strengthen the IPC governance at the county level, MTaPS supported and provided TA during the progress review of the implementation of Nairobi County's first edition of the costed CIPCAC work plan and revision. Additionally, in June 2024, MTaPS supported the orientation of the Kiambu CIPCAC members, progress review of the implementation of the first edition of the CIPCAC work plan, and revision of the work plan. Both CIPCACs drafted zero drafts of the costed work plans that await validation. MTaPS also supported validation of the Kilifi County revised CIPCAC work plan in June 2024 through coordination by the county team.

MTaPS collaborated with the MOH Division of Patient and Health Worker Safety to finalize the revision of the National IPC Guidelines, National Guidelines for Safe Management of Healthcare Waste, and National HAI Surveillance Guidelines. These documents were disseminated in all current and previously MTaPS-supported sites and counties (22 facilities in counties). Following successful entry meetings in the new counties of Kiambu and Nairobi, IPC baseline assessments were conducted in the target facilities of Ruiru Level 4 and Mater Misericordiae hospitals in April 2024 to determine status and obtain baseline data for informing future improvements. Based on the capacity gaps identified, five-day and three-day IPC CQI trainings were conducted for Ruiru Level 4 and Mater Misericordiae hospitals in May 2024 and June 2024, respectively. Both facilities developed IPC CQI work plans to guide the implementation of IPC activities in both HFs. Monitoring the implementation of CQI activities in the target HFs in Kilifi and Murang'a continued through the county IPC focal persons.

MTaPS, in collaboration with the PPB, provided TA during the pilot of the AMC tool at four target antimicrobial supply chain points (i.e., importers and local manufacturers, wholesalers/distributers, HFs, and community pharmacies).

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

Validation of the Murang'a CASIC work plan 2024–2026, through a county-led meeting, was held on April 19, 2024, with MTaPS' financial and technical support. In attendance were 14 participants (10 female). The revised work plan is ready for design and layout.

To build the capacity of the CASIC members, MTaPS supported and facilitated virtual and face-to-face training sessions on the WHO costing and budgeting tool for 18 participants in Kilifi County (7 female) in April 2024, 13 participants in Nairobi County (7 female) in May 2024, and 16 participants in Kiambu County (8 female) in June 2024. One Health members of the CASIC (human health, agriculture, and environment) were represented in the 3 counties, while Kiambu County included representation from its department of education. MTaPS supported the training of 19 Kilifi CASIC members (11 female) on data analysis, interpretation, and report writing in May 2024. Additionally, MTaPS provided TA to the PPB during the pilot of the AMC tool among importers and local manufacturers, wholesalers/distributors, HFs, and community pharmacies, which are the four targeted antimicrobial supply chain points.

RESULTS AREA 2: IPC

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

MTaPS initiated the process of developing SOPs in wound management by holding a meeting with a wound specialist. Information gathering is ongoing and subsequent meetings will be held next quarter to consolidate the materials.

Additionally, MTaPS disseminated the National IPC Guidelines, HAI Surveillance Guidelines, and the National Guidelines on Safe Management of Healthcare Waste to the previous and current MTaPS-supported counties and facilities. Through MTaPS' support, progress review meetings were held for Nairobi and Kiambu CIPCAC work plans, and revision of the first editions commenced. In Nairobi County, out of 29 planned activities, 7 (24%) were fully implemented, 10 (34.5%) partially implemented/ongoing, and 12 (41.4%) not implemented. The work plan was developed through COVID-19 funding; thus, no comprehensive monitoring was done even though CIPCAC members made efforts while lacking partner support. In Kiambu County, out of the 90 planned activities, 8 (8.9%) were fully implemented, 46 (51.1%) partially implemented/ongoing, and 23 (25.6%) were not implemented. Similarly, no monitoring of the work plan was done, and the county lacked partner support. Kilifi revised their CIPCAC work plan which was also validated through MTaPS' support and is ready for printing and launch.

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

MTaPS, in collaboration with the departments of health in Nairobi and Kiambu Counties, conducted a 3-day and 5-day IPC CQI training for the IPC committees from Mater Misericordiae and Ruiru Level 4 hospitals, respectively, to address the capacity gaps in IPC revealed by the IPC baseline assessment findings. A total of 35 participants were trained (26 female). IPC trainers of trainers (TOTs) from the counties facilitated the sessions in collaboration with the MTaPS team.

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

In the new counties of Kiambu and Nairobi, IPC baseline assessments were conducted in the target HFs (Ruiru Level 4 and Mater hospitals) in April to determine their status and to obtain baseline data that would help inform future improvements. Four modules from the Infection Control Assessment Tool

(ICAT) were used during the assessment. The mean scores were 28.7% for Ruiru Level 4 and 52.9% for Mater Hospital, rated as C and B, respectively. The IPC committees of the new facilities developed IPC CQI work plans and implementation is ongoing. Monitoring the progress of IPC CQI plan implementation continued in Kilifi and Murang'a counties; this was continued remotely through the county and facility IPC focal persons.

RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

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

MTaPS held an entry meeting with Mater Misericordiae Hospital management (Nairobi County) in April 2024 to give an overview of the USAID MTaPS program in Kenya and to develop a roadmap outlining the activities to be implemented. The meeting was chaired by the facility's director of medical services with 9 participants in attendance (6 female). Additionally, MTaPS provided TA in the reconstitution of 2 MTCs in the new counties of Nairobi and Kiambu and trained the committee members to build their capacity in steering the AMS programs in their respective facilities.

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

MTaPS supported the training of MTC/AMS committees for Mater Misericordiae and Ruiru Level 4 hospitals in May 2024 to build their capacity in steering AMS programs in their respective facilities and to bridge the capacity gaps identified during the baseline assessments. A total of 41 participants were trained (29 female).

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

MTaPS conducted AMS baseline assessments in the target HFs (Ruiru Level 4 and Mater Hospitals) in the new counties of Kiambu and Nairobi in April 2024 to determine their status and to obtain baseline data that would help in measuring future improvement. Findings revealed that MTCs were not functional, and there was a lack of human resource capacity in AMS, lack of an AMS work plan, and lack of formal appointment of committee members. Despite these findings, strong management support for both an MTC and AMS program was evident. The facility teams developed their MTC/AMS CQI action plans that will guide the implementation of AMS interventions in the facilities.

BEST PRACTICES/LESSONS LEARNED

Building on existing governance structures within the new counties and facilities eased the strengthening of the structures and building the capacity of the CASIC and CIPCAC members and the facility IPC and AMS committees that were enthusiastic to implement the programs. Use of county TOTs during the capacity building sessions provided confidence and is key to sustainability beyond MTaPS.

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	July–September 2024

▪ Continue to provide TA to the NASIC and the CASICs in Murang'a, Kilifi, Nairobi, and Kiambu ▪ Finalize and launch the Kilifi, Murang'a, Nairobi, and Kiambu CASIC work plans	
Activity 2.1.1: Institutionalize IPC governance at the national, county, and facility levels ▪ Finalize, launch, and disseminate the AMR mobile app and the SOPs on wound management ▪ Finalize, print, and launch the second editions of the costed CIPCAC work plans in the four counties ▪ Continue providing TA for NIPCAC, county, and facility IPC committees during their regular meetings	July–September 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 continuing professional development trainings ▪ Support set-up of IPC induction and continuing education programs in two facilities in Nairobi and Kiambu ▪ Conduct targeted webinars and sensitization sessions to address identified implementation gaps	July–September 2024
Activity 2.5.1: Institutionalize county, sub-county, and facility-level IPC, OSH, and WASH activities for sustainable capacity ▪ Continue monitoring implementation of the IPC CQI work plans and track compliance ▪ Provide facility mentorship to address any implementation gaps identified	July–September 2024
Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels ▪ Finalization and launch of the AMC tool ▪ Continue monitoring the implementation of AMS CQI work plans—both face-to-face and remotely ▪ Support the MTCs through mentorship in the implementation of the facility work plans	July–September 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 ▪ Conduct targeted webinars, CMEs, and sensitization sessions to address identified implementation gaps	July–September 2024
Activity 3.5.1: Support institutionalization of county, sub-county, and facility-level AMS activities for sustainable capacity ▪ Provide support and TA during supportive supervision and mentorship sessions to the six target facilities through the county or facility AMS focal persons through face-to-face sessions for the new facilities	July–September 2024

Table 11. Quarter 3, 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; dissemination and implementation of the NAP-AMR 2023–2027 with its consequent M&E framework. Additionally, support institutionalization and strengthening of the Kilifi and Murang'a CASICs.	5.4	1.1	▪ Provided TA to Kilifi and Murang'a CASICs to cost and validate the next iteration of their work plans. ▪ Provided TA to Kilifi County on training on the use of the WHO costing and budgeting tool prior to costing their second CASIC work plan. ▪ Provided support and TA during the orientation, progress review, development, costing, and validation of the Nairobi and Kiambu CASIC work plans. ▪ Provided TA during the piloting of the AMC tool.
Activity 2.1.1: Institutionalize IPC governance at the national, county, and facility levels **Activity description:** Support the MOH in the implementation of the national IPC M&E framework; development/review of relevant SOPs; meetings with the national IPC TWG and NIPCAC; CIPCAC meetings; monitoring implementation of HF action and IPC CQI plans.	5.4	2.1	▪ Held a meeting to initiate the development of SOPs in wound management. ▪ Disseminated the National IPC Guidelines, Guidelines on HAI Surveillance, and the National Guidelines on Safe Management of Healthcare Waste. ▪ Provided TA to Kilifi County to conduct validation for their second edition of the CIPCAC work plan. ▪ Provided TA and support to Nairobi and Kiambu CIPCACs during orientation of members and work plan progress review. Revision of their CIPCAC work plans was initiated.
Activity 2.2.1: Support routinization, strengthening, and scale-up of health care human resource capacity for IPC through pre-service, in-service, and continued professional development trainings **Activity description:** Support routinization, strengthening, and scale-up of the IPC CPD course in collaboration with health professional associations; collaborate with national MOH IPC team and stakeholders in introduction of IPC agenda/courses for in-service training.	5.4		▪ Conducted IPC CQI training for IPC committee members from the two target facilities (i.e., Mater Misericordiae and Ruiru Level 4) in the new counties of Nairobi and Kiambu using their own IPC TOTs.
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, 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	▪ Conducted IPC baseline assessments in the target facilities in the new counties of Nairobi and Kiambu using modules from the ICAT. ▪ Monitored implementation of IPC CQI plans in the counties of Kilifi and Murang'a remotely through the county and facility IPC focal persons.

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 3.1.1: Institutionalize and strengthen AMS governance structures at national and county levels **Activity description:** Support PPB in utilization of the AMC surveillance tool, provide TA to county AMS focal persons in two MTaPS focus counties, and support development/review and use of national outpatient prescription and inpatient treatment review sheets.	5.4	3.1	▪ In collaboration with PPB, MTaPS provided TA during the piloting of the AMC tool among the target supply chain points of importers and local manufacturers, wholesalers/distributers, HFs, and community pharmacies. ▪ TA in the reconstitution of the MTCs in the new counties of Nairobi and Kiambu. MTC members were trained to build their capacity in steering the AMS programs in their respective facilities.
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 the routinization, strengthening, scale-up, and incorporation of the AMR and AMS courses in core pre-service 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	▪ Trained Kilifi CASIC members in data analysis, interpretation, and reporting. ▪ Conducted training for Mater Misericordiae and Ruiru Level 4 hospital MTC/AMS teams to build their capacity in steering AMS programs.
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; documentation of best practices and lessons learned to support knowledge management and sharing.	5.4	3.5	▪ Conducted AMS baseline assessment in Mater Misericordiae and Ruiru Level 4 hospitals to determine status and obtain baseline data. ▪ Supported the MTC/AMS teams in both hospitals to develop CQI work plans to guide in the implementation of AMS interventions.

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 coordination meetings of the 12 initially planned, to monitor progress in implementing the NAP-AMR. The eighth meeting was an opportunity to pause and reflect, as well as develop a sustainability plan for MTaPS supported activities. Additionally, MTaPS supported the IPC TWGs in organizing 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 4 regular meetings to monitor and evaluate AMS practices in supported HFs. The WHO tool has been used to monitor AMS program implementation at the national level during the last meeting in August 2023. The evaluation showed a national score of 60% for AMS program implementation and 85% for monitoring/surveillance and evaluation. The lowest score was 31% for education awareness and training.

MTaPS supported the DGSHP and DPM in establishing DTCs and IPC committees in 16 HFs. Following their establishment, the committees developed CQI plans for IPC and AMS practices. MTaPS assisted the GCMN-RAM and the DGSHP in organizing 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 6 virtual meetings and conducting 3 DTC supervision visits to each of the 16 HFs. Additionally, MTaPS supported the National Institute of Public Health, DGSHP, and DPM in developing the 2023–2027 NAP AMR, the 2021–2025 AMS action plan, 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 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 sectors and an IPC action plan for the animal health sector which have been adopted and implemented since 2020. MTaPS assisted the DGSHP in printing and disseminating 500 copies of the national IPC strategic plan to the MOH, 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 1,520 AMS training toolkits, including the facilitator guide, participant manual, and infectious disease treatment guidelines, to HCWs.

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

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 1: EFFECTIVE MSC OF AMR

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

MTaPS supported the IPC Kati hospital committee in celebrating Global Hand Hygiene Day on May 21, 2024. This year's theme was "promoting knowledge and developing expertise of health care staff through innovative and effective training and education on infection prevention and control including hand hygiene." The objective of the day was to raise awareness among HCWs of the importance of hand hygiene in the health care environment and reducing the transmission of pathogenic agents. A total of 143 people (73 female), including government officials, took part in the event. MTaPS' support to the IPC committee included development of the agenda and the invitation letter. MTaPS also supported media coverage and provided 200 caps, 2 banners, 5 cans of hydroalcoholic gel, and 10 cartons of soap during the event.

On June 6, 2024, MTaPS supported the DGSHP in organizing the WASH IPC Task Force coordination meeting in Bamako. The meeting objectives were to present the WASH assessment process and steps as requested by the DGSHP, presentation of the new JEE 2023 benchmark action tool, and presentation of the IPCAT2 assessment at the national level. The 2024 IPCAT2 assessment results are summarized in table 12 below.

Table 12. Summary of the results of the IPCAT2 assessment of the main components of IPC at the national level from 2020 to 2024

COMPONENTS	ASSESSMENT YEARS				
	2020	2021	2022	2023	2024
IPC programs	43%	61%	61%	70%	74%
IPC guidelines	72%	75%	75%	75%	78%
IPC education and training	38%	60%	60%	60%	60%
Surveillance for HAI infections	13%	13%	13%	23%	23%
Multimodal strategies	25%	50%	63%	63%	63%
Monitoring/audit of IPC practices, feedback, and control activities	6%	19%	31%	31%	31%
Average	33%	46%	50%	54%	55%

The IPC Program core component score of 74% was attained owing to "defined scope of responsibilities (6/7)" and "linkages with other programs and professional organization (8/8)." IPC guidelines reached a score of 78% credited to "development, dissemination and implementation of national technical guidelines (7/9)." Although "Surveillance for Health Associated Infections (HAI)" improved over 4 years, scores are still low, as there is a lack of a national HAI surveillance system. The monitoring/audit of IPC practices core component score is also low because monitoring and audits are conducted sporadically. Despite progress made in IPC programs, there is no administrative note officially establishing the IPC program at the national level and designating a national IPC focal point.

Participants at the WASH IPC working group meeting. Photo credit: Famory Samassa, STA, MTaPS

RESULT AREA 2: IPC

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

On June 7, 2024, MTaPS supported the DGSHP in organizing a virtual meeting to monitor IPC activities in the 16 health facilities. The aim of this virtual follow-up meeting was to monitor progress and to

ensure continuous improvement in the quality of IPC practices in HFs. Positive highlights of the virtual meetings were functionality of all 16 health facility IPC committees and quality improvement plans implemented in all health care facilities with CQI activity implementation rates ranging from 21% to 93%. Areas for improvement include the following: 10 of the 16 assessed health facilities are not compliant with the biomedical waste sorting guidelines, and poor health care behavior contributes to noncompliance of waste sorting guidelines.

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

On May 6, 2024, MTaPS oriented the USAID-funded Keneya Sinsi Wale (KSW) project staff on the use of the DGSHP and Faculty of Medicine's IPC, AMS and COVID-19 e-Learning platform courses. A total of 65 (7 female) KSW project staff benefited from the orientation. MTaPS also shared the electronic version of the e-Learning course flyer and platform user guide with participants.

BEST PRACTICES/LESSONS LEARNED

- To improve infection prevention practices, the infection prevention committees of the Kati hospital and the Kangaba and Koutiala reference health centers have instituted the celebration of Global Hand Hygiene Day in their various structures. Celebrating this day is important, as it helps to establish a culture of hand hygiene in the health care environment, raise staff awareness, and reduce the number of hand-transmitted diseases.

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.	July–September 2024
Activity 3.5.1: Support the DPM in disseminating IEC materials on AMS.	July–September 2024
Activity 2.5.2: Support the IPC-WASH group and DGSHP to strengthen HH practices and monitor compliance with waste management SOPs in HFs.	July–September 2024

Table 13. Quarter 3, FY24, Activity Progress, Mali—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Provide technical and operational support to the GCMN-RAM and its subcommittees.	5	5.4	▪ Recruitment of a consultant to work on scale up strategy of IPC and AMS interventions. ▪ IPCAT2 assessment conducted.
Activity 2.5.2: Support the IPC-WASH group and DGSHP to strengthen HH practices and monitor compliance with waste management SOPs in HFs.	5	5.4	▪ Virtual meeting organized to monitor IPC activities in the 16 health establishments supported by MTaPS.

MATERNAL, NEWBORN, AND CHILD HEALTH ACTIVITIES

OVERVIEW

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

CUMULATIVE PERFORMANCE TO DATE

From December 2021 to April 2022, MTaPS supported the DPM in conducting a 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 site for the safe use of pharmaceutical products and for improving the quality of health services in facilities.

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

In September 2023, MTaPS, in collaboration with the Global Fund project Unité de Mise en Oeuvre de Renforcement du Système de Santé, supported the DPM in developing training tools on rational prescription and in organizing a workshop to train 25 trainers (22 male, 3 female) on rational prescription of antimicrobials. Those trainers trained 116 health practitioners 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.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1. PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

Activity 1.1.2. Support the DPM to conduct a mid-term evaluation of the 2022–2026 National Pharmaceutical Master Plan

MTaPS supported the DPM to recruit a consultant to conduct a mid-term evaluation of the 2022–2026 pharmaceutical policy master plan. The mid-term evaluation was conducted from April 15 to June 7, 2024. The evaluation identified achievements, areas of improvement, challenges, lessons learned and priorities to be implemented before the master plan expires. A validation workshop organized for June 5–7 in Bamako brought together 49 participants from the central, regional, and district levels, as well as technical and financial partners. Workshop recommendations included: depositing funds generated from laboratory activities into a bank account that is separate from the hospital management account, developing procedures for mobilizing funds in emergency situations and having them validated by the state control service, and adopting a specific nomenclature for medicines and health products in the public procurement code. Following the assessment, MTaPS, in collaboration with the DPM, started preparation meetings to develop an advocacy document for fundraising. The meeting focused on the agenda, invitation list, and content of the workshop.

OBJECTIVE 5. PHARMACEUTICALS SERVICES, INCLUDING PRODUCT AVAILABILITY AND PATIENT-CENTERED CARE TO ACHIEVE HEALTH OUTCOMES, IMPROVED

Activity 5.4.6: Support the DPM to build the capacity of health practitioners on infectious disease treatment and appropriate prescribing

From April 24 to June 14, MTaPS supported the DPM to organize infectious treatment and prescribing training in Bamako, Kayes, Mopti, Segou, and Sikasso regions. In total, 116 (30 female) health practitioners benefited from the training. The training objectives were:

- Identify the patient's problem and specify the therapeutic goal.
- Ensure that the choice of drugs is appropriate for the clinical case management.
- Provide information, instructions, and warnings about the drug of choice.
- Implement the best practices for antibiotic prescribing.
- Manage the main infectious diseases.
- Utilize the rules of antibiotic prophylaxis.
- Communicate and improve the doctor-patient relationship.

BEST PRACTICES/LESSONS LEARNED

- Organizing preparatory meetings involving all stakeholders from the pharmaceutical sector to prepare for the assessment and the validation of 2022–2026 pharmaceutical policy master plan enabled a complete and comprehension evaluation of the policy master plan.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.2: Support the DPM in conducting a mid-term evaluation of the 2022–2026 National Pharmaceutical Master Plan	July 2024
Sub-activity 3.1.6.2: Support the DPM in improving the functionality and operationalization of the website	July 2024

Table 14. Quarter 3, FY24, Activity Progress, Mali—MNCH

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
Activity 1.1.2. Support the DPM to conduct a mid-term evaluation of the 2022–2026 National Pharmaceutical Master Plan.	1.1		▪ 2022–2026 National Pharmaceutical Master Plan assessment conducted. Preparatory meetings to develop an advocacy document for fundraising to support the implementation of the policy master plan held.
Activity 5.4.6: Support the DPM to build the capacity of health practitioners on infectious disease treatment and appropriate prescribing.			▪ 116 health practitioners trained on infectious disease treatment guidelines and rational prescribing. ▪ Creation of a collaboration menu between the DPM and customs on the website

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 June 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, the country completed all 4 (100%) benchmark actions in capacity level 2 and level 3. MTaPS supported the achievement of 4 (100%) of the 4 actions in capacity level 4 and 4 (100%) of the 5 actions in capacity level 5. With MTaPS' support, the country is on track to complete 100% of level 4 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. At the subnational level, MTaPS supports the state-level AMR TWGs in Kebbi and Enugu States and the corresponding facility programs in 7 facilities.

In IPC, MTaPS' support contributes to the country moving toward JEE (version 2.0) level 3, with MTaPS contributing to 3 of the 5 benchmark actions (60%) in level 2, all (100%) of the 6 actions in level 3, and 4 of the 5 benchmark actions (80%) in level 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 (BSI) surveillance to support HCAI surveillance in the country.

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

program across the state, including the use of WHO assessment tools to self-assess and develop improvement plans. As a result, step-down trainings were conducted by the facility teams for 1,967 staff (836 male, 1,131 female). MTaPS provides ongoing monitoring of these programs remotely and through mentorship visits to the facilities.

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

MTaPS supported the country's AMR TWG to develop a national OH AMS policy and strategy. This document 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 help control the misuse of lifesaving antibiotics. MTaPS supported a meta-analysis of published data on resistance and sensitivity patterns of common microbes to commonly used antibiotics in Nigeria. The AWaRe TWG, a subcommittee of the NEML committee, then used the outcome of the meta-analysis for input during the categorization of antibiotics based on WHO AWaRe groupings in April 2023. MTaPS collaborated with the Federal Ministry of Health (FMOH) and NEML committee to review the NEML in line with the AWaRe list.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

MTaPS, working collaboratively with the NCDC and other partners, has finalized the 2024–2028 NAP-AMR, including the monitoring framework, and it is 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 (FMOHSW), the Federal Ministry of

Agriculture and Food Security (FMOAFS), and the Federal Ministry of Environment and Water Resources. Tentatively, the launch will be in August 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 7 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 mentored the 2 state IPC focal persons in Kebbi and Enugu states (1 in each state) to support governance 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 3 FY24, MTaPS, in collaboration with the NCDC, finalized the manuscript for the completed HCAI systematic review meta-analysis for HCAI surveillance in the country. The findings have 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 3 FY24, MTaPS, in collaboration with the national AMR TWG secretariat, continued to provide support to IPC focal persons and teams at the 7 supported facilities in Enugu and Kebbi states through the deployed local IPC experts. 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 3 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.

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 is also supporting the development of AMS training modules. Once completed, it will be validated by subject matter experts and key stakeholders in the country and be used to train facilities that want to implement 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 (MSSV) 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 is now being completed, and will be validated at a stakeholder's workshop. Once it is validated, it will be used to support implementation of AMS programs in the facilities.

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. For example, the Enugu State government has independently activated 10 facilities in the state for IPC program implementation and monitoring.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

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

Table 15. Quarter 3, 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, 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 (AMRIS) and piloting data collection with the tools.
Activity 3: Development of AWaRe categorization of antibiotics **Activity description:** Following the completion of categorization of essential antibiotics in Nigeria into the AWaRe categories based on local evidence of the sensitivity and resistance profile of the antibiotics	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 list.
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 disseminated IPC for VHF manual.
Activity 6: Strengthen HCAI surveillance in human health.	5.4	2.1	Manuscript development finalized.
Activity 7: Strengthening IPC core components and functioning of committees	5.4	2.5	Engaged MTaPS mentor to provide support to IPC committees and co-facilitate Knowledge Exchange Workshops for 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 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 clinical trial oversight.

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 since 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 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 from the National Pharmacovigilance Advisory Committee and Rwanda FDA on PV. In strengthening the PViMS for both active and spontaneous PV, PViMS (now known as the digital public good OpenRIMS-PV[6]) 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 (UMC). 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 1,440 enrolled patients. By the end of the study in May 2023, nine 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 6MMD 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.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

OBJECTIVE 1: GOVERNMENT AND HEALTH WORKER CAPACITY TO MANAGE PHARMACEUTICAL SYSTEMS STRENGTHENED

[6] See more details on https://github.com/OpenRIMS-PV.

Activity 1.1.1: Strengthen the medical products regulatory framework capacity of Rwanda FDA in regulating pharmaceuticals including that for medicines used in HIV/AIDS, MNCH, and FP/RH programs (PY5)

In May 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 September 2024. The meeting also discussed how various partners will provide support to the Rwanda FDA to address the remaining four institutional development plans (IDPs) from the May 2024 WHO GBT evaluation as well as priority activities being undertaken by the Authority.

Building on support provided previously to enhance the QMS, MTaPS is preparing a contract between the certification company and the Rwanda FDA to conduct an external quality audit to certify the Rwanda FDA on ISO 9001:2015. The external audit is expected to start in mid-July. This signifies a major step towards the Rwanda FDA's goal of enhancing the quality and efficiency of its operations.

Activity 1.1.2: Improve capacity registration of medical products (essential medicines, vaccines, and medical devices), including those used in HIV/AIDS, MNCH, and FP programs

From March 27 to April 30, 2024, MTaPS provided operational support to the Rwanda FDA in conducting an additional dossier assessment workshop to address the WHO's recommendation from the February 2024 GBT evaluation regarding the clearance of medicines on the Rwanda FDA's Authorized list. The 80 participants (36 female) from the registration division aimed to evaluate 338 dossiers (comprising 207 dossiers requiring full assessment, 114 dossiers using reliance and abridged procedures, and 17 dossiers dealing with variations in registration), evaluate 171 summary of product characteristics (SmPCs) and 207 product information leaflets (PILs) for publishing, and review another 101 SmPCs and 100 PILs. Dossier evaluation was undertaken using full, reliance, and abridged assessment principles on which MTaPS had previously oriented and trained Rwanda FDA assessors.

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

MTaPS trained 8 Rwanda FDA IT team members (6 female) on IRIMS management and administration and continued working with the IRIMS software developer to update user manuals and guides in line with ongoing enhancements to IRIMS functionalities. MTaPS updated the IRIMS transition plan and developed a 12-week system roadmap that aims to address critical issues, enhance system operationalization, and facilitate handover to the Authority. Out of 106 tickets reported through the helpdesk, 77 were resolved during the quarter. The helpdesk system provides monitoring and an archive of issues raised by, and support given to, IRIMS internal and external users at the Rwanda FDA that can assist with future system review and knowledge transfer. Furthermore, MTaPS has continued to improve engagement with and monitoring of IRIMS by the Rwanda FDA by conducting weekly update meetings that contribute to MTaPS' continued efforts to ensure knowledge transfer to the Rwanda FDA and the Authority's ownership of IRIMS.

MTaPS worked with the USAID Ireme project to organize and undertake a webinar on June 13, 2024, on the role of digital transformation in the health sector in Rwanda. In the webinar, MTaPS discussed

how digitalization of regulatory functions, including pharmacovigilance, through implementation of OpenRIMS-PV and IRIMS at the Rwanda FDA have contributed to improving the quality of regulatory services provided by the Rwanda FDA to its clients.

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

Activity 3.2.2: Continue to strengthen pharmacovigilance and safety monitoring for regulated medicines, including ARVs, through enhancing the existing spontaneous reporting system

MTaPS further updated OpenRIMS-PV to meet the WHO requirements for the electronic transmission of individual case format version three, known as the E2B R3 standard, for the direct upload of AE reports into VigiFlow. This will ensure that OpenRIMS-PV is interoperable with VigiFlow for integration with the global VigiBase database at UMC, further enhancing the Rwanda FDA's PV reporting process to the UMC and facilitating PV data access and use. In addition, MTaPS supported the Rwanda FDA to develop an abstract on "Strengthening pharmacovigilance in Rwanda, by introducing PViMS for spontaneous reporting of adverse drug effects," which was approved for presentation at the 2024 conferences of the International Society of Pharmacovigilance's (ISOP) chapters in Africa and in Canada.

BEST PRACTICES/LESSONS LEARNED

No best practices or lessons learned in quarter 3.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
(PY5 & 6) Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation processes ▪ Continue fixing software concerns highlighted by the Rwanda FDA and providing system user support ▪ Support transition of the system to the Rwanda FDA	July–Sept 2024
(PY6) Activity 1.1.2: Enhance the clinical trials oversight function of the Rwanda FDA ▪ Conduct further training in assessment of clinical trial study protocols, including hands-on practical exercises, mentoring, and coaching	July–Sept 2024
(PY6) Activity 3.2.1: Continue to strengthen pharmacovigilance and safety monitoring for medicines including ARVs and vaccines through enhancing the existing spontaneous reporting system (continuing from FY23) ▪ Ensure E2B R3 compliance of AE .xml report files from PViMS so they can be uploaded into VigiFlow and transmitted automatically to the WHO UMC ▪ Enable signal detection of received ADR reports for active surveillance by providing a signal detection algorithm ▪ Conclude final training of Rwanda FDA PV staff, including the full information and communication technology team, on the updated OpenRIMS-PV	July–Sept 2024

Table 16. Quarter 3, FY24, Activity Progress, Rwanda—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: (Y3) 4) Support Rwanda FDA to conduct an external quality management system audit towards ISO 9001:2015 certification, including additional implementation of CAPAs (Corrective Actions and Preventive Actions) arising out of the assessment **Activity description:** Work with an international certifying company (BSI) to assess Rwanda FDA readiness to ISO 9001:2015 certification to enable the Authority to improve their overall performance and ensure quality in their processes and regulatory services	1.2	MTaPS continued discussions with the Rwanda FDA regarding the modalities of the contract for planned QMS audit. In May 2024, MTaPS participated in the CIP meeting led by the WHO and presented on the program's planned support to the Rwanda FDA until September 2024. As a result of the Authority's efforts and support from MTaPS and other partners, only 4 sub-indicators remain to be addressed for the Rwanda FDA to attain ML3 as of February 2024.
Activity 1.1.2: Improve capacity registration of medical products (essential medicines, vaccines, and medical devices), including those used in HIV/AIDS, MNCH, and FP programs **Activity description:** Work with the Rwanda FDA to implement facilitated registration pathways by conducting medicines dossier assessment and registration-related retreats to reduce dossier backlog and apply reliance principles for expedited quality evaluations	1.2	MTaPS provided operational support for a 4-week retreat to review dossier applications of medicines on the Rwanda FDA's authorized list. Assessed products included general medicines, antimalarials, vaccines & biologicals, MNCH/FP products, antiretroviral medicines, and TB products.
(Y5) Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation processes **Activity description:** Work with the Rwanda FDA and the software development consultant to support the implementation of IRIMS and train stakeholders and additional staff as users; undertake capacity strengthening of Rwanda FDA staff, including the ICT team, on effective application usage and implementation support of IRIMS; update system and operational manuals and procedures	3.1	MTaPS conducted a 10-day workshop for the Rwanda FDA ICT team on IRIMS system administration, support, and management.
(**Y4) Activity 3.1.3:** Improve access to and administration of oxygen to hypoxic newborns and children with pneumonia **Activity description:** Work with RBC and stakeholders to review existing resources for oxygen management and support the development of guidelines and SOPs on oxygen therapy and oxygen equipment utilization for use at facility levels; given that the oxygen STGs had already been developed, consensus was to develop job aids (posters and desktop sheets) to support the application of the treatment guidelines by health care providers	5.2	MTaPS completed the review and printing of job aids for medical oxygen management at hospitals. Final versions were submitted to the Mission.
(Y2) Activity 3.1.4: Support the management of medicines at the community level **Activity description:** Work with MCCH section of RBC to develop mini lessons for health center staff to give as refresher trainings to the community health workers in their regular monthly meetings at the health centers	5.2	MTaPS completed the final review of mini lessons with the MCCH and submitted the final versions to the Mission.

(Y6) Activity 3.2.1: Continue to strengthen PV and safety monitoring for medicines, including ARVs, through enhancing the existing spontaneous reporting system **Activity description:** Work with the Rwanda FDA to build the capacity of the FDA's PV and ICT staff on the enhancements to PViMS, the system's management for sustainable use, and to improve reporting of AEs. Enhancements include simplifying data entry, updates to the user manual, and enhance user-friendliness	5.3	MTaPS worked with the OpenRIMS-PV developer to continue updating the system according to Rwanda FDA requirements. This aims to ensure that OpenRIMS-PV will meet the WHO requirements of the E2B R3 standard for direct upload of AE reports into VigiFlow. MTaPS is working with the Rwanda FDA to schedule training of staff on the enhancements to the system using developed training materials for increased sustainability.

K. SENEGAL

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

The GHSA-related goal of MTaPS in Senegal is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. MTaPS will achieve this goal by building the capacity of in-country stakeholders through a system-strengthening approach. In Senegal, MTaPS provides support to strengthen governance for MSC, improve IPC practices and services, and strengthen governance for AMS, including capacity building. In line with the GHSA AMR action package, the expectations of the USAID Mission in Senegal, and the MOH and its partners, MTaPS continues to focus on interventions to support progress on the path toward higher JEE scores for IPC and AMS.

The MTaPS technical approach is designed to achieve expected outcomes while addressing identified challenges by implementing country-specific TA based on a sound, evidence-based situational analysis of the strengths and weaknesses of activities at the eight targeted hospitals and of the national IPC and AMS programs. Since 2021, program implementation has focused on solving immediate problems and demonstrating results at an additional five hospitals.

CUMULATIVE PERFORMANCE TO DATE

During previous years, MTaPS supported the revitalization of the AMR TWG in the OH Platform and the TWG's functionality under the aegis of the OH secretariat. MTaPS supported the development of annual and quarterly action plans for the OH Platform, based on the National Health Security Plan and the evaluation of MSC activity implementation, through multisectoral workshops and meetings. MTaPS also supported the implementation of selected activities for WAAW and the development of Senegal's Multisectoral Health Security Action Plan, informed by an assessment using the e-SPAR Tool. Finally, MTaPS supported the evaluation and results analysis of the NAP-AMR of 2017–2022 and has supported the development and validation of the new NAP-AMR of 2024–2028.

MTaPS supported the DQSHH to review and update Senegal's national IPC supervision checklist. The revised national IPC supervision checklist now includes the WHO's multimodal strategy, as well as the WASH component in health care settings. The DQSHH then used the newly updated national IPC supervision checklist to measure the IPC capacity level of HFs. The supervision checklist also includes guidance to help supervisors standardize its use in the 14 health regions in Senegal. Additionally, MTaPS supported the DQSHH to conduct a first assessment of the national IPC program using the WHO IPCAT2 and to conduct the baseline assessment of the IPC program in 13 hospitals and 1 health center using the WHO IPCAF tool.

MTaPS also supported the revitalization of the 13 supported hospitals using the WHO multimodal strategic approach and the CQI approach. These approaches have been appropriated by the MOH through the update of the National IPC Policy document and the development of the 5-year IPC NSP; the development of both was supported by MTaPS. The General Secretary of the MOH technically validated the IPC NSP, and the NSP's current annual action plan is being implemented.

To strengthen governance for AMS, MTaPS provided support to the NCAT to update Senegal's antibiotic policy and national STGs, which had been developed in 2010 but never implemented. MTaPS used this opportunity to provide technical orientation to NCAT's 4 TWGs (for antibiotic therapy policy, antibiotic therapy for community infections of adults and children, antibiotic therapy of health care–associated infections, and antibiotic prophylaxis) on WHO's AWaRe categorization of antibiotics. NCAT has since adopted AWaRe categorization. The national antibiotic STGs have been institutionally validated and MTaPS has supported the development of training modules for AMS, based on the national antibiotic STGs. MTaPS also supported a TOT for a pool of national trainers to start the implementation of the guidelines. In Q2 (From January 31 to February 2, 2024), MTaPS supported the training of 26 members (15 male, 11 female) of the hospital medical committee of the level 2 hospital in Fatick on the national antibiotic policy and guidelines.

QUARTER 3/YEAR 6 ACHIEVEMENTS AND RESULTS

RESULT AREA 2: IPC

Activity 2.5.1: Support local ownership by the regional health directorate and the routinization of IPC activities in selected facilities.

MTaPS supported level 3 facilities Hôpital Général Idrissa Pouye (HOGIP), Fann, and Abass Ndao to complete data collection and analysis and write their first articles for scientific publication. The articles are titled as follows:

- Study on infections during surgery at HOGIP
- Prevalence of health care-associated infections at CHNU de FANN in Dakar
- Assessment of the biomedical waste management system at the National Hospital Center, Abass Ndao

The facility ICC data collection tools were developed by the ICCs themselves and were reviewed by MTaPS.

As part of strengthening and the routinization of IPC practices, MTaPS also supported Kédougou and Kaffrine level 2 hospitals to conduct an IPC capacity self-assessment with the WHO IPCAF tool. The results are as follows:

- Kédougou hospital obtained a score of 452.50/800, corresponding to an intermediate IPC capacity level. This result is an improvement from the assessment conducted in August 2023, where a score of 324/800 was obtained, corresponding to basic IPC capacity level.
- T Kaffrine hospital progressed from an intermediate level (499.50/800 in October 2023) to an advanced level of 709/800.

The ICCs of both hospitals updated their improvement action plans based on the gaps identified during their assessment.

MTAPS END-OF-PROJECT EVENT

On June 25, 2024, USAID MTaPS program held its official closing ceremony in Dakar, Senegal. The MOH General Secretary, the USAID Senegal Health Office Director, and the MSH Vice President of Program Delivery Group co-chaired the end-of-project event.

Participants of the event included the following:

- Representatives from all 13 hospitals supported by MTaPS
- Regional health directorates that received IPC and COVID-19 vaccination support, such as Matam
- The National High Council of Global Health Security at the Prime Minister's office
- Several representatives from the MOH Directorate that collaborated with MTaPS Senegal during the 6 years of implementation
- USAID implementing partners

The event allowed MTaPS to share project results and provide recommendations and future considerations related to pharmaceutical systems strengthening. The MOH also shared a presentation which provided the major achievements from the MTaPS project in all three domains related to AMR: MSC, IPC, and AMS.

Following these two presentations, the HOGIP ICC committee and Medical Committee provided a testimony on how they are now champions in implementing IPC in health facilities. They also shared what the hospital has achieved with the support of its management team, after the revitalization of the IPC program. This management team was also present at the end-of-project event. Finally, HOGIP provided participant testimony on the close collaboration with MTaPS and the sustainable approach used with the project to achieve significant results.

The One Health Platform also provided a testimonial on how MTaPS supported the multisectoral fight against AMR through the implementation and functionality of the AMR TWG and the implementation and monitoring of the annual AMR action plans, among other activities.

Finally, the General Secretary requested one last testimonial from the chief laboratory of the level 1 hospital in Tivaouane. This last testimonial applauded the selection of Tivaouane hospital, as they had already been supported by the USAID IDDS program. Because of this support from USAID MTaPS and USAID IDDS, the hospital is now implementing a HCAI surveillance program. Below are quotes from the event that highlight MTaPS' contribution to Senegal's fight against AMR:

> "Throughout the implementation of the MTaPS program, the Ministry of Health was able to train health personnel and establish habits and skills that make it possible to change behavior in health structures and better welcome populations."
>
> —Mr. Serigne Mbaye, General Secretary of the Ministry of Health

> "The closure of this project does not mark the end of our commitment, but rather the beginning of a new phase of collaboration. The solid foundations laid by the MTaPS project provide a springboard for future initiatives."
>
> —USAID Health Office Director, USAID Senegal

Following the event a video and an article were published highlighting MTaPS Senegal's work and collaboration with the Senegal government; these can be accessed below:

- Cérémonie de clôture du projet sur les médicaments, technologique et pharmaceutique/l'USAID et MSH
- SENEGAL-SANTE/Structures sanitaires : le programme MTaPS a permis d'installer de "bonnes habitudes" (officiel)

Attendees of the MTaPS Senegal official closing event ceremony. Photo credit: PhotoTogui

BEST PRACTICES/LESSONS LEARNED

Establishing a contract strengthened the collaboration between the Regional Health Directorate (RHD) and the Fatick regional hospital, while showing that investment in capacity building initiatives can lead to lasting improvements in IPC practices. By supporting training on IPC, providing TA, and sharing financial and technical resources, MTaPS contributed to strengthening the skills and knowledge of health personnel in the DRS of Fatick and allowed them to monitor the implementation of IPC measures. The success of this initiative in Fatick could serve as a model for similar interventions in other regions or countries facing similar challenges in the functionality of IPC committees (CLINs) in health facilities.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

The MTaPS Senegal program concluded in June 2024.

Table 17. Quarter 3, FY24, Activity Progress, Senegal—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 2.5.1: Support local ownership by the RHD and the routinization of IPC activities in selected facilities.	5.4	2.5	This activity is fully completed.

L. TANZANIA

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

OVERVIEW

MTaPS' GHSA goal in Tanzania is to support AMR containment by slowing the emergence of resistant bacteria and preventing the spread of resistant infections. To achieve this, MTaPS is improving the quality of care for AMR containment in the country by building the capacity of in-country stakeholders through a systems strengthening approach in three result areas: effective MSC on AMR, IPC, and optimization of antimicrobial medicine use through AMS. The PY6 implementation plan for the GHSA builds on the work done in PY1–PY5. MTaPS continues to focus on strengthening the governance of the MOH and selected HFs, in collaboration with other USAID programs and partners working to implement a sustainable AMR program in Tanzania. 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 is building the capacity of HCPs to implement the IPC-related reporting system (as part of DHIS2) to provide the MOH with data for decision making about IPC and for the active implementation of CQI methodologies and AMS interventions in supported HFs.

CUMULATIVE PERFORMANCE TO DATE

From PY1 through PY6Q2, MTaPS supported 43 of 62 (69%) WHO IHR benchmark actions: 10 contributing to MSC/AMR, 20 contributing to IPC, and 13 contributing to AMS. MTaPS helped the MOH improve Tanzania's JEE score for MSC by supporting 25% (1/4) of capacity level 2, 100% (4/4) of capacity level 3, 75% (3/4) of capacity level 4, and 40% (2/5) of capacity level 5 WHO benchmark actions, resulting in an overall achievement rate of 59% (10/17) of benchmark actions completed. In MSC, MTaPS supported the coordination of AMR activities under the AMR MCC. Working under the OH approach, the MCC held meetings to oversee and give guidance on implementing the NAP-AMR 2017–2022 and the current NAP-AMR 2023–2028 across the human health, animal health, plant, livestock, and 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; Ministry of Agriculture; Ministry of Livestock and Fisheries; 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 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 (seven district hospitals, two faith-based hospitals, and two 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 eLearning 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, Ministry of Agriculture, and Ministry of Livestock and Fisheries in developing the AMS policy guidelines per the OH approach. MTaPS also supported the MOH in disseminating the MTC guidelines and developing and disseminating the STGs and NEML for Tanzania, which included the 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 seven regions. The training engaged members of the PO-RALG and Association of Private Health Facilities in Tanzania (APHFTA) to continue the roll out of AMS implementation to the sub-national 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 six referral hospitals in 2020 and two 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 (1,342 in IPC and 693 in AMS) reached countrywide that contributed to improved IPC and AMS practices.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

MTaPS provided technical support to the MOH in organizing and conducting a virtual AMS TWG meeting and a physical AMR MCC meeting. The MCC meeting provided input into and recommended

fast-tracking the development of the draft M&E framework for the NAP-AMR 2023–2028, aiming for launch by the end of 2024.

With MTaPS' technical support, the MOH conducted remote follow-up on AMS and IPC activities and mentorship at 10 MTaPS-supported facilities to support AMS and IPC implementation and IPC data reporting for use in decision making.

RESULT AREA 1: EFFECTIVE MSC OF AMR

Activity 1.1.1: Help further institutionalization and full local leadership and ownership of AMR by the MSC

MTaPS attended a virtual AMS TWG meeting on May 20, 2024, and presented updates on AMS implementation. The virtual meeting, organized and led by the MOH, portrayed the MOH's ownership and sustainability of the AMS program. In addition, MTaPS attended the 27th MCC meeting May 23–24, 2024, in Dar es Salaam and presented the program's updates for the past year, including support provided for the IPC, AMS and M&E TWGs. The chair of the M&E TWG, of which MTaPS is a member, presented to the MCC progress on the development of the draft M&E framework for the NAP-AMR 2023–2028. This M&E framework had been developed with MTaPS' technical support. The MCC recommended that the M&E TWG fast-track reducing the number of indicators in the document and provided other inputs to refine the framework. The MCC also directed that the M&E TWG finalize the document and prepare it for launch by the end of 2024.

RESULT AREA 2: IPC

Activity 2.2.1: Help further enhance capacity and local ownership of national and local government authorities and IPC implementing partners to monitor and evaluate the IPC program

MTaPS Tanzania supported the MOH to conduct virtual follow-up of the implementation of IPC M&E at the 10 MTaPS-supported facilities and other HFs and provided them with ongoing mentorship. The remote follow-up to monitor IPC activities included assessing the completion of IPC reporting forms and indicators and data analysis, interpretation, use, and reporting through DHIS2. The facilities continue to report IPC data in DHIS2, and the MOH regularly reviews the data and provides feedback to the respective facility for improvements in IPC practices.

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

Activity 3.5.1: Help further institutionalization and ownership of AMS activities in the 10 MTaPS-supported facilities

The MOH, in cooperation with MTaPS Tanzania, conducted virtual AMS follow-up and mentorship for each of the 10 MTaPS-supported hospitals. The remote support built on findings from previous mentoring onsite visits and aimed to promote AMS governance and continuation of AMS activities at the facilities. The facilities continue to report on AMS implementation to their facility leadership and the MOH.

BEST PRACTICES/LESSONS LEARNED

No best practices or lessons learned for this quarter.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Activity 1.1.1: Help further institutionalization and full local leadership and ownership of AMR by the MSC ▪ Prepare brochures with summary of key program achievements and share with stakeholders.	July/August 2024
End of Project Event	July/August 2024

Table 18. Quarter 3, FY24, Activity Progress, Tanzania—GHSA

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
Activity 1.1.1: Help further institutionalization and full local leadership and ownership of AMR by the MSC **Activity Description:** Support regular meetings of the AMR MCC and its TWGs to oversee implementation of the NAP-AMR	5.4	1.1	After handing over the IPC, AMS, and M&E TWGs to the MOH, MTaPS was invited to attend and present the past year's achievements, including the development of the draft M&E framework for the NAP-AMR 2023–2028.
Activity 2.2.1: Help further enhance capacity and local ownership of national and local government authorities and IPC implementing partners to monitor and evaluate the IPC program **Activity Description:** Conduct TOT on M&E of the IPC program; scale up the IPC M&E system, including reporting in DHIS2; mentor MOH and PO-RALG staff on conducting analysis of reported IPC data for decision making; use the ECHO platform for capacity building of IPC teams in implementing IPC measures	5.4	2.2	With virtual support from MTaPS, the MOH conducted IPC M&E implementation follow-up in 10 MTaPS-supported facilities and other facilities. The facilities continue to report on IPC data in DHIS2 and receive feedback from the MOH to guide improvement.
Activity 3.5.1: Help further institutionalization and ownership of AMS activities in the 10 MTaPS-supported facilities **Activity description**: Work with MOH and AMS experts to conduct visits to the 10 MTaPS-supported hospitals for mentorship; work with the MOH, PO-RALG, and APHFTA to scale up AMS to other facilities; conduct AMS ECHO sessions to mentor HCPs on rational use of antibiotics	5.4	3.5	With virtual support from MTaPS, the MOH followed up on AMS activities at facilities, including the 10 MTaPS-supported facilities. Mentorship was provided to build facilities' capacity in AMS governance and continuation of AMS activities for effective AMS program implementation.

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 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 to organize 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 with regard to 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 will help the QPPVs support their MAHs to set up a

functioning internal PV system for follow up on safety of their medical products and to submit PSUR and RMP documents on time with the required content and format as per the 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. Participants were trained on the review of pre-clinical, clinical, and manufacturing data and on developing scientific assessment reports following applicable regulations and guidelines, which contributed to improving the competency of TMDA assessors in analyzing and writing summary assessments based on clinical trial assessment data. MTaPS also supported the training of 25 (13 female) clinical trial officers on the inspection of clinical trial sites for good clinical practices compliance. These trainees further gained practical experience by conducting inspections of three clinical sites located in the Dar es Salaam region: one at Mwananyamala Regional Referral Hospital and two at Muhimbili University of Health and Allied Sciences. The intervention contributed to efforts to strengthen clinical trial 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.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

MTaPS Tanzania provided technical support to the TMDA to conduct a meeting with stakeholders, including medicine importers, MAHs, local manufacturers, Medical Stores Department, and Bugando Medical Centre, to assess progress made in improving the importation and registration processes for medicines and other health products. The stakeholders were happy with the progress that the TMDA has made addressing previous recommendations made for improvement of these processes. This activity contributes to improving the relationship between the TMDA and its clients, ensuring adherence by medicine importers, MAHs, and local manufacturers to regulatory guidance and more efficient clearance of imported medicines and other health products, including for FP and MNCH, thereby improving access to high-quality, safe, and effective health products, including ARVs for the public sector.

In addition, MTaPS provided technical support to the TMDA to develop the first guidelines for GSDP and for a workshop to capture stakeholder input April 16–27, 2024. The program provided technical support to the TMDA to conduct a stakeholder validation workshop, and the guidelines are now pending finalization by the TMDA. These guidelines will contribute to improving pharmaceutical supply

chain management for MNCH, FP, and other medical products and ensuring proper handling, storage, and distribution of medical products from the manufacturer down to the end user, thereby ensuring that these products maintain their quality, safety, and effectiveness throughout the supply chain.

OBJECTIVE 1: INSTITUTIONAL CAPACITY STRENGTHENED TO MANAGE PHARMACEUTICAL SYSTEMS

Activity 1.1.1: Create awareness among stakeholders on the processes of importation and registration of FP and MNCH products in Tanzania to ensure their quality, safety, and efficacy

With technical support from MTaPS Tanzania, the TMDA conducted a meeting with medicine importers, MAHs, local manufacturers, and other stakeholder April 4, 2024, in Mwanza, including stakeholders from the Lake and Western Zones of Tanzania, which have a high number of pharmaceutical product importers, second only to the Dar es Salaam region. This contributes to the ongoing activities undertaken by the TMDA and supported by MTaPS to streamline the process of importation and registration to ensure access to quality, safe, and effective medical products.

The TMDA and medicine importers agreed to continue implementing the action plan developed at the previous stakeholder meeting in May 2023 to reduce bottlenecks for improvement of importation and registration processes. The stakeholders were happy with the progress that the TMDA has made in implementing the action plan. The meeting also provided an opportunity for the TMDA to communicate the requirements for importation and registration as well as GSDP, which raised their awareness and will reinforce the stakeholders' adherence to the regulatory guidance. The meeting also contributed to improving the relationship between the TMDA and its clients and will lead to more efficient clearance of imported medicines and other medical products, including for FP and MNCH, thereby improving access to high-quality, safe, and effective medical products, including ARVs for the public sector.

ACTIVITY 1.1.3: SUPPORT THE TMDA TO DEVELOP GUIDELINES FOR GSDP OF MEDICINES

MTaPS provided technical support to the TMDA to develop the first GSDP guidelines, which are based on the TMDA GSDP regulations of 2021. The guidelines simplify the regulations into guidance that can be easily understood and implemented by medicine importers, health workers, and other stakeholders. This development of the draft guidelines was followed by a workshop April 16–27, 2024, to gather input from stakeholders and international guidance. This workshop produced an inspection checklist and inspection forms. On May 10, 2024, the TMDA, in collaboration with MTaPS, organized a one-day stakeholder consultation workshop in Dar es Salaam to validate the draft GSDP guidelines. Invited stakeholders included the Medical Stores Department, Pharmacy Council of Tanzania, Tanzania Association of Pharmaceutical Importers, Tanzania Pharmaceutical Manufacturers Association, MAHs, and partners involved in the supply chain. The stakeholder inputs are being used by the TMDA to finalize the guidelines and apply them to the country situation, which will facilitate their successful adoption and implementation.

The TMDA will share the guidelines with stakeholders across the country to improve pharmaceutical supply chain management, including for FP and MNCH products, through providing guidance on proper handling, storage, and distribution of medicines and other health products from the manufacturer to the end user. The guidelines are designed to align with international best practices and regulatory requirements and provide a clear framework for all stakeholders involved in the pharmaceutical supply chain, including HCPs; manufacturers; distributors; public and private health care facilities; NGOs; and

importers, exporters, wholesalers, and retailers of medical products as outlined in the TMDA Act, Cap 219. In addition, their implementation will contribute to efforts to prevent the infiltration of substandard or falsified products into the supply chain.

BEST PRACTICES/LESSONS LEARNED

- Effective stakeholder engagement has been a key driver in consolidating the support provided by MTaPS to the TMDA. By identifying the right stakeholders and building a strong working relationship with the TMDA, activities aimed at ensuring access to high-quality, safe, and effective medical products have been implemented.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Work plan activity implementation has concluded. MTaPS Tanzania will focus on deliverables completion and submission.

Table 19. Quarter 3, FY24, Activity Progress, Tanzania—FIELD SUPPORT

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Create awareness among stakeholders on the processes of importation and registration of FP and MNCH products in Tanzania to ensure their quality, safety, and efficacy. **Activity Description:** Sensitization of various health commodity supply chain stakeholders in the Lake zone on existing regulations regarding import and registration of medical products; including for FP and MNCH; discussion with stakeholders on key challenges faced and mitigative actions.	2.4	A stakeholder meeting was held April 4, 2024, in Mwanza and included stakeholders from the Lake and Western Zones of Tanzania to discuss progress in addressing bottlenecks in health product importation and registration processes, emerging challenges, and mitigative actions. The TMDA was able to raise awareness of and provide updates to stakeholders on requirements regarding the registration and importation of and GSDP for medicines and other health commodities. The deliverable is finalized for submission to the Mission.
Activity 1.1.3: Support the TMDA to develop guidelines for GSDP of medicines **Activity Description:** Development of GSDP guidelines for future dissemination by TMDA to key stakeholders, including pharmaceutical importers and retailers, Pharmacy Council, and MOHs.	2.4	MTaPS provided technical support to the TMDA in the development of draft GSDP guidelines to guide proper handling, storage, and distribution of medical products from the manufacturer to the end user. A workshop was held April 16–26, 2024, to gather stakeholder input to refine the draft guidelines. They were then validated in a stakeholder workshop May 10, 2024. The deliverable is finalized for submission to Mission.

5. PROGRESS BY REGIONAL BUREAUS

A. ASIA REGIONAL BUREAU

OVERVIEW

MTaPS set out to advance pharmaceutical management systems within the Asia region by strengthening the capacity to institutionalize transparent and evidence-based decision making and use robust information to define and cost pharmaceutical coverage, as well as by improving medicine regulatory capacity and pharmaceutical-sector governance.

CUMULATIVE PERFORMANCE TO DATE

Under objective 1, MTaPS played a pivotal role in advancing HTA in Asia. This included the collaborative development of an extensive HTA roadmap, in-depth assessments of nine countries/territories, and the introduction of the innovative HTA institutionalization canvas to comprehensively evaluate HTA systems. Supported by funding from the Asia Bureau, MTaPS provided hands-on support to countries, resulting in HTA institutionalization in Indonesia and guidance for medical device assessment in the Philippines. The evaluation of the need for an HTA hub led to a recommendation to strengthen HTAsiaLink's existing initiatives, aligned with the commitment to HTA best practices in Asia. MTaPS has worked continuously with key HTA stakeholders in Asia to support the priorities of the region, as enumerated by HTAsiaLink and MTaPS' prior assessment: regional capacity building strategy, improved political economy, and support for HTA in the region, and development of an HTA registry, which will be a global public good.

Under objective 2, MTaPS made significant progress in implementation of the OHT, conducting regional and in-person training sessions in several countries. This included the completion of the Bangladesh Social Health Protection benefits costing and development of dissemination materials for pharmaceutical expenditure (PE) tracking standardization in the Asia region. Notably, MTaPS completed PE tracking in Bangladesh for health commodity expenditure, producing a comprehensive report. In addition, MTaPS conducted a PE tracking training for the Bangladesh HEU to increase their 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 among the participants was identified 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 various stakeholders to bolster capacity within the medical products regulatory systems of the ASEAN member states. In PY3 to PY4, MTaPS organized a regional training of trainers course focused on evaluation of biological products and vaccines, enhancing the knowledge and skills of regulatory assessors from ASEAN NRAs. A regional training course on Good Review Practices for dossier evaluation processes in ASEAN member states further contributed to strengthening regulatory capacities. In PY4 to PY5, MTaPS worked closely with WHO Southeast Asia Regulatory Office (SEARO) and SEARN to develop a regional capacity building

strategy, endorsed by the SEARN Assembly of the Members, to structure capacity building in regulatory functions. In PY3 to PY4, MTaPS undertook competency mapping and developed capacity building plans for the NRAs of Bangladesh, Nepal, and the Philippines, with the aim of addressing competency gaps and improving regulatory efficiency and effectiveness. In 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. So far in PY6, MTaPS has provided support in the draft model for efficient regulations of medicines and vaccines for NRAs with limited resources in SEARN and advocated for the adoption of minimum standards for regulatory information management systems (RIMS) in ASEAN.

Under Objective 4, MTaPS collaborated with the Philippines DOH to analyze and evaluate procurement laws, rules, and policies, with a focus on enhancing strategic procurement mechanisms, and with more focus on the PPM. MTaPS developed a legal analysis document detailing the legal and policy context favoring or countering implementation of PPM with recommendations. Based on the analysis, findings, and recommendations, the DOH drafted and submitted a policy proposal for PPM implementation to the Government Procurement Policy Board (GPPB) in 2023. The review of the proposed policy is still underway and there is no clear timeline for when the approval will happen. Anticipating potential delays, additional activities were identified and initiated, including generating evidence for selecting priority medicines and facilities (DOH-retained hospitals and LGUs), assessing their capacity and readiness to engage in PPM, and developing a generic implementation plan for PPM piloting once approved by GPPB. This multi-phased approach included desk reviews, data collection, analysis, and interviews with representatives of selected LGUs and hospitals. As detailed in the technical document entitled "Analysis report and recommendations to guide selection of health products and health facilities/LGUs," MTaPS analyzed sales data of medicines for partially (7) and fully (5) devolved therapeutic areas, set criteria (sales volume and potential savings), and determined a priority list of health products. A total of 36 medicines (12 therapeutic areas with 3 medicines each) and 6 LGUs and 9 DOH-retained hospitals have been identified as candidates for piloting of the PPM policy. In addition, MTaPS—in collaboration with IQVIA Healthcare Solutions—conducted a deeper analysis of the existing procurement practices and associated challenges of health products at a sample of the selected LGUs (5) and DOH-retained hospitals (5) to assess their capacity and readiness to engage in the PPM pilot. Online in-depth interviews were employed to do qualitative analysis. The MTaPS technical team has provided detailed technical feedback to IQVIA.

The Philippines DOH has been encountering a series of bid failures which has led to stockout of some vital health commodities and affected program implementation. MTaPS completed a study with the objective of identifying the root causes of bid failures and recommending solutions. The methodologies involved both quantitative and qualitative study approaches including desk reviews, analyses of available data on failed DOH procurements, and key informant interviews. MTaPS reviewed Government Procurement Reform Act (RA 9184) (2002) and the Revised Implementing Rules and Regulations (IRR) of RA 9184 (2016), conducted deep analyses of data on failed HIV, TB, and FP commodity procurements and associated bid resolution documents from January 2021 to February 2024, and interviewed representatives from the DOH Procurement Service, DOH Disease Prevention and Control Bureau, and 7 suppliers.

The PY3 activity on COI concluded with the launch of the eLearning course on OpenWHO for public access that was developed by MTaPS in collaboration with WHO. Engagement is being monitored,

particularly in India, Pakistan, Bangladesh, China, and Malaysia, where the course will be a mandatory module for pharmaceutical inspectors. For the quarter January–March 2024, there were 401 COI course completions.

QUARTER 3/Y6 ACHIEVEMENTS AND RESULTS

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

Activity 1.1.1: Technical assistance to HTAsiaLink in shaping the HTA ecosystem in the Asia region

MTaPS has successfully achieved technical alignment with key partners, including the Health Intervention and Technology Assessment Program (HITAP) and the Health Intervention and Policy Evaluation Research unit at the National University of Singapore (HIPER-NUS). This collaboration aims to enhance the HTA ecosystem in Asia. Key efforts include improving the political economy and increasing the participation of diverse stakeholders in HTA processes. MTaPS is continuously working with regional stakeholders such as the HTAsiaLink Secretariat: HITAP. HITAP has successfully received Unique Entity Identifier status and can now be a subcontractor for MTaPS. Key activities for the HITAP and MTaPS collaboration include:

- Capacity building strategy: Collaborating with HTAsiaLink to implement a strategy for HTAsiaLink that is responsive to members' needs.
- Political economy: Improve participation of diverse HTA actors in Asia.
- HTA registry development: Supporting the establishment and maintenance of the HTAsiaLink HTA registry, which serves as a centralized database for HTA activities across the region.

Through these efforts, MTaPS aims to create a more robust, participatory, and politically supported HTA environment in Asia, ensuring that health interventions are effectively assessed and implemented to meet the region's diverse health needs.

MTaPS staff at the Priorities Conference 2024, displaying awards won for their presentations on HTA work in Asia. Photo credit: USAID MTaPS Program.

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 PE tracking—a review of Bangladesh and Indonesia experiences

In Indonesia and Bangladesh, MTaPS provided technical assistance to customize the HA methodology to produce higher quality and detailed data on pharmaceutical spending. This included determining how expenditures on different medicines can be collected, compiled, and classified to align with the HA methodology; identifying the types of summary data on PE most useful to decision makers; and making initial efforts to collect, analyze, and package PE data to meet the needs of pharmaceutical decision makers. PE tracking covered national data by targeting secondary data sources in Indonesia and reproductive, maternal, newborn, and child health commodities data for Bangladesh. Indonesian PE tracking was implemented in close collaboration with the Pusjak PDK team, the HA team, and the HEU in Bangladesh.

As a follow-up activity, MTaPS—in collaboration with the health financing teams of Bangladesh and Indonesia—conducted preparations for an interactive webinar scheduled for July 11, 2024, that showcases the application of the PE tracking methodology, process, and tools in each country. There will also be a keen focus on how best to institutionalize PE tracking with key country actors. As part of preparations, MTaPS completed the PowerPoint presentation and the webinar concept note which is currently in the process of review and finalization. A dry run is planned to be completed before the webinar.

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

Activity 3.1.1: Advocate for adoption of global standards to support the development of RIMS for electronic transmission of information across NRAs in Asia

MTaPS continued to develop recommendations for USAID to support the adoption of common RIMS standards by NRAs in ASEAN member states based on the regional action plan, developed during the workshop on RIMS adoption advocacy held in Bangkok, Thailand, from February 29 to March 1, 2024.

Activity 3.1.2: Implementation of priority capacity strengthening activities of NRAs in Bangladesh

MTaPS Asia Bureau, through MTaPS country offices and in collaboration with the WHO Bangladesh office, engaged the Bangladesh DGDA to organize and implement a training on Good Clinical Practice from June 2 to 4, 2024, in Bangladesh. The training targeted DGDA personnel involved in clinical trials oversight, patient safety activities, and regulatory inspections. A total of 26 (9 female, 17 male) participants attended the training that focused on building skills and competency for the conduct of clinical trials inspections, design of clinical trials, and participants' safety. The aim of the training was to build strong functional competencies in the regulation of clinical trials that will enable DGDA to regulate medical products effectively and efficiently.

Activity 3.1.3: Develop a capacity building action plan for the SEARN

MTaPS continued to engage with SEARN and SEARO to develop a capacity building action plan through consultative meetings—SEARN working group meetings were held on April 23, May 7, and June 3 to discuss and review the development of the action plan and SEARN capacity building work plan. A draft capacity building action plan has been finalized and shared with SEARN/SEARO for feedback. The action plan focuses on development of regulatory capacity in product registration, regulatory inspection, laboratory analysis, and vigilance as per the WHO competency mapping framework. Validation of the action plan is set for July 1 to 4, 2024, during the heads of NRA meeting.

MTaPS also participated in the WHO Coalition of Interested Parties (CIP) SEARN meeting held on May 29, 2024, and provided updates on SEARN support and expectations as partners.

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

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

MTaPS also started the registration process for participating in the International Conference of Drug Regulatory Authorities (ICDRA) planned for October 14 to 18 in New Delhi, India.

Activity 3.1.5: Strengthen the capacity of NRAs in the ASEAN member states through regional harmonization

MTaPS continued to engage the ASEAN Pharmaceutical Product Working Group through USAID on planned activities and was able to receive approval for the implementation of pharmacovigilance training focused on building capacity on the conduct of active surveillance, post-authorization safety studies, and review of periodic safety reports. Consultant recruitment is currently ongoing for the activity planned for Q4.

OBJECTIVE 4: PHARMACEUTICAL-SECTOR GOVERNANCE IN ASIAN COUNTRIES STENGTHENED

Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines (PY5)

MTaPS has been working with IQVIA Healthcare Solutions on finalizing the analysis of data and development of technical deliverables. The first deliverable, "Analysis report and recommendations to guide selection of health products and health facilities/LGUs," has been finalized and is under editorial review before its submission to USAID. MTaPS has provided detailed feedback to IQVIA on the remaining deliverables and is working with IQVIA to finalize them.

Activity 4.1.1: Assess factors that affect health commodity procurement (bid) failures in the Philippines at DOH level and identify key interventions to address challenges (PY6)

MTaPS completed the analyses of the data and development of the technical advisory based on the results of the study. The technical advisory consists of methodology, quantitative and qualitative analyses findings, recommendations to reduce bid failures and to conduct similar studies in the future, challenges encountered, and limitations. MTaPS also presented the results of this activity to USAID Washington and Philippines representatives, obtained feedback, and shared revised versions of the technical advisory

and PowerPoint slides with USAID and United States Pharmacopeia - Promoting the Quality of Medicines Plus (USP PQM+) program. The technical advisory and accompanying PowerPoint slides are to be shared with local stakeholders in the Philippines through the USAID mission and partners to validate the findings and then to drive actions and changes according to the recommendations provided in the documents.

BEST PRACTICES/LESSONS LEARNED

- Successfully managing differing agendas, such as between HITAP and HTAsiaLink, requires focused efforts on aligning goals and addressing the political economy within the region.
- Using findings from MTaPS hub assessment to define hub activities that respond to regional demand ensures that interventions are relevant and impactful.

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 **Activity Description:** Execute sub-contracts with HITAP/HTAsiaLink Secretariat for the remainder of PY6 activities.	July 2024
Activity 2.1.2: Conduct a webinar on PE tracking—a review of Bangladesh and Indonesia experiences **Activity Description**: Finalize preparations for the webinar, including a dry run, and host the webinar.	July 2024
Activity 3.1.3: Develop a capacity building action plan for the SEARN **Activity Description:** Validation and finalization of capacity building action plan from July 1 to 4, 2024, during the heads of NRA meeting.	August 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 to 18 in New Delhi, India.	September 2024
Activity 3.1.5: Strengthen the capacity of NRAs in the ASEAN member states through regional harmonization **Activity Description:** Finalize consultant recruitment and continue with preparations for the pharmacovigilance training.	September 2024
Activity 4.1.1: Strategic procurement initiatives for selected products in the Philippines (PY5) **Activity Description:** Submit the deliverable for phase 1 and finalize the remaining deliverables for phase 2 and 3 working with IQVIA Healthcare Solutions.	July 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 (PY6) **Activity Description:** Finalize the technical advisory based on any final feedback from USAID Washington and Philippines, undertake editorial work, and submit final version to USAID and relevant partners. Develop summary flyers and package resources from the whole activity to make them available through a dedicated webpage for Asia Bureau activities. Disseminate the resources through the webpage and other means such as webinars (if resources are available).	July 2024

Table 20. Quarter 3, FY24, Activity Progress, Asia Regional Bureau

Activity	MTaPS Objective(s)	Activity Progress
Activity 1.1.1: Technical assistance to HTAsiaLink in shaping the HTA ecosystem in the Asia region	5.1	Actively working, support to HIPER-NUS participation completed.
Activity 2.1.1: Strengthen capacity for PE tracking in Bangladesh	2.1.1	MTaPS conducted PE in-person training in Bangladesh in February 2024 and a report is in the process of finalization.
Activity 2.1.2: Conduct a webinar on PE tracking—a review of Bangladesh and Indonesia experiences	2.1.2	Conducting preparations for webinar which was held July 11.
Activity 3.1.1: Advocate for adoption of global standards to support the development of RIMS for electronic transmission of information across NRAs in Asia	2.4.3	MTaPS continued to develop recommendations for USAID to support the adoption of common standards for RIMS by NRAs. MTaPS is finalizing the deliverable for this activity.
Activity 3.1.2: Implementation of priority capacity strengthening activities of NRAs in Bangladesh and the Philippines	2.4.3	MTaPS engaged with DGDA Bangladesh in collaboration with WHO and held a training on GCP for DGDA from June 2 to 4, 2024.
Activity 3.1.3: Develop a capacity building action plan for the SEARN	2.4.3	MTaPS continued to engage with SEARN/SEARO to review the developed draft capacity building action plan. This plan was shared with other stakeholders, including CIP, for their input. MTaPS is incorporating comments to finalize the document.
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.
Activity 3.1.5: Strengthen the capacity of NRAs in the ASEAN member states through regional harmonization	2.4.3	ASEAN approved the concept note for the implementation of pharmacovigilance training. Consultant recruitment ongoing.
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 (PY6)	4.1.1	MTaPS completed data analysis and developed a technical advisory, including methodology, findings, recommendations, and challenges. Results were presented to USAID and Philippines representatives, feedback was obtained, and revised materials were shared with USAID and USP PQM+. These will be validated and used to drive actions in the Philippines.

6. PROGRESS IN ACHIEVING CONTRACT DELIVERABLES

Table 21. FY24 Quarter 3 Progress in Achieving Contract Deliverables

Contractual Deliverable	Due Date	Submission Date	Comments
Reporting of Foreign Taxes	4/16/24	4/16/24	
Quarterly performance report – PY6 Quarter 2	4/30/24	4/30/24	
Subcontract Reporting (eSRS)	4/30/24	4/29/24	

7. PROGRAM SPOTLIGHT

Boosting Health Care through e-Learning for Practitioners

Digitizing Data to Better Manage Public Health Supplies

Embracing Technology for UHC on a Remote Island

Mobilizing Partnerships to Integrate the Supply Chain in Public Health

Promoting Patient Safety in the Philippines through Improved Pharmacovigilance

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SUCCESS STORY

MTaPS collaborated with partners to develop eLearning courses on up-to-date health standards, technologies, and processes to address the capacity gaps faced by health workers in the Philippines' island environment. The course is available online to help health workers across the archipelago enhance lifesaving skills and knowledge without needing to travel or incur out-of-pocket expenses.

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.

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

Boosting Health Care through e-Learning for Practitioners

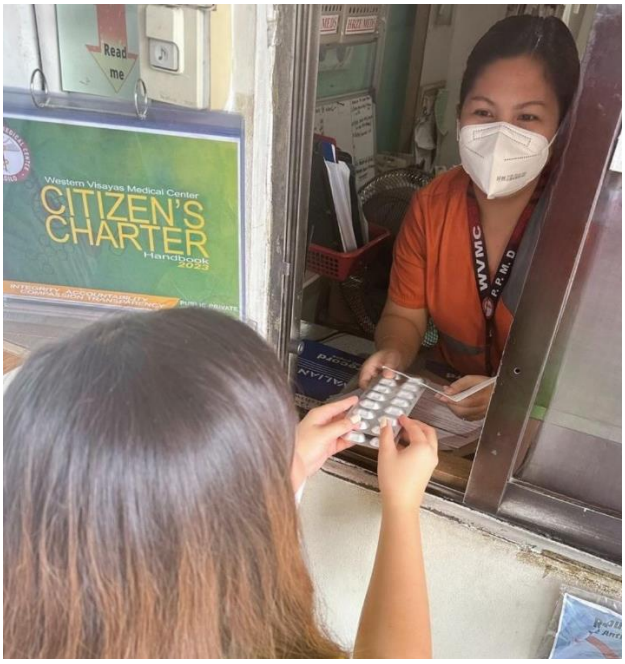
Elena, Registered Nurse working in Western Visayas Medical Center, Tuberculosis Clinic

Health care is only as good as the people who provide it. In the island environment of the Philippines, making sure that all health workers have access to essential training can be challenging. To address this issue, the US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program collaborated with partners to develop eLearning courses on up-to-date health standards, technologies, and processes—available to all online. By accessing these courses, health workers across the archipelago can enhance their skills and knowledge without the need to travel or incur out-of-pocket expenses.

Recognizing the need for training

One health worker who has greatly benefited from the new eLearning courses is Elena. A health practitioner for almost 15 years, Elena currently serves as a nurse in a tuberculosis (TB) clinic at the Western Visayas Medical Center, a government hospital in Iloilo City on Panay Island. Proudly identifying as a TB warrior, Elena dreams of a TB-free Philippines.

Elena interacts with individuals who visit the medical center for TB screening, testing, and treatment. She diligently inquires about a client's symptoms, clinical history, and overall well-being and collects sputum specimens. "I want to give my best to the people and community I serve," said Elena. "And I am passionate about learning how I can do this."



Elena (front), dispensing medication to her client after providing proper counseling, Western Visayas Medical Center TB clinic. Photo credit: Chesa Desano, MTaPS Philippines

Elena understands the importance of staying updated on current standards and practices on infection prevention and control to protect her clients, herself, and other health workers. She also knows that she must be knowledgeable about safely disposing of health care waste, such as face masks, gloves, and sputum cups.

Another critical aspect of Elena's work that requires technical expertise is the dispensing of medicines to patients. Elena needs to be proficient in properly storing and managing medicines to ensure that the medicines do not expire and remain effective. She also plays a crucial role in safeguarding patients by helping them manage side effects and ensuring that any serious side effects are reported.

Given these responsibilities, Elena and health workers like her need constant support to equip them with the necessary skills to provide high-quality care. However, for Elena, leaving Panay Island to enroll in a high-quality training would consume valuable time and incur out-of-pocket expenses—a common dilemma faced by many health care workers across the Philippines.

Providing sustainable access to eLearning

To enable health workers like Elena to access free and high-quality training anytime and anywhere, MTaPS developed a range of eLearning courses in partnership with the Department of Health (DoH) and the Philippines Food and Drug Administration. These courses cover essential topics such as infection prevention and control, health care waste management, supply chain management of medicines and supplies, and other crucial measures to ensure patient safety.

This initiative is empowering practitioners, like Elena, to stay current with best practices, enhance their skills, and deliver high-quality care, regardless of their location and without the need for costly and time-consuming travel, ultimately leading to improved health care services throughout the Philippines. Through these eLearning initiatives, USAID is providing sustainable access to critical training, empowering health workers across the Philippines. The uptake of these eLearning courses has been considerable. By February 2024, **around 19,250 health workers and learners had accessed the training courses**, and the number has since grown exponentially.

The eLearning courses are available via the website of the DoH's Academy. Once users have set up an account, they can access courses within broader categories, such as supply chain management of health commodities, pharmacovigilance and patient safety, pharmaceutical systems strengthening, quantification of health commodities, warehouse management of health commodities, and gender and development. Each course features a series of modules that take around 40 minutes to complete.

Promoting professional development

For Elena, USAID's free online courses provide her with the flexibility and accessibility she needs to continue her professional development. "The eLearning courses mean that I don't need to leave Panay Island to receive training," she explained. "And I can fit my studies around my work at the medical center." Since the eLearning courses are accredited to the continuing professional development points required for renewing professional licenses, studying in this way also saves Elena a lot of time and money.

As a result of her training, Elena has become more proficient in her role as a TB nurse and is able to mentor her colleagues. She actively encourages her peers to take the courses as well, highlighting that the topics covered will help them become more effective health care professionals and service providers. By engaging in eLearning and promoting it to others, Elena feels confident that health care practices will improve and that her dream of a TB-free Philippines will become a reality.

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

Digitizing Data to Better Manage Public Health Supplies

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.

Jaymar Orong, Officer in Charge Supply Officer and Rose Balite, Pharmacist III, Cold Chain Manager, Davao Center for Health Development displaying their eLMIS official launch certificate. Photo credit: Kenny Gallos, MTaPS Philippines

Maintaining a steady stock of medicines and other essential products at health centers is not easy, as the supply chain involves huge amounts of data and requires seamless communication between health care managers at multiple levels. To address these complexities, the US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program collaborated with the Philippines' Department of Health (DoH) to digitize and streamline information onto a single platform using an electronic logistics management information system (eLMIS). In Davao Region, the first area to fully implement the eLMIS, managing the distribution of health supplies has now become easier, quicker, and more cost-effective. The system has also resulted in reduced product waste, ensuring that health centers maintain an adequate supply of essential items.

Facing a logistical challenge

Two people who have experienced the benefits of the new eLMIS firsthand are Jaymar Orong and Rose Balite. For the past six years, Jaymar and Rose have worked side by side as supply chain managers in the Davao Center of Health Development. While Rose oversees the flow of medicines and vaccines, Jaymar is responsible for the supply of nonpharmaceutical products.

About USAID MTaPS

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Jaymar and Rose know only too well the challenges involved in managing logistics for approximately 3,400 health products across 52 public health programs and 80 service delivery points. Besides ensuring that products are distributed as intended, both Jaymar and Rose must provide data on storage space availability, location, and distribution status to multiple health program managers in Davao Region. "Managing volumes and volumes of data is quite overwhelming," explained Jaymar. "Before we had the new system, I sometimes didn't know where to start, and doing things manually took such a long time."

Program managers in Davao Region rely on the inventory data provided by Jaymar and Rose to make evidence-based decisions on how many health care products to allocate and how to ensure that municipalities have enough stock to provide for their communities. Delays in providing these data can lead to undersupply, potentially endangering the public, or oversupply, resulting in the wastage of valuable medicines and other health products.

Providing data on a single platform

Recognizing the challenges facing supply chain and health program managers, MTaPS worked with the DoH to acquire, configure, and implement an end-to-end eLMIS. When Jaymar and Rose first heard about the new system, they were cautiously optimistic. "We were delighted that a new management information system was coming to Davao Region," said Rose. "And that it could capture all logistics information on a single platform. But we wondered—can it really be done?"

Jaymar and Rose soon discovered that the new eLMIS lived up to its promises, enabling them to quickly generate and share inventory data with decision makers in the public health sector. This efficiency freed up their time, allowing Jaymar and Rose to focus on improving other aspects of supply chain operations.

With support from MTaPS, Jaymar and Rose became qualified to train others in using the eLMIS. MTaPS also provided tools and checklists to enable them to successfully roll out the eLMIS to all warehouses and health centers in Davao Region. Initially, some local chief executives were resistant to adopting the new system. However, when Jaymar and Rose explained the benefits—using knowledge gained from MTaPS' training sessions—these executives became convinced of its value.

As a result, Davao Region became the first region in the Philippines to successfully connect all regional, provincial, and city warehouses, along with rural health units, in a single eLMIS. This integration marked a significant milestone in streamlining logistics and improving the management of public health supplies across the region.

Andrea Halverson (left), USAID Philippines Office of Health Director, launching eLMIS with DOH central and regional officials in Davao. Photo credit: Kenny Gallos

Stepping up health care management

The new eLMIS now operating in Davao Region marks a new era of information management. Not only is it quick and efficient, but also it provides inventory data that extend to the last mile of rural health units and barangay health stations. By enabling the transfer of essential health commodities to even the most remote locations, this level of detail has positive implications not just for Davao Region but also for the Philippines.

As the eLMIS is scaled up to cover the whole country, it will provide real-time logistics data for warehouses across all 17 regions, including those of the DoH central office. For Jaymar and Rose, the system has transformed the way they work, and they are both thankful to USAID for making this possible. Using the eLMIS, Jaymar and Rose, and other health care managers, can ensure that medicines and other health supplies are always available to any Filipino in need.

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

Embracing Technology for Universal Health Coverage on a Remote Island

SUCCESS STORY

MTaPS supported the Philippines Department of Health with new technology to make it easier for the Catanduanes island population to access medicines and other health care products they need when they need them. The introduction of the new electronic logistics management information system (eLMIS) provides quick access to stock data on a single platform to ensure that essential supplies are always available to the most remote communities.

Dr. Hazel Palmes, Provincial Health Officer II, Catanduanes Provincial Health Office. Photo credit: Kenny Gallos, MTaPS Philippines

As an island nation, the Philippines faces numerous challenges in the pursuit of universal health coverage (UHC). Catanduanes—a remote island province frequently hit by typhoons—is no exception. Despite these obstacles, new technology, implemented by the Department of Health (DoH) with support from the US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program, is making it easier for these communities to access medicines and other essential health care products. The introduction of the new electronic logistics management information system (eLMIS) has revolutionized the way health care managers operate by providing quick access to stock data on a single platform. This means that essential supplies are always on hand, ensuring that even the most remote communities can receive the health care they need, when they need it.

Confronting challenges

The island province of Catanduanes sits on the northeastern edge of the Philippines archipelago, directly facing the Pacific Ocean. Its limited transport infrastructure is frequently damaged by tropical storms, making it difficult to restock medicines and other essential supplies—an issue that Dr. Hazel Palmes knows all too well.

Dr. Palmes, who is responsible for delivering quality health care to the 270,000 residents of Catanduanes, has been a public health leader on the island for 31

About USAID MTaPS

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years. She is passionate about providing the best possible services. "Catanduanes is known for its typhoons," said Dr. Palmes. "But I aspire for our island to be known for having health care services that match those on the larger islands and cities of the Philippines."

When the Philippines' UHC Act was enacted in 2019, Dr. Palmes successfully advocated for Catanduanes to be one of the first sites to expand access to health care through an integrated delivery system. But she recognizes that improvements are necessary, particularly in the provision of medication and services to combat tuberculosis, boost mental health, and support family planning.

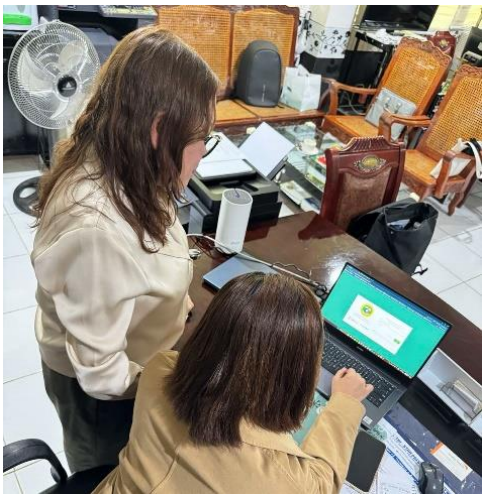
Implementing a digital management system

Recognizing the challenges faced by health care practitioners like Dr. Palmes, MTaPS collaborated with the Philippines' DoH to acquire, configure, and implement an end-to-end eLMIS. The aim was to digitalize the public health supply chain across the country, making it easier to accurately assess stock levels and order new supplies appropriately.

When Dr. Palmes heard about the new eLMIS, she eagerly embraced the opportunity to implement it in Catanduanes. She understood that effective management of medical products is crucial on a remote island where immediate restocking is logistically difficult. Dr. Palmes ensured that all warehouses, hospitals, and health centers in the province installed the new system, thereby digitalizing the island's entire medicine and supply inventory management.

"I empathize with lone health workers at treatment centers juggling multiple public health programs," said Dr. Palmes. "The new eLMIS, as a single information system, can make things much easier, and I know that the people of Catanduanes are not afraid of embracing new technology," she explained.

As a result of the new eLMIS, medical supplies are now transported to their destinations in a timely manner. This means that the people of Catanduanes no longer have to wait to access products or make costly and time-consuming trips to neighboring islands. Additionally, health program managers can now analyze data to ensure that supplies are allocated correctly, avoiding expiry and wastage of medicines through overstocking and health risks associated with stockouts.



Demie Posada, Pharmacist/Unit Head Designate, Catanduanes Provincial Health Office, using eLMIS for her stock management. Photo credit: Kenny Gallos, MTaPS Philippines

Providing training for long-term gain

Dr. Palmes is committed to ensuring that the eLMIS remains a cornerstone of health care in Catanduanes for the long run. Her proactive engagement with local chief executives has led to the province passing a local health resolution to formally adopt the system across the island. Dr. Palmes' colleague Demi Posada is playing a crucial role in making sure that everyone embraces the new technology.

Ms. Posada—who has received training from MTaPS, the DoH, and the local government of Bicol Region—is actively promoting the eLMIS to managers and officers within the public health system of Catanduanes. She started at the island's Provincial Health Office, where she trained program coordinators, supply officers, accountants, and IT officers on how to use the system effectively.

Thanks to this comprehensive staff training, supply officers in warehouses and stock rooms are now following up-to-date storage practices, and collaboration with program coordinators has become more efficient. Dr. Palmes is grateful to MTaPS for providing the support she and her colleagues needed to provide better health services on Catanduanes. By working with others to implement the new eLMIS, she is much closer to realizing her dream of UHC for her island home.

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

Mobilizing Partnerships to Integrate the Supply Chain in Public Health

SUCCESS STORY

MTaPS supported a series of interventions to create a better-managed and integrated supply chain for medicines and supplies in the Philippines. MTaPS worked with the Department of Health to facilitate resource mobilization from international agencies, ensuring widespread support and guaranteeing a well-functioning health care system for Filipinos in the long term.

Dr Joyce Ducusin, Director of Supply Chain Management Services (SCMS) at DOH. Photo credit: MTaPS Philippines

A steady supply of high-quality medicines, vaccines, and other health products is essential to public health. Medical supply chains should be efficient and effective, but in the Philippines, this hasn't always been the case. Through a series of interventions, the US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program has helped the Department of Health (DoH) to work with partners to create a better-managed and integrated supply chain for medicines and supplies. By facilitating resource mobilization from international agencies, MTaPS has ensured widespread support, guaranteeing a well-functioning health care system for Filipinos in the long term.

Dealing with organizational bottlenecks

Decades of underinvestment in public health have meant that Filipinos too often struggle to access the medicines and vaccines they need. Motivated individuals within the public health system are starting to turn things around.

Dr. Joyce Ducusin, the daughter of a doctor and a city auditor, grew up well aware of the limited government resources available to public servants. Despite this, after leaving medical school, Dr. Ducusin chose not to take a job in a private hospital, but to embark on her own career in public health.

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Since 1993, Dr. Ducusin has held various positions in the civil service. In 2018, she became co-leader of an office responsible for the supply chain operations of the DoH, with just 10 permanent members of staff and a budget of only USD 40,000. This funding came from public health program offices within the DoH, each of which had to approve any work program before it could proceed.

This bureaucratic arrangement made it difficult for Dr. Ducusin and her team to operate efficiently. "I dreamt of having an integrated supply chain with clear standards and systems so that my office could fulfill its responsibility of improving the availability of lifesaving products to Filipinos," explained Dr. Ducusin. "I just wanted to do more for my country."

Strengthening the supply chain

The USAID report "Strengthening the Supply Chain Governance Framework for Pharmaceuticals and Health Products in the Philippines," published in 2017, played an important role in bringing about change. This report gave Dr. Ducusin and other leaders in the DoH the backing they needed to successfully advocate for the right organization to manage supply chain operations. With 77 approved permanent positions and its own budget for managing the public health supply chain, the new Supply Chain Management Service office was well equipped to improve service delivery.

Dr Joyce Ducusin physically inspecting medical supplies for COVID-19 response. Photo credit: Philippines DOH, SCMS

But Dr. Ducusin knew that this was not enough. She realized that her office needed a visionary national strategic plan to help it strengthen and integrate the supply chain for public health supplies. So, she contacted USAID Philippines, which developed a national strategic plan through MTaPS to establish an integrated supply chain from 2018 to 2024.

In formulating this plan, MTaPS and the DoH engaged with private and public stakeholders to co-create strategic objectives and key interventions. Furthermore, MTaPS helped Dr. Ducusin's new office to gather pledges for financial support and technical assistance from other offices in the DoH and to identify development partners to help with implementation.

USAID's support did not stop there. The agency also invested USD 1 million to enable the DoH to acquire and configure an electronic logistics management information system (eLMIS) to digitalize the public health supply chain and streamline information onto a single platform.

Preparing for the future

The DOH's new eLMIS is critical for achieving the United Nations Sustainable Development Goal of universal health coverage in the Philippines. As the country accelerates its efforts toward this goal, more resources are needed to scale up this important management information system.

To provide these and other resources, USAID has helped the DoH mobilize around USD 2.5 million from different development partners, including the Global Fund to Fight AIDS, Tuberculosis and Malaria; the World Health Organization; and the United Nations Children's Fund.

When it comes to strategy, Dr. Ducusin has not stopped looking forward either. At her request, MTaPS has revised the previous strategy and developed a new integrated supply chain strategy from 2024 to 2028. "Big thanks to USAID MTaPS," said Dr. Ducusin. "Since the Supply Chain Management Service was first created, you have always been there to support us. You are responsive to our needs, and we hope that our partnership will continue in the implementation of our next strategic plan."

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SUCCESS STORY

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

Promoting Patient Safety in the Philippines through Improved Pharmacovigilance

Ryann using the system. Photo credit: MTaPS Philippines

Pharmacovigilance (PV) is the science and activities related to the detection, assessment, understanding, and prevention of adverse effects, side effects, or other drug-related issues, and it is essential for patient safety. Health care workers, patients, and consumers must be encouraged to document and report side effects of medicines, as the success of PV depends on collecting vast amounts of quality data to assess whether a particular medicine is safe for public use. It can be challenging to gather this kind of data, and in the Philippines, the US Agency for International Development (USAID) has successfully initiated advocacy efforts and training programs to encourage health workers and patients to report any untoward side effects and promote patient safety.

Background

Ryann has been working with the Philippines Food and Drug Administration (FDA) for 16 years. "During that time, I was part of almost all the units of the FDA, but I found my calling in PV," he explained. "As a pharmacist, I understand the importance of PV for medicines, especially for new medicines that are widely accessible, and I have wanted to build the safety profile of new medicines in the country for a long time."

However, managing the large quantities of data required for effective PV is not easy—especially given that the FDA's PV Unit covers the whole of the

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.

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Philippines. Furthermore, the country's reporting system should be well suited to the large quantities of data that need to be filed and assessed.

As part of the regulatory requirement for medicines that are in the market, companies and government entities must collate side effect data from their respective information systems, then send these data to the FDA. Originally, this information was sent to the FDA PV unit and they in turn encoded it to the FDA's Vigiflow system manually. To avoid overloading the system and the PV officers through manual encoding, in 2015, the FDA announced that all future reports must be submitted using an electronic E2B form.[7]

Optimizing systems for greater efficiency

USAID recognized that for effective PV, the FDA needed a more efficient way of capturing and analyzing data, with greater collaboration between the different systems used by the Philippines Department of Health (DOH) and the FDA. While the FDA uses Vigiflow, the DOH implements active tuberculosis (TB) drug monitoring and management using the Pharmacovigilance Monitoring System (PViMS).

To avoid the duplication of entries in these systems, USAID supported the DOH and FDA to establish interoperability between the PViMS and the Vigiflow system. Data encoded in the PViMS can now easily be shared with FDA's Vigiflow system through the E2B files. Consequently, relevant staff members, such as Ryann and his team, can seamlessly capture more PV data regarding new TB regimens. They also have more time to assess the submitted side effects, as they no longer need to manually encode reports into Vigiflow.

Reaching thousands through virtual and in-person training

With USAID support, Ryann and his colleagues received PV training to build their expertise and optimize their internal PV process and work procedures. USAID and the FDA's PV Unit collaborated to develop a course on principles of PV and the accurate reporting of side effects to ensure the integrity of their assessment. These learning sessions reached almost 1,000 health workers across virtual and in-person channels, and the free e-Learning course has now been uploaded into the DOH Academy (https://learn.doh.gov.ph) to facilitate continued learning for thousands of people all over the country.

Mentors also visited health facilities to deliver onsite PV training to staff, prioritizing those facilities providing care to people living with HIV. Several new HIV drugs and regimens have entered the market; therefore, greater quantities of information are needed to build up their safety profile.

Spreading awareness for greater public safety

Following these interventions, Ryann has seen a significant increase in the number of quality adverse events reports submitted for TB and HIV medicines that are crucial to enable signal detection, one of the core responsibilities of the PV Unit to actively ensure safety of medicines in the market. "Thanks to the support from USAID and other development partners, I no longer feel that I am alone in my advocacy," he said. "I am so happy to hear people talking more widely about PV, and they are aware of its importance."

Although more work is needed to advance the PV system in the Philippines, Ryann sees that, with support from development partners such as USAID, his dream of having a fully mature PV system to keep the public safe can be realized. This marks the inception of more robust PV, enhancing patient safety across the country.

[7] E2B is the international standard of sharing individual case safety reports between information systems.

USAID FROM THE AMERICAN PEOPLE

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8. MONITORING, EVALUATION, RESEARCH, & LEARNING

A. MONITORING & EVALUATION

QUARTER 3 PROGRESS

IDENTIFYING INDICATORS AND SETTING TARGETS

Toward the end of PY6 Quarter 3, the Home Office (HO) MERL team started working with MTaPS countries to adapt their M&E systems to each country's PY6 extension plan and amendments in their PY6 work plans. Based on the updates in the activities, the HO team is discussing selection of indicators and updating of targets in detail with the country teams. Detailed guidance on updating indicators and targets for the amended PY6 work plans has been shared with countries.

DEVRESULTS DATA AND DASHBOARDS

The DevResults system continues to be used as the key platform for data submission by countries and portfolios followed by validation by the HO MERL team. DevResults and PowerBI dashboards are also being used to understand and visualize project's progress over time on performance indicators. The HO team regularly reviews and reflects 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 3, the HO M&E team worked with MTaPS countries closing at the end of PY6 Quarters 3 and 4 to ensure that all M&E-specific tasks are completed before the closeout 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 timeline to make sure all key tasks are completed by the tailored deadlines provided.

COVID-19 IN-COUNTRY ACTIVITY REPORTS

By the end of PY6 Quarter 3, COVID-19 activities in Madagascar have been completed. During Quarter 3, COVID-19 activities continued in Côte d'Ivoire, Kenya, and Rwanda. Monitoring data on relevant indicators were collected, along with narratives for submission to USAID's Development Information Solutions (DIS) platform.

DATA QUALITY ASSURANCE

High-quality data continued to be a focus of the M&E teams at the HO and country levels. In PY6 Quarter 3, the country teams consistently referred to the DQA SOP to ensure that timely, accurate, and complete data are submitted.

ACTIVITIES & EVENTS FOR NEXT QUARTER

Activity & Description	Date
M&E closeout coordination with all active MTaPS countries	Ongoing
Data review and reflection with countries	Ongoing
Integration of performance-monitoring data in end-of-project narratives and presentations to highlight key results	September 30, 2024
Identify indicators and update targets for PY6 work plan amendments	August 30, 2024

B. KNOWLEDGE MANAGEMENT AND LEARNING

QUARTER 3 PROGRESS

TECHNICAL DOCUMENTATION

During Quarter 3, MTaPS developed 12 technical briefs and highlights to address learning questions:

Asia Bureau: Using the One Health Tool to Allocate Pharmaceutical Budgets. MTaPS developed 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?

Asia Bureau: Strengthening Medical Products Registration in the Asia Region. MTaPS completed a technical brief on its support for NRAs to improve regulatory capacity, streamline regulatory processes, and adopt best practices in medical product registration and marketing authorization. This technical brief addresses the following learning question: How will medical products registration contribute to the improvement of overall regulatory systems strengthening?

Strengthening Information Systems for PSCM in Bangladesh. MTaPS developed a technical brief on efforts to implement information management systems (e.g., eAMS, DGFP eLMIS, DGHS eLMIS, and QuanTB) that facilitate data-driven decision making by system users and managers. This technical brief addresses the following learning question: What are the critical lessons learned in strengthening the capacity of national- and subnational-level managers to use data from the various information management systems for monitoring performance and decision-making processes?

Strengthening IPC at the National and Health Care Facility Levels in Bangladesh. MTaPS completed a technical brief on supporting IPC governance structures at the national and subnational levels, conducting facility-level IPC assessments, and building capacity for improved IPC practices. This technical brief addresses the following learning question: What are the lessons learned from strengthening IPC governance capacity and practice at the national and facility levels in Bangladesh?

Introducing Comprehensive Electronic Recording and Reporting for TB in Bangladesh. MTaPS 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 brief is currently with USAID for review and approval.

Building MSC to Combat AMR in Burkina Faso. MTaPS completed a technical highlight on use of the One Health platform as a mechanism for partner collaboration, an essential approach to strengthening global health security. This technical highlight addresses the following learning questions: What are the key factors enabling or hindering MSC on AMR at the national level? How can MSC efforts be sustained? This highlight is currently with USAID for review and approval.

Strengthening MSC to Contain AMR in Cameroon. MTaPS completed a technical highlight on lessons learned from using the One Health platform to improve MSC and to ensure updating of

Cameroon's national action plan for AMR. This technical highlight addresses the following learning question: What are the critical lessons learned in the strengthening of MSC bodies on AMR? This highlight is currently with USAID for review and approval.

The Rational Use of Antimicrobials in Jordan. MTaPS completed a technical highlight on its efforts to develop localized protocols for rational use of antimicrobials, through collaboration with the Ministry of Health in Jordan. This technical highlight addresses the following learning question: What approaches are effective for building institutional and health facility capacity in rational use of antibiotics and IPC?

Sustaining Improvements in the Coordination and Governance of Pharmaceutical Systems in Jordan. MTaPS completed a technical brief on its efforts to support the institutionalization of framework agreements for public procurement of pharmaceuticals. This technical brief addresses the following learning question: What factors contribute to sustaining improvements in governance in pharmaceutical systems?

Key Factors of MSC in the Fight against AMR in Mali: A National Analysis. MTaPS completed a technical brief in French on supporting the national MSC committee (GCMN-RAM) and its IPC and AMS TWGs through activities aimed at strengthening MSC for AMR containment. This technical brief addresses the following learning question: What are the key factors enabling or hindering MSC on AMR at the national level?

Supporting Rwanda FDA to Strengthen Its Regulatory Services. MTaPS developed a technical brief summarizing program support to the Rwanda FDA in strengthening the quality of its regulatory services through implementation of a QMS. This technical brief addresses the following learning question: What is the effect of the QMS implementation on the quality of the Rwanda FDA's regulatory services?

Adherence to IPC Standards in MTaPS-Supported Health Facilities in Senegal. MTaPS completed a technical brief in French on its approach to improving IPC practices in Senegal through revitalization of nosocomial infection committees, which resulted in improved IPCAF scores at MTaPS-supported health facilities. This technical brief addresses the following learning question: What is the level of adherence to IPC standards in MTaPS-supported facilities?

During Quarter 3, MTaPS also developed three technical briefs and highlights to document implementation knowledge:

Asia Bureau: Mapping Regulatory Workforce Competency for National Regulatory Authorities. MTaPS developed a technical brief on workforce competency mapping of NMRAs in Bangladesh, Nepal, and the Philippines to determine the regulatory capacity–building needs of these NMRAs at institutional and individual levels.

Institutionalizing the eAMS in Bangladesh. MTaPS developed a technical brief on development of a centralized, web-based eAMS to strengthen the process of deploying, operating, maintaining, upgrading, and disposing of assets cost effectively.

Improving Early Tuberculosis Detection in DRC. MTaPS completed a technical brief on the strengthening of the capacity of community health workers in Ituri province, DRC, to improve TB screening and referral.

COUNTRY SUMMARY REPORTS

Supported development of country summary reports to Mission highlighting key achievements, results, recommendations, and future PSS considerations for the country. During Quarter 3, two country summary reports were completed:

Madagascar Country Summary Report. This report summarizes MTaPS' efforts to improve governance and management of the COVID-19 Response Mechanism (C19RM) launched by the Global Fund to address the challenges posed by the pandemic. The program strengthened pharmaceutical systems and services in the areas of Governance, Capacity, Information Systems, and Supply Chain, which primarily corresponded to the Laboratory Systems and Coordination of Operations result areas in the USAID's COVID-19 Response Framework.

Senegal Country Summary Report. This report summarizes MTaPS' efforts to strengthen pharmaceutical systems and services to improve AMR prevention and containment, to strengthen capacity for hemorrhagic fever disease in EVD preparedness and to support COVID-19 emergency response.

During Quarter 3, eight 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, including Bangladesh, Indonesia, and the Philippines, as well as 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.

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 Mpox.

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 combating AMR, increase adherence to IPC practices, promote rational use of antimicrobials, strengthen regulatory systems and PV structures, and impact COVID-19 preparedness, response, and vaccination implementation.

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

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.

CORE AND HEALTH AREA SUMMARY REPORTS

During Quarter 3, four Core and Health Area summary reports were drafted:

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 promote 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 contribute to equitable access for persons of all sexes and genders.

GHSA/AMR Summary Report. This report summarizes MTaPS' GHSA TA to 13 collaborating countries, including Bangladesh, Burkina Faso, Cameroon, Côte d'Ivoire, DRC, 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

Activity and Description	Date
Technical briefs and highlights	July–September 2024
Conference presentations	July–September 2024

Webinars	July–September 2024
Country summary reports	July–September 2024
Core and Health Area summary reports	July–September 2024
Country end-of-project presentations	July–September 2024
Country end-of-project events	July–September 2024

C. RESEARCH

QUARTER 3 PROGRESS

Under Cross Bureau, the team completed its post-intervention analysis for an evaluation study focused on a package of social behavior change interventions aimed at motivating compliance with antimicrobial prescribing guidelines among providers in selected hospitals in Uganda. The behavioral interventions—determined based on an analysis of barriers and motivators of appropriate antimicrobial prescribing—included perceived monitoring, ward leaderboards, and educational workshops. The study found that the intervention package significantly increased antimicrobial prescription compliance with the 2016 Uganda Clinical Guidelines, from 27% at baseline to 50% immediately post-intervention. The effects diminished at one month post-intervention. However, 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.

Under the CSL portfolio, MTaPS continued to finalize its report 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. 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 the community-based distributors (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 had 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 level 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 health facility 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 record keeping and workflow efficiency.

This quarter, Boston University School of Public Health working with the MTaPS team, finalized a manuscript reporting on an evaluation of the effect of MTaPS' GHSA and COVID-19 IPC interventions on facility-level IPC preparedness, readiness, and pandemic response in six countries. The results suggest an improvement of IPC performance in some countries over time, although results varied by country and level of support. MTaPS support was associated with increases in mean IPCAF IPC assessment scores in Cameroon and Mali and mean COVID-Scorecard scores in Côte d'Ivoire and Mali. Stakeholders also reported that IPC compliance improved from before the COVID-19 pandemic and largely attributed this to preparedness and readiness from pre-COVID support, and to the MTaPS support received during the pandemic. IPC components most amenable to change were related to guidelines, training, and surveillance; staffing, workload, and infrastructure and equipment were least amenable to change.

MTaPS participated in three conferences this quarter. At the Priorities 2024 Conference, the annual global meeting of the International Society for Priorities in Health, held May 8–10 in Bangkok, Thailand, MTaPS and MSH presented eight abstracts:

- Using Real-World Data and Evidence for Health Technology Assessment in Asia: Framework and Findings from Scoping Review
- Developing Health Technology Assessment (HTA) Organizational Development Canvas as Guide for Institutionalization
- Model calibration to harness real-world evidence in a cost-effectiveness analysis of adjuvant trastuzumab in Indonesia
- Development of Monitoring and Evaluation Framework for the Health Technology Assessment Topic Selection
- Applying Multi-Criteria Decision Analysis in Prioritization of TB Diagnostics: Lessons from Capacity Building Exercise
- Developing Methodology Guidelines for Health Technology Assessment in the Context of Medical Devices in the Philippines
- Health Technology Assessment for Medical Devices: A Cross-Country Study of Methodological Approaches
- Advancing Health Technology Assessment (HTA) Collaboration in Asia

The abstract focused on MTaPS' work in Indonesia received second prize for best oral presentation.

At SAPICS 2024, the annual meeting of the Professional Body for Supply Chain Management, held June 9–12, MTaPS conducted a PSS skills–building workshop entitled "The Nexus of Pharmaceutical Systems and Health Supply Chain Management." The workshop introduced 39 (22 female) supply chain managers and other health systems stakeholders to the concept of PSS and how supply chains fit in the context of pharmaceutical systems.

At the Global Health Security Conference held June 18–21 in Sydney, Australia, the program presented five abstracts and conducted one workshop:

- Implementation of AMS in resource constrained settings: Perspectives from Kenya (poster)
- Antimicrobial consumption surveillance in Uganda: Analysis of national import data for the human health sector, 2018–2021 (poster)
- Improving Infection Prevention and Control and Hand Hygiene Using a Continuous Quality Improvement Approach at Six Hospitals in Uganda (oral presentation)
- Building Functional Multisectoral Coordination to fight Antimicrobial Resistance: Experiences from 13 Countries (oral presentation)
- Advancing subnational-level multisectoral coordination in Kenya for AMR containment (oral presentation)
- Pandemic preparedness and the elephant in the room: Combatting AMR in resource-constrained settings (skills building workshop)

The International Society for Pharmacovigilance has two upcoming conferences, one regional meeting scheduled for July 2024 in Kampala, Uganda and their global annual meeting scheduled for October 1–15

in Montreal, Canada. This quarter, MTaPS submitted abstracts for consideration to both meetings and will be presenting at both as outlined below.

- At both the Kampala and Montreal meetings:
    - 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
- At the Kampala meeting:
    - 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
    - Pharmacovigilance Monitoring System PViMS (OpenRIMS-PV)—A Digital Tool to Enhance Decision-Making for Active and Passive Patient Safety Monitoring
    - Medicines Safety and Strengthening Pharmacovigilance in Senegal: Improving Adverse Drug Event Reporting by Involving the Bajenu Gox
- At the Montreal meeting:
    - Strengthening Pharmacovigilance and Safety Surveillance in Bangladesh
    - Institutionalizing a Digital System for Active Tuberculosis Drug Safety Monitoring in the Philippines

Of the two abstracts MTaPS submitted last quarter to Health Systems Research 2024, scheduled for November 18–22 in Nagasaki, Japan, the one entitled "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. The abstract entitled "Pharmaceutical Systems Governance: the Critical Role of National Pharmaceutical Services Units" was submitted to the 82nd FIP Congress of Pharmacy and Pharmaceutical Sciences scheduled for September 1–4 in Cape Town, South Africa, and was accepted as a poster. The program declined to attend because of budget considerations.

ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Finalize abstract submissions for PharmaConnect and Global Health Supply Chain Summit	July 2024
Prepare presentations for PharmaConnect	July 2024
Finalize manuscripts and submissions to various journals	September 2023

9. ANNEXES

ANNEX 1. MTAPS INDICATORS

Annex Table 1. MTaPS performance indicator tracking table

N/A is placed when activities are out of scope for the portfolio in the reporting year.

Code	Performance indicator	Reporting frequency	Baseline value	PY2 result	PY3 result	PY4 result	PY5 result	PY6 Q1 result	PY6 Q2 result	PY6 Q3 result	PY6 Q4 result	PY6 cumulative result
GH-IO 1	Has the country developed policies for prescription of Access, Watch, or Reserve class of antibiotics according to AWaRe categorization (yes/no)?	Annually	0/12	4/12	5/12	5/12	10/10					
	Bangladesh		No	Yes	Yes	Yes	Yes					
	Burkina Faso		No	No	Yes	No	Yes					
	Cameroon		No	No	No	No	Yes					
	Côte d'Ivoire		No	No	No	No	N/A					
	DRC		No	Yes	Yes	Yes	Yes					
	Ethiopia		No	No	No	Yes	Yes					
	Kenya		No	No	No	No	Yes					
	Mali		No	No	No	No	N/A					
	Mozambique		No	No	No	No	Yes					
	Nigeria		No	No	No	No	Yes					
	Senegal		No	Yes	Yes	Yes	Yes		Yes			Yes
	Tanzania		No	Yes	Yes	Yes	Yes					
GH-IO 2	Has the country implemented WHO AWaRe categories (yes/no)?	Annually	1/12	3/12	8/12	7/12	10/12					
	Bangladesh		Yes	Yes	Yes	Yes	Yes					
	Burkina Faso		No	No	Yes	Yes	Yes					
	Cameroon		No	No	No	No	Yes					
	Côte d'Ivoire		No	No	No	No	Yes					
	DRC		No	Yes	Yes	Yes	Yes					

	Ethiopia		No	No	Yes	Yes	Yes		
	Kenya		No	No	Yes	Yes	Yes		
	Mali		No	No	Yes	No	N/A		
	Mozambique		No	No	No	No	Yes		
	Nigeria		No	No	No	No	No		
	Senegal		No	No	Yes	Yes	Yes	No	No
	Tanzania		No	Yes	Yes	Yes	Yes		
GH-IO 5	*% of MTaPS-supported facilities with compliance with at least 60% prescribed antibiotics coming from WHO's AWaRe Access category*	Baseline/ endline	71%	N/A	49%	55%	67% (35/52)		
	Cote d'Ivoire		0%	N/A	N/A	100%	N/A		
	DRC		28%	N/A	N/A	0%	25% (3/12)		
	Jordan		0%	N/A	N/A	N/A	N/A		
	Kenya		80%	N/A	N/A	N/A	92% (22/24)		
	Mali		80%	N/A	49%	56%	62% (10/16)		
	Senegal		0%	N/A	N/A	0%	N/A	N/A	N/A
	Tanzania		100%	N/A	N/A	N/A	N/A		
	Uganda		100%	N/A	N/A	100%	N/A		
IO.1	% of median international price paid for a set of tracer medicines that was part of the last regular MOH procurement	Baseline/ endline	179%	N/A	N/A	N/A	N/A		
IO.2	Mean % availability across a set of tracer medicines	Annually	78%	75%	76%	78%	50% (50/100)	N/A	N/A
	Nepal							N/A	N/A
IO.3	% of medicines on the EML that have at least one registered product available	Annually					29% (434/1,477)		
	DRC MNCH		0%	N/A	N/A	17%	79% (30/38)		
	Nepal		84%	N/A	73%	72%	75% (318/426)	N/A	N/A
	Rwanda		49%	N/A	N/A	N/A	15% (86/1,013)		
IO.4	Has the country's regulatory system increased its score since the last WHO	Annually	0	N/A	N/A	N/A	Yes		

	global regulatory benchmarking assessment in at least one regulatory function (yes/no)?								
	Nepal		Yes	Yes	Yes	N/A	Yes	N/A	N/A
IO.5/GH-IO-4	*% of surveyed patients who can correctly state instructions dosage of antimicrobial prescriptions*	Baseline/ endline	76%	N/A	N/A	N/A	39% (1,324/ 3,376)		
	Nepal		76%	N/A	N/A	N/A	37% (1,166/ 3,136)	N/A	N/A
	Mali		32%	N/A	55%	54%	66% (158/240)		
IO.6	*Optimal level of medicines prescribing indicators (composite indicator)*	Annually	0.38	N/A	0.5	N/A	0.25	N/A	N/A
	Nepal								
MNCH 17	# of countries participating in the dissemination of the regulation guidelines for medical devices	Annually	0	0	0	N/A	N/A		
MNCH 18	# of MNCH medical devices included in the guidelines	Annually	0	N/A	0	N/A	N/A		
MNCH 19[8]	# of stakeholders from regulatory authorities and manufacturers of oxygen participating in the dissemination and adoption of the oxygen regulatory framework	Annually	0	0	0	N/A	N/A		
MNCH 4	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	0	0	0	N/A	N/A		
MNCH 6	# of countries using the RMNCH forecasting supplement	Annually	0	N/A	5	8	N/A		
MNCH 9	# of best practices identified and documented on elements of pharmaceutical management in social	Annually	0	3	N/A	N/A	N/A		

[8] The activity being reported under MNCH 19 has changed scope and to measure the changed activity, MNCH 27 has been added.

	accountability MNCH interventions from the literature									
MNCH 10	# of MTaPS-supported NMRAs implementing improved registration practices relevant for MNCH medical products	Semiannually	0	1	N/A	1	0	N/A	-	
MNCH 11	# of countries supported to develop and implement action plans for regional harmonization efforts relevant for MNCH medical products	Semiannually	0	0	N/A	N/A	0	N/A	-	
MNCH 12	# of quality-assured MNCH products registered in selected country	Semiannually	0	N/A	N/A	123	N/A	N/A		
MNCH 13	# of countries supported to implement decentralized procurement systems	Semiannually	0	1	N/A	1	N/A	N/A		
MNCH 21	# of quantification guidance documents developed	Annually	0	0	0	5	2			
MNCH 22	# of countries in selected region implementing regulation of medical devices	Semiannually	0	N/A	N/A	N/A	N/A	N/A		
MNCH 23	# of countries participating in the joint assessment of MNCH medical devices	Annually	0	N/A	N/A	N/A	0			
MNCH 24	# of countries participating in the meetings to disseminate the call-to-action paper to improve use of amoxicillin and gentamicin	Annually	0	N/A	N/A	N/A	23			
MNCH 25	# of countries receiving MTaPS support to include nonmalaria commodities in their Global Fund proposals	Annually	0	N/A	N/A	N/A	6			
MNCH 26	# of countries participating in the dissemination of the	Annually	0	N/A	N/A	N/A	42			

	oxygen quality assurance (QA) resource document								
MNCH 27	Number of stakeholders involved in validation of oxygen QA resource document	Annually	0	N/A	N/A	N/A	36		
MT 1.1.1	# of entities that have clarified roles and responsibilities in pharmaceutical systems and made information publicly available with MTaPS support	Annually	0	3	11	6	2		
	Bangladesh		0	2	1	2	N/A		
	DRC		0	N/A	N/A	N/A	N/A		
	Indonesia		0	N/A	2	N/A	N/A		
	Jordan		0	0	0	3	N/A		
	Nepal		0	0	0	N/A	1	3	3
	Rwanda		0	1	4	1	1		
	IGAD		0	0	4	N/A	N/A		
MT 1.1.2	# of MTaPS-supported entities that monitor key elements of pharmaceutical management operations and make the information publicly available	Annually	0	0	29	17	17		
	DRC MNCH		0	0	29	17	17		
MT 1.1.3	% of MTaPS-supported decision-making entities that have publicly available guidelines for key elements of pharmaceutical management operations	Annually	0	N/A	100% (2/2)	0% (0/1)	100% (1/1)		
	IGAD		0	N/A	100% (2/2)	N/A	N/A		
	Mali		0	N/A	N/A	0% (0/1)	100% (1/1)		
MT 1.2.1	# of pharmaceutical sector–related policy, legislation, regulation, or operational documents developed or updated with	Annually	0	30	28	20	80		

	technical assistance from MTaPS										
	Asia Bureau		0	0	1	4	1				
	Cross Bureau		0	N/A	N/A	1	1				
	Bangladesh		0	2	2	5	1				
	Burkina Faso PV		0	1	0	N/A	N/A				
	Global MNCH		0	1	0	N/A	N/A				
	Indonesia		0	N/A	0	N/A	1				
	Jordan		0	0	0	0	11				
	Mali MNCH		0	N/A	N/A	1	N/A				
	Mozambique		0	1	2	N/A	N/A				
	Nepal		0	N/A	3	6	65	22			22
	Philippines		0	0	3	1	Data not available[9]				
	Rwanda		0	26	17	0	N/A				
	Tanzania PEPFAR		0	N/A	2	2	N/A				
PP 1.1.1	# of policies and plans developed, enhanced, or implemented to improve service delivery governance and regulation because of MTaPS support	Annually	0	2	3	1	Data not available[9]				
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	
MT 1.2.2	# of pharmaceutical regulatory enforcement mechanisms established or strengthened with MTaPS support	Semiannually	0	0	5	8	24	0			
	Burkina Faso		0	N/A	N/A	N/A	0	N/A			
	Global MNCH		0	N/A	0	N/A	1	N/A			
	Mozambique		0	0	2	N/A	N/A	N/A			
	Philippines		0	N/A	N/A	N/A	N/A	0			
	Rwanda		0	0	2	8	23	N/A			
	Tanzania PEPFAR		0	N/A	1	N/A	N/A	N/A			

[9] Indicator data are collected through government sources that were not available at the time of data collection.

MT 1.2.3	% of established pharmaceutical regulatory enforcement mechanisms that are functional	Semiannually	50%	42% (11/26)	88% (15/17)	75% (3/4)	100% (1/1)	N/A				
	Bangladesh		50%	100% (2/2)	100% (8/8)	100% (2/2)	100% (1/1)	N/A				
	Mozambique		0%	22% (2/9)	67% (2/3)	N/A	N/A	N/A				
	Rwanda		0%	83% (5/6)	83% (5/6)	75% (6/8)	N/A	N/A				
MT 1.3.1	# of platforms for citizen and consumer engagement in the pharmaceutical sector established or strengthened with MTaPS support	Annually	0	0	1	1	N/A					
	DRC MNCH		0	0	1	1	1					
	Jordan		0	0	0	0	N/A					
PP 1.3.1	% of US Government (USG)-supported facilities using MTaPS-supported eLMIS	Quarterly	0	N/A	N/A	Data not reported	28% (39/68)	269.44% (97/36)	100% (10/10)	N/A		
MT 1.3.2	# of civil society organizations or media groups that have disseminated information on pharmaceutical sector–monitoring activities or conducted advocacy for equity in access to medical products with MTaPS support	Annually	0	0	0	0	N/A					
	Jordan		0	0	0	0	N/A					
MT 2.1.2	# of MTaPS-supported health professional training curricula developed or revised to address pharmaceutical management topics	Annually	0	5	2	7	5					
	Asia Bureau		0	N/A	1	2	N/A					
	Bangladesh		0	4	0	1	N/A					
	IGAD		0	1	1	N/A	N/A					
	Jordan		0	N/A	N/A	4	2					
	Mali MNCH		0	N/A	N/A	N/A	3					

	# of persons trained in pharmaceutical management with MTaPS support		0	1,827	12,480	9,862	8,815	3,623		2,164		964					
	Asia Bureau[10]		0	N/A	101	413	184	*Female*	0	*Female*	5	*Female*	9	*Female*			
								Male	0	*Male*	18	*Male*	17	*Male*			
								Unknown	1,064	*Unknown*	401	*Unknown*	0	*Unknown*			
								Total	1,064	***Total***	424	***Total***	26	***Total***			
	Bangladesh		0	1,678	2,856	3,013	1,961	*Female*	7	*Female*	46	*Female*	21	*Female*			
								Male	47	*Male*	16	*Male*	104	*Male*			
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*			
								Total	54	***Total***	62	***Total***	125	***Total***			
	Burkina Faso		0	N/A	N/A	N/A	32	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*			
								Male		*Male*		*Male*		*Male*			
								Unknown		*Unknown*		*Unknown*		*Unknown*			
								Total		***Total***		***Total***		***Total***			
MT 2.2.2	*Cross Bureau*	Quarterly	0	N/A	N/A	124	2,895	*Female*	0	*Female*	0	*Female*	0	*Female*			
								Male	0	*Male*	0	*Male*	0	*Male*			
								Unknown	1,713	*Unknown*	1,393	*Unknown*	713	*Unknown*			
								Total	1,713	***Total***	1,393	***Total***	713	***Total***			
	DRC MNCH		0	N/A	373	192	334	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*			
								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*			
								Male		*Male*		*Male*		*Male*			
								Unknown		*Unknown*		*Unknown*		*Unknown*			
								Total		***Total***		***Total***		***Total***			
	IGAD		0	N/A	843	23	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*			
								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*			
								Male	20	*Male*		*Male*		*Male*			

[10] Data reported in PY6Q1 is for the Asia Bureau PY5 e-Learning course

								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*		
								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*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Mozambique		0	105	21	125	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Nepal		0	N/A	38	121	733	*Female*	196							977
								Male	781							
								Unknown	0							
								Total	977							
	Philippines		0	N/A	7,615	5,191	1,048	*Female*	304	*Female*	22	*Female*	N/A	*Female*		
								Male	133	*Male*	47	*Male*		*Male*		
								Unknown	0	*Unknown*	0	*Unknown*		*Unknown*		
								Total	437	***Total***	69	***Total***		***Total***		
	Rwanda[11]		0	44	603	246	616	*Female*	22	*Female*	1	*Female*	N/A	*Female*		
								Male	30	*Male*	3	*Male*		*Male*		
								Unknown	0	*Unknown*	0	*Unknown*		*Unknown*		
								Total	52	***Total***	4	***Total***		***Total***		
	Rwanda PEPFAR		0	N/A	N/A	78	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	*Female*	0	*Female*	9	*Female*	N/A	*Female*		
								Male	0	*Male*	16	*Male*		*Male*		

[11] Rwanda PY6 field support activities are a continuation of the PY5 work plan.

								Unknown	0	*Unknown*	0	*Unknown*		*Unknown*		
								Total	0	***Total***	25	***Total***		***Total***		
	Tanzania PEPFAR		0	N/A	30	27	N/A	*Female*	0	*Female*	N/A	*Female*	N/A	*Female*		
								Male	0	*Male*		*Male*		*Male*		
								Unknown	0	*Unknown*		*Unknown*		*Unknown*		
								Total	0	***Total***		***Total***		***Total***		
MT 2.2.3	# of in-person or e-Learning courses developed with MTaPS assistance	Annually	0	1	11	11	1										
	Asia Bureau		0	N/A	3	2	1										
	Bangladesh		0	0	0	N/A	N/A										
	Cross Bureau		0	1	1	2	N/A										
	IGAD		0	N/A	0	N/A	N/A										
	Mozambique		0	0	1	1	N/A										
	Nepal		0	N/A	N/A	N/A	N/A										2
	Philippines		0	0	4	6	Data not available[12]										
	Rwanda		0	0	2	N/A	N/A										
MT 2.2.4	# of people successfully completing MTaPS-developed e-Learning courses	Quarterly	0	65	6,917	4,227	5,961	2,753		113		1,488					
	Asia Bureau		0	0	52	0	8	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Bangladesh FS		0	0	0	0	2,012	*Female*	64	*Female*	7	*Female*	109	*Female*		
								Male	395	*Male*	105	*Male*	478	*Male*		
								Unknown	5	*Unknown*	1	*Unknown*	2	*Unknown*		
								Total	464	***Total***	113	***Total***	589	***Total***		
	Bangladesh GHSA		0	N/A	N/A	N/A	56	*Female*	173	*Female*	N/A	*Female*	N/A	*Female*		
								Male	401	*Male*		*Male*		*Male*		
								Unknown	2	*Unknown*		*Unknown*		*Unknown*		
								Total	576	***Total***		***Total***		***Total***		
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	*Female*	0	*Female*	0	*Female*	64	*Female*		

[12] Indicator data are collected through government sources that were not available at the time of data collection.

								Male	0	*Male*	0	*Male*	122	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		
								Total	0	***Total***	0	***Total***	186	***Total***		
	Cross Bureau		0	6	8	208	3,123	*Female*	0	*Female*	0	*Female*	0	*Female*		
								Male	0	*Male*	0	*Male*	0	*Male*		
								Unknown	1,713	*Unknown*	1,393	*Unknown*	713	*Unknown*		
								Total	1,713	***Total***	1,393	***Total***	713	***Total***		
	DRC		0	N/A	N/A	N/A	N/A	*Female*	N/A	*Female*	0	*Female*	N/A	*Female*		
								Male		*Male*	0	*Male*		*Male*		
								Unknown		*Unknown*	0	*Unknown*		*Unknown*		
								Total		***Total***	0	***Total***		***Total***		
	Mozambique		0	65	0	0	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Philippines		0	0	6,857	3,892	762	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Rwanda		0	0	0	127	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
MT 2.4.1	# of days reduced for product registration in countries with MTaPS-supported NMRAs	Annually	0	0	180	0	N/A									
	Mali MNCH		0	N/A	N/A	0	N/A									
	Rwanda		0	N/A	N/A	N/A	240									
MT 2.4.2	# of premises inspected by MTaPS-supported NMRAs	Annually	0	N/A	N/A	3,751	N/A	N/A								N/A
	Nepal		0	N/A	N/A	3,751	N/A	N/A								N/A
MT 2.4.3	# of regional harmonization initiatives with participation by MTaPS-supported NMRAs	Annually	0	0	3	10	2									

	Asia Bureau		0	N/A	1	10	1		
	Cross Bureau		0	N/A	N/A	N/A	1		
	IGAD		0	N/A	2	N/A	N/A		
	Mozambique		0	0	0	N/A	N/A		
MT 2.4.4	# of countries that have conducted an assessment at any level of the regulatory system	Annually	2	1	2	1	1		
	Nepal		Yes	Yes	Yes	Yes	Yes	N/A	N/A
	Rwanda		Yes	N/A	Yes	No	No		
MT 2.4.5	# of medicines with current valid registration	Annually	0	N/A	N/A	60	482		
	Mali MNCH		0	N/A	N/A	60	N/A		
	Rwanda		0	N/A	N/A	N/A	482		
MT 3.3.1	*Has the country used PSS metrics to assess its pharmaceutical system?*	Annually	No	N/A	N/A	No	No		
	Cross Bureau		No	N/A	N/A	No	No		
NP 1	% of USG-assisted organizations with improved performance	Annually	0	0%	0%	0% (0/1)	100% (1/1)	N/A	N/A
NP 2	# of wholesalers inspected according to the new good distribution practice inspection guidelines	Annually	0	0	0	22	8	2	2
NP 3	# of public- and private-sector pharmacies inspected according to the new good pharmacy practice inspection guidelines	Annually	0	0	12	N/A	N/A	10	10
NP 4	# of innovations supported through USG assistance	Annually	0	0	2	4	5	2	2
NP 5	% of surveyed medicines labeled in compliance with labeling requirements	Annually	8.70%	N/A	8.70%	0%	60% (60/100)	N/A	N/A
NP 6	% of private-sector pharmacies surveyed dispensing prescription medicines without prescription	Annually	25%	N/A	25%	N/A	N/A	N/A	N/A

NP 8	# of monitoring visits in which the Government of Nepal (GON) participates	Annually	0	N/A	2	6	17	9		9
PP 1.5.1	# of TB and FP commodities for which a quantification process is completed with MTaPS support	Annually	0	0	0	6	14			
PP 1.5.2	# of TB and FP commodities procured by the DOH through FAs, pooled procurement, or other innovative procurement mechanisms with support from MTaPS	Annually	0	0	0	0	Data not yet available[9]			
PP 2.2.1	# of TB and FP products registered in the Philippines with MTaPS support	Annually	0	0	0	9	Data not yet available[9]	-		
PP 3.2	# of synergized approaches for supply chain management, human resources for health, and engagements with the private sector and local government units	Annually	0	2	5	1	Data not yet available[9]			
PP 3.3	% of MTaPS-supported entities carrying out supply chain management functions without external TA	Annually	0	0	33% (4/12)	25% (2/8)	Data not yet available[9]			
MT 3.1.1	# and % of MTaPS-supported HFs that have newly implemented or improved PMIS to document-specific components of the pharmaceutical system for analysis and reporting with MTaPS support	Semiannually	90%	92% (4,303/ 4,690)	99% (2,006/ 2,016)	100% (20/20)	N/A	N/A		
	Bangladesh		90%	92% (4,293/ 4,680)	100% (2,006/ 2,006)	N/A	N/A	N/A		
	Rwanda Field Support		0%	100% (10/10)	0% (0/10)	N/A	N/A	N/A		
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	N/A		

MT 3.1.2	# and % of MTaPS-supported HFs using interoperable PMIS tools	Semiannually	61% (61/100)	88% (3,884/4,410)	85% (6,434/7,565)	72% (8,957/12,367)	70% (10,253/14,537)/5,963)	65% (4,461/6,846)														
	Bangladesh[13]		61% (61/100)	88% (3,875/4,396)	77% (4,734/6,173)	72% (4,418/6,106)	70% (10,243/14,527)/5,958)	65% (4,461/6,846)														
	Mozambique		0%	64% (9/14)	85% (1,412/1,652)	64% (9/14)	100% (5/5)	N/A														
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	N/A														
MT 3.1.3	# of countries that have a functional early warning system linking clinical and stock data	Annually	0	0	2	1	1															
	Bangladesh		0	Yes	Yes	Yes	Yes															
	Mozambique		0	No	No	No	N/A															
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)										
	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*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*								
								Other		*Other*		*Other*		*Other*								
								Total		***Total***		***Total***		***Total***								
	DRC MNCH		42% (74/177)	Data not reported	56% (100/177)	74% (132/177)	78% (1,123/1,441)	*Hospitals*	N/A	*Hospitals*	0% (0/0)	*Hospitals*	0% (0/0)	*Hospitals*								
								Health centers		*Health centers*	92% (385/419)	*Health centers*	81% (342/422)	*Health centers*								
								Pharmacies		*Pharmacies*	79% (11/14)	*Pharmacies*	0% (0/0)	*Pharmacies*								
								Other		*Other*	0% (0/0)	*Other*	0% (0/0)	*Other*								
								Total		***Total***	91% (396/433)	***Total***	81% (342/422)	***Total***								
MT 3.3.2	# of PSS technical documents authored by MTaPS	Semiannually	0	14	39	56	48	27														
	Asia Bureau		0	N/A	N/A	0	2	N/A														
	Burkina Faso		0	N/A	N/A	N/A	N/A	0														
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0														

[13] Quarter 1-2 data was not reported in the quarter 2 report due to delays in data sources. Data for quarter 1-2 have now been collected and is included in this report.

	Cross Bureau		10	13	10	11	16	2				
	CSL		0	N/A	1	10	1	3				
	DRC MNCH		0	N/A	N/A	N/A	N/A	2				
	Global MNCH		0	1	1	9	10	1				
	Indonesia		0	N/A	0	7	8	3				
	Jordan		0	N/A	N/A	2	7	0				
	Kenya		0	N/A	N/A	N/A	N/A	2				
	Mali GHSA		0	N/A	N/A	N/A	N/A	6				
	Mali MNCH		0	N/A	N/A	N/A	1	N/A				
	Mozambique		0	N/A	N/A	N/A	N/A	1				
	Philippines		0	N/A	N/A	N/A	N/A	5				
	Rwanda		0	N/A	27	17	3	0				
	Senegal		0	N/A	N/A	N/A	N/A	1		3		4
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	1				
MT 3.3.3	# of activities to engage with stakeholders to advance the PSS global learning agenda	Quarterly	0	4	12	64	67	29	18	29		
	Asia Bureau		0	N/A	N/A	1	7	0	N/A	N/A		
	Cross Bureau		0	11	12	31	34	17	10	18		
	Côte d'Ivoire		0	N/A	N/A	N/A	N/A	0	N/A	N/A		
	CSL		0	N/A	0	16	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		
	Indonesia		0	N/A	0	16	23	4	N/A	N/A		
	Kenya		0	N/A	N/A	N/A	N/A	4	4	10		
	Mali		0	N/A	N/A	N/A	N/A	2	2	1		
	Mozambique		0	N/A	N/A	N/A	0	0	1	N/A		
	Tanzania GHSA		0	N/A	N/A	N/A	N/A	2	N/A	N/A		
	Tanzania Field Support		0	N/A	N/A	N/A	N/A	0	1	N/A		
PP 3.1	# of joint success stories produced	Annually	0	2	3	2	8					
PP 3.4	# of gender assessments, analyses, studies, or research activities conducted by MTaPS on PSCM and PV	Annually	0	0	1	1	1					
DRC 6	% of MTaPS-supported HFs that used data to	Semiannually	0	N/A	100%	100% (50/50)	N/A	N/A				

	inform medicine use, patient safety, quality of pharmaceutical services, and/or pharmacy benefits									
MNCH 13	# of countries supported to implement decentralized procurement systems	Semiannually	0	N/A	N/A	N/A	N/A	N/A		
MNCH 15	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	0	N/A	0	N/A	N/A			
MT 4.1.2	# of new or revised medicine pricing policies developed with MTaPS' assistance	Annually	0	N/A	N/A	N/A	N/A			
	DRC Supply Chain		0	N/A	N/A	N/A	N/A			
	Indonesia		0	N/A	N/A	N/A	N/A			
MT 4.2.1	# of pharmacy benefits programs introduced or improved in health sector with MTaPS support	Annually	0	1	N/A	N/A	N/A			
	Bangladesh		0	1	N/A	N/A	N/A			
MT 4.2.2	Has the country established a national-level, multistakeholder platform for evidence-based pharmacy benefits program decision making (yes/no)?	Annually	0	N/A	0	N/A	N/A			
	Indonesia		0	N/A	0	N/A	N/A			
MT 4.2.3	# of strategic plans developed or updated to address pharmaceutical costs and financing with MTaPS support	Semiannually	0	2	0	2	3	N/A		
	Asia Bureau		0	N/A	N/A	N/A	0	N/A		
	Bangladesh		0	2	0	0	N/A	N/A		
	Indonesia		0	N/A	N/A	2	3	N/A		
MT 4.3.1	Has the country increased domestic funding budgeted for or	Annually	0	N/A	No	Data not reported	Yes			

	spent on high-priority diseases or conditions (yes/no)?											
	Indonesia		0	N/A	No		Yes					
MT 4.3.2	Has the country reviewed public-sector pharmaceutical financing in the last fiscal year (yes/no)?	Annually	0	N/A	Yes	Yes	Yes					
	Indonesia		0	N/A	Yes	Yes	Yes					
MT 4.3.3	Does the country have a system(s) to track pharmaceutical expenditures (yes/no)?	Annually	0	N/A	N/A	No	Yes					
	Indonesia		0	N/A	N/A	No	Yes					
MT 4.3.4	Has the country reduced the value of product losses (due to expired medicines, damage, or theft) per value of commodities received (yes/no)?	Annually	0	N/A	0	N/A	N/A					
	Indonesia		0	N/A	0	N/A	N/A	N/A				
MT 4.4.1	*# of proposals or grants developed or submitted, with technical assistance from MTaPS, that were funded by a global initiative or donor*	Semiannually	0	N/A	N/A	N/A	N/A	N/A				
	Global MNCH		0	N/A	N/A	N/A	N/A	N/A				
PP 1.4.1	# of private-sector outlets providing FP or TB commodities through a referral and reimbursement scheme	Annually	0	N/A	5	0	N/A	N/A				
MT 5.1.1	% of SDPs with stockout of FP, TB, and HIV/AIDS tracer commodities	Quarterly	40.50%	45% (5,896/ 13,114)	31% (5,661/ 18,258)	37% (15,398/ 40,738)	26% (7,511/ 2,8717)	32% (5,763/17,679)	N/A	N/A		
	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		
	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		
	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		

	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		
	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		
	TB second-line drug (moxifloxacin 400 mg)		0	50% (100/199)	7% (12/168)	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		
	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		
	GeneXpert cartridges		0	3% (13/395)	14% (46/338)	30% (367/1,207)	69% (932/1,345)	37% (239/654)	N/A	N/A		
	FP injectable		30.20%	27% (466/ 1,703)	22% (500/ 2,237)	28% (1,420/ 5,017)	25% (813/3,299)	20% (443/2,199)	N/A	N/A		
	FP implant		52.70%	69% (796/ 1,150)	42% (784/ 1,879)	50% (2,022/ 4,208)	40% (916/2,285)	47% (859/1,836)	N/A	N/A		
	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		
	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		
	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		
	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		
MT 5.1.1 (FP)	Stockout rates of tracer medicines in MTaPS-supported HFs (FP)	Semiannually	0%	N/A	N/A	.00116% (70/60,363)	0.36% (202/56,464)	22% (6,673/30,571)				
	Bangladesh[14]							22% (6,673/30,571)				
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)				
	Bangladesh[14]							29% (14,050/48,530)				
MT 5.1.1 (TB)	Stockout rates of tracer medicines in MTaPS-supported HFs (TB)	Semiannually	78%%	N/A	N/A	N/A	10% (145/1,408)	0.31% (3/972)				
	Bangladesh[14]							0.31% (3/972)				
MT 5.1.2	% of tracer products stocked according to plan	Semiannually	0%	N/A	28% (52/186)	28% (25/88)	46% (27/59)	100% (31/31)				

[14] Quarter 1-2 data was not reported in the quarter 2 report due to delays in data sources. Data for quarter 1-2 have now been collected and is included in this report.

	Bangladesh		0%	N/A	0% (0/7)	50% (3/6)	N/A	N/A			
					92% (12/13)	50% (3/6)					
					14% (1/7)	0					
					0% (0/7)	0					
	DRC MNCH		0%	N/A	37% (14/38)	56% (11/19)	46% (27/59)	*Stocked according to plan*	0% (0/0)		
					42% (16/38)	26% (5/19)		*Overstocked*	100% (15/15)		
					18% (7/38)	16% (3/19)		*Understocked*	100% (9/9)		
					53% (2/38)	0% (0/19)		*Stocked out*	100% (7/7)		
MT 5.1.2 (FP)	% of tracer products stocked according to plan (FP)	Semiannually	0%	N/A	N/A	50% (12/14)	16% (2/12)	N/A			
	Bangladesh		0%	N/A	N/A	50% (12/14)		N/A			
MT 5.1.2 (TB)	% of tracer products stocked according to plan (TB)	Semiannually	0%	N/A	N/A	N/A	N/A	N/A			
	Bangladesh		0%	N/A	N/A	N/A	N/A	N/A			
MT 5.1.3	% of initially MTaPS-supported supply chain functions carried out by national entities that are done without external TA	Semiannually	0%	Data not reported	100% (3/3)	100% (3/3)	100%	N/A			
	Bangladesh		0%	Data not reported	100% (3/3)	100% (3/3)		N/A			
MT 5.2.1	% of MTaPS-supported HFs which have developed, adopted, or implemented pharmaceutical service standards	Semiannually	0%	0%	0% (0/100)	0%	N/A	N/A			
	Rwanda		0%	0%	0% (0/100)	0%	N/A	N/A			
MT 5.2.2	% of MTaPS-supported HFs promoting patient-centered pharmaceutical services	Semiannually	0%	N/A	N/A	100% (20/20)	N/A	N/A			
	Rwanda		0%	N/A	N/A	100% (20/20)	N/A	N/A			
MT 5.2.3	% of MTaPS-supported HFs implementing CQI approaches to improve medicine use	Semiannually	0%	N/A	N/A	100% (20/20)	100% (20/20)	N/A			
	Rwanda		0%	N/A	N/A	100% (20/20)	100% (02/20)	*Hospitals*	N/A		

								Health centers										
								Pharmacies										
								Other										
								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)						
	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)	*Pharmacies*				
								Total	75% (49/65)	***Total***	77% (50/65)	***Total***	68% (44/65)	***Total***				
	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*				
	IGAD		0%	Data not reported	24% (10/41)	6.5% (8/123)	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*				
								Health centers		*Health centers*		*Health centers*		*Health centers*				
								Pharmacies		*Pharmacies*		*Pharmacies*		*Pharmacies*				
								Total		***Total***		***Total***		***Total***				
	Mozambique		0%	N/A	100%	100% (14/14)	100% (5/5)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*				
								Health centers		*Health centers*		*Health centers*		*Health centers*				
								Total		***Total***		***Total***		***Total***				
	Rwanda[15]		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*				
								Health centers	100% (10/10)	*Health centers*		*Health centers*		*Health centers*				
								Pharmacies	0% (0/0)	*Pharmacies*		*Pharmacies*		*Pharmacies*				
								Other	N/A	*Other*		*Other*		*Other*				
								Total	100% (20/20)	***Total***		***Total***		***Total***				
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*				
								Health centers		*Health centers*		*Health centers*		*Health centers*				
								Total		***Total***		***Total***		***Total***				

[15] Rwanda PY6 field support activities are a continuation of the PY5 work plan.

	% of ADEs reported to the NMRA and reviewed by the NMRA			22% (95/440)	53% (7,419/ 13,881)	16% (3,801/ 22,758)	43% (1,311/3,000)	2% (10/687)			
	Bangladesh		68% (68/100)	22%	77% (449/ 586)	90% (852/945)	80% (617/774)	N/A			
	Burkina Faso		0	N/A	N/A	N/A	N/A	N/A			
MT 5.3.2	*IGAD*	Semiannually	0% (0/0)	N/A	100% (1,104/ 1,104)	N/A	N/A	N/A			
	Mozambique		60%	N/A	56% (1,237/ 2,213)	12.19% (1,223/ 10,035)	N/A	N/A			
	Mozambique PEPFAR		0	0	23% (1,563/ 6,635)	12.19% (1,223/ 10,035)	N/A	N/A			
	Rwanda		0	73% (274/374)	55% (102/186)	29% (503/1,746)	31% (694/2,226)	2% (10/687)			
	Tanzania PEPFAR		0	N/A	2,641/	N/A	N/A	N/A			
NP-MT 5.3.2	# of ADEs reported in Nepal	Annually	194	29	43	6	27				
MT 5.3.4	# of medical product regulatory actions carried out by the NMRA for reasons of drug safety during the reporting period	Annually	0	N/A	N/A	15	Data source not yet available				
	Nepal		0	N/A	N/A	15	Data source not yet available				
MT 5.4.1	% of MTaPS-supported HFs that have documented evidence of improvement in antimicrobial medicine prescription and/or use	Annually	0	N/A	N/A	0% (0/3)	N/A				
	Jordan		0	N/A	N/A	0% (0/3)	N/A				
MT 5.4.2	% of MTaPS-supported HFs implementing locally identified and prioritized core elements of IPC activities	Semiannually	0%	100%	100% (7/7)	100% (7/7)	N/A	100% (81/81)			
	Jordan		0%	N/A	N/A	N/A	N/A	100% (81/81)			
	Mozambique		0%	100%	100% (7/7)	100% (7/7)	N/A	N/A			
MT 5.4.3	# of AMR-related in-country meetings or activities conducted	Quarterly	0	N/A	N/A	4	N/A	N/A	N/A	N/A	

	with multisectoral participation												
	Jordan		0	N/A	N/A	4	N/A	N/A	N/A	N/A			
	Nepal		0	N/A	N/A	N/A	9	N/A					N/A
ML 1	# of marketing authorization commission meetings supported by MTaPS	Quarterly	0	0	0	1	N/A	N/A	N/A	N/A			
	Mali MNCH		0	0	0	1	N/A	N/A	N/A	N/A			
ML 2	# of quarterly meetings to orient key stakeholders on using directory of registered medical products	Quarterly	0	0	0	1	N/A	N/A	N/A	N/A			
	Mali MNCH		0	0	0	1	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			
	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			
	Côte d'Ivoire		0	0	0	N/A	N/A	*Ebola treatment unit (ETU)*	N/A	*ETU*	N/A	*ETU*	*ETU*
								Non-ETU		*Non-ETU*		*Non-ETU*	*Non-ETU*
								Point of entry (POE)		*POE*		*POE*	*POE*
								Total		***Total***		*Total*	*Total*
	Mali		0	0	0	7		*ETU*		*ETU*		*ETU*	*ETU*
								Non-ETU		*Non-ETU*		*Non-ETU*	*Non-ETU*
								POE		*POE*		*POE*	*POE*
								Total		***Total***		***Total***	***Total***
	Rwanda		0	0	0	0		*ETU*		*ETU*		*ETU*	*ETU*

								Non-ETU		*Non-ETU*		*Non-ETU*		*Non-ETU*				
								POE		*POE*		*POE*		*POE*				
								Total		***Total***		***Total***		***Total***				
	Senegal		0	0	0	0		*ETU*		*ETU*		*ETU*		*ETU*				
								Non-ETU		*Non-ETU*		*Non-ETU*		*Non-ETU*				
								POE		*POE*		*POE*		*POE*				
								Total		***Total***		***Total***		***Total***				
	Uganda		0	0	0	59		*ETU*		*ETU*		*ETU*		*ETU*				
								Non-ETU		*Non-ETU*		*Non-ETU*		*Non-ETU*				
								POE		*POE*		*POE*		*POE*				
								Total		***Total***		***Total***		***Total***				
	# of persons who received EVD training with MTaPS support		0	0	0	924	N/A	N/A		N/A		N/A						
	Côte d'Ivoire		0	0	0	N/A	N/A	*Female*		*Female*		*Female*		*Female*				
								Male		*Male*		*Male*		*Male*				
								Unknown		*Unknown*		*Unknown*		*Unknown*				
								Total		***Total***		***Total***		***Total***				
	Mali		0	0	0	0		*Female*		*Female*		*Female*		*Female*				
								Male		*Male*		*Male*		*Male*				
								Unknown		*Unknown*		*Unknown*		*Unknown*				
								Total		***Total***		***Total***		***Total***				
EVD 3	*Rwanda*	Quarterly	0	0	0	32		*Female*		*Female*		*Female*		*Female*				
								Male	N/A	*Male*	N/A	*Male*	N/A	*Male*				
								Unknown		*Unknown*		*Unknown*		*Unknown*				
								Total		***Total***		***Total***		***Total***				
	Senegal		0	0	0	0		*Female*		*Female*		*Female*		*Female*				
								Male		*Male*		*Male*		*Male*				
								Unknown		*Unknown*		*Unknown*		*Unknown*				
								Total		***Total***		***Total***		***Total***				
	Uganda		0	0	0	892		*Female*		*Female*		*Female*		*Female*				
								Male		*Male*		*Male*		*Male*				
								Unknown		*Unknown*		*Unknown*		*Unknown*				
								Total		***Total***		***Total***		***Total***				
EVD 4	# of MTaPS-supported entities in compliance	Quarterly	0	0	0	7		N/A		N/A		N/A						

	with EVD IPC guidelines														
	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***	
	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			
	Philippines		0	0	20%	70% (564/801)	100% (197/197)	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								
	Philippines														
PH- P 2	# of HIV/AIDS commodities that complete the quantification process with MTaPS support	Annually	0	N/A	N/A	9	Data not yet available[9]								
	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			
	Jordan						1	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								

	Jordan		0														
JO 3	# of active hospital-level AMS teams	Annually	0	N/A	N/A	3	3										
	Jordan		0														
JO 4	# of awareness-raising activities on AMR and rational use of antibiotics conducted	Quarterly	0	N/A	N/A	4	30	N/A		N/A		98					
	Jordan		0	N/A	N/A	4	30	N/A		N/A		98					
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					
	Jordan		0	N/A	N/A	0		*Female*	N/A	*Female*	N/A	*Female*	4,288	*Female*			
								Male		*Male*		*Male*	746	*Male*			
								Unknown		*Unknown*		*Unknown*	0	*Unknown*			
								Total		***Total***		***Total***	5,034	***Total***			
JO 6	# of awareness-raising activities to promote vaccine safety messages and reporting of ADRs conducted at the community level	Quarterly	0	N/A	N/A	0	N/A	N/A		N/A		N/A					
	Jordan		0	N/A	N/A	0	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					
	Jordan		0	N/A	N/A	3	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										
	Jordan			N/A	N/A	N/A											
MSC 1	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	0	122	170	188	144	45		21		22					
	Bangladesh		0	3	2	9	9	2		N/A		N/A					
	Burkina Faso		0	2	2	4	11	1		3		N/A					
	Cameroon		0	5	7	4	3	1		1		1					
	Côte d'Ivoire		0	35	67	76	29	11		7		11					
	DRC		0	6	20	8	8	3		0		1					

	Ethiopia		0	1	N/A	5	9	N/A	N/A	N/A		
	Jordan		0	0	2	N/A	N/A	N/A	N/A	N/A		
	Kenya		0	38	26	24	18	18	5	4		
	Mali		0	16	6	13	8	4	1	2		
	Mozambique		0	0	13	12	9	N/A	N/A	N/A		
	Nigeria		0	N/A	6	10	12	1	1	N/A		
	Senegal		0	2	5	8	14	1	1	1	N/A	3
	Tanzania		0	4	2	8	6	3	2	2		
	Uganda		0	9	7	7	8	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)				
	Bangladesh		29% (24/84)	29% (24/84)	29% (12/41)	20% (60/300)	24% (41/171)	N/A				
	Burkina Faso		18% (3/17)	22% (6/27)	33% (10/10)	29% (5/17)	33% (56/171)	37% (176/480)				
	Cameroon		50% (2/4)	39% (39/101)	52% (32/62)	27% (38/138)	49% (40/81)	30% (5/17)				
	Côte d'Ivoire		38% (21/55)	38% (42/110)	43% (70/163)	39% (151/382)	37% (145/392)	30% (79/260)				
	DRC		34%	36% (76/212)	32% (30/93)	35% (54/154)	39% (41/105)	36% (21/59)				
	Ethiopia		22%	17% (16/93)	N/A	22% (71/321)	14% (70/490)	N/A				
	Jordan		45% (5/11)	Data not reported	45% (5/11)	N/A	N/A	N/A				
	Kenya		66%	44% (562/1270)	51% (105/207)	45% (101/226)	45% (205/453)	49% (375/771)				
	Mali		15%	16% (20/124)	20% (22/109)	21% (82/394)	26% (103/392)	25% (62/247)				
	Mozambique		48% (11/23)	N/A	40% (4/10)	40% (36/92)	48% (93/195)	N/A				
	Nigeria		Data not reported	N/A	41% (17/41)	46% (44/95)	45% (25/56)	N/A				
	Senegal		58% (54/93)	58% (54/93)	34% (11/32)	39% (70/181)	38% (127/332)	N/A		N/A		N/A
	Tanzania		14% (3/21)	14% (3/21)	0% (0/0)	22% (14/63)	28% (12/42)	33% (13/39)				
	Uganda		Data not reported	N/A	61% (28/46)	43% (44/102)	35% (32/92)	N/A				
MSC 3	# of policies, legislation, regulations, and operational documents	Annually	0	17	13	12	19					

	related to NAP-AMR implementation developed or updated with MTaPS support											
	Bangladesh		0	0	2	1	N/A					
	Burkina Faso		0	0	1	1	0					
	Cameroon		0	1	1	0	1					
	Côte d'Ivoire		0	0	0	1	N/A					
	DRC		0	3	0	0	N/A					
	Kenya		0	3	3	1	3					
	Mali		0	8	N/A	1	1					
	Mozambique		0	N/A	2	N/A	3					
	Nigeria		0	N/A	0	1	1					
	Senegal		0	1	2	3	4	2				2
	Tanzania		0	1	2	1	3					
	Uganda		0	0	0	2	1					
MSC 4	# of multisectoral bodies that have developed a national monitoring framework with MTaPS support	Annually	0	1	1	8	3					
	Bangladesh		0	0	0	N/A	N/A					
	Burkina Faso		0	0	0	0	N/A					
	Cameroon		0	0	0	1	1					
	Côte d'Ivoire		0	0	0	1	N/A					
	DRC		0	0	0	1	N/A					
	Kenya		0	1	1	1	1					
	Mali		0	0	N/A	N/A	N/A					
	Mozambique		0	0	0	0	N/A					
	Nigeria		0	N/A	0	1	0					
	Senegal		0	0	1	2	1	N/A				N/A
	Tanzania		0	0	0	1	N/A					
	Uganda		0	0	0	0	N/A					
MSC 5	# of persons trained in AMR-related topics in leadership/management related to multisectoral engagement in AMR with MTaPS support	Quarterly	0	164	655	237	240	0	22	0		

	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***		
	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***		
	Cameroon		0	0	20	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***		
	Côte d'Ivoire		0	134	0	N/A	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***		
	DRC		0	0	463	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***		
	Ethiopia		0	150	N/A	22	144	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***		
	Kenya		0	N/A	N/A	22	0	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***		
	Mali		0	30	2	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***		
	Mozambique		0	0	45	67	67	*Female* *Male*	N/A	*Female* *Male*	N/A	*Female* *Male*	N/A	*Female* *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*		
								Male		*Male*	14	*Male*		*Male*		
								Unknown		*Unknown*	0	*Unknown*		*Unknown*		
								Total		***Total***	22	***Total***		***Total***		
	Senegal		0	0	0	0	N/A	*Female*	0	*Female*	0	*Female*	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*		
								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*		
								Male		*Male*		*Male*		*Male*		
								Unknown		***Unknown***		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
MSC 6	# of e-Learning courses or m-mentoring platforms related to AMR developed or adapted with MTaPS support	Annually	0	2	25	26	50									
	Bangladesh		0	0	0	0	1									
	Burkina Faso		0	0	1	0	N/A									
	Cameroon		0	0	20	20	46									
	Côte d'Ivoire		0	1	2	6	1									
	DRC		0	0	0	N/A	N/A									
	Ethiopia		0	N/A	N/A	N/A	2									
	Kenya		0	0	0	0	N/A									
	Mali		0	1	2	N/A	N/A									
	Mozambique		0	N/A	0	N/A	N/A									
	Nigeria		0	N/A	0	N/A	N/A									
	Senegal		0	0	0	0	N/A	N/A								N/A
	Tanzania		0	0	0	N/A	N/A									

	Uganda		0	0	0	0	N/A									
MSC 7	# of data collection and analysis mechanisms for tracking AMR-related indicators developed or strengthened with MTaPS support	Annually	0	0	2	5	5									
	Bangladesh		0	0	0	N/A	N/A									
	Burkina Faso		0	0	0	0	N/A									
	Cameroon		0	0	0	1	1									
	Côte d'Ivoire		0	0	0	0	N/A									
	DRC		0	0	1	0	N/A									
	Kenya		0	0	0	1	1									
	Mozambique		0	N/A	1	2	1									
	Nigeria		0	N/A	0	0	N/A									
	Senegal		0	0	0	0	2	N/A								N/A
	Tanzania		0	0	0	1	N/A									
	Uganda		0	0	0	0	N/A									
IP 1	# of updated policies, pieces of legislation, regulations, or operational documents for improving IPC	Annually	0	9	3	7	13									
	Bangladesh		0	0	0	N/A	5									
	Burkina Faso		0	0	0	N/A	N/A									
	Cameroon		0	0	1	1	N/A									
	Côte d'Ivoire		0	7	0	0	N/A									
	DRC		0	0	0	N/A	N/A									
	Kenya		0	0	3	2	3									
	Mali		0	1	N/A	1	N/A									
	Mozambique		0	N/A	1	N/A	N/A									
	Nigeria		0	N/A	1	1	2									
	Senegal		0	0	0	1	3	N/A								N/A
	Tanzania		0	1	0	1	N/A									
	Uganda		0	0	0	1	N/A									
IP 2	# of persons trained in IPC with MTaPS support	Quarterly	0	1,199	7,477	3,886	3,717	252		581		563				
	Bangladesh		0	0	95	264	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		

								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Cameroon		0	86	88	N/A	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Côte d'Ivoire		0	0	131	158	N/A	*Female*	18	*Female*	5	*Female*	42	*Female*		
								Male	88	*Male*	10	*Male*	70	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		
								Total	106	***Total***	15	***Total***	112	***Total***		
	DRC		0	0	94	N/A	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Ethiopia[16]		0	0	N/A	28	394	*Female*	13	*Female*	N/A	*Female*	N/A	*Female*		
								Male	12	*Male*		*Male*		*Male*		
								Unknown	0	*Unknown*		*Unknown*		*Unknown*		
								Total	25	***Total***		***Total***		***Total***		
	Kenya		0	642	5,230	742	926	*Female*	N/A	*Female*	198	*Female*	35	*Female*		
								Male		*Male*	97	*Male*	12	*Male*		
								Unknown		*Unknown*	0	*Unknown*	0	*Unknown*		
								Total		***Total***	295	***Total***	47	***Total***		
	Mali		0	N/A	21	29	39	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Mozambique		0	0	0	57	73	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Nigeria		0	N/A	15	51	1,478	*Female*	N/A	*Female*	N/A	*Female*	293	*Female*		

[16] Ethiopia PY6Q1 trainings are continued activities from the PY5 work plan. Ethiopia implementation concluded in November 2023.

								Male		*Male*		*Male*	86	*Male*		
								Unknown		*Unknown*		*Unknown*	0	*Unknown*		
								Total		***Total***		***Total***	379	***Total***		
	Senegal		0	0	22	717	397	*Female*	11	*Female*	150	*Female*	19	*Female*	N/A	317
								Male	10	*Male*	121	*Male*	6	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		
								Total	21	***Total***	271	***Total***	25	***Total***		
	Tanzania		0	471	17	117	108	*Female*	46	*Female*	0	*Female*	N/A	*Female*		
								Male	54	*Male*	0	*Male*		*Male*		
								Unknown	0	*Unknown*	0	*Unknown*		*Unknown*		
								Total	100	***Total***	0	***Total***		***Total***		
	Uganda		0	0	1,247	1,770	302	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
IP 3	# and % of MTaPS-supported facilities that are using a standardized tool(s) for monitoring IPC and informing 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)				
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	100% (4/4)	100% (9/9)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		
								Health centers		*Health centers*		*Health centers*		*Health centers*		
								Others		*Others*		*Others*		*Others*		
								Total		***Total***		***Total***		***Total***		
	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*		
								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% (12/12)	***Total***	100% (13/13)	***Total***	100% (13/13)	***Total***		
	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*		

								Animal health centers	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*		
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*		
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***		
	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*		
								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% (12/12)	***Total***	58% (7/12)	***Total***	58% (7/12)	***Total***		
	Ethiopia		0% (0/0)	50% (15/30)	N/A	100% (5/5)	100% (8/8)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		
								Health centers		*Health centers*		*Health centers*		*Health centers*		
								Others		*Others*		*Others*		*Others*		
								Total		***Total***		***Total***		***Total***		
	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*		
								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% (4/4)	***Total***	67% (4/6)	***Total***	100% (6/6)	***Total***		
	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*		
								Health centers	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		
								Total	100% (16/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***		
	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*		
								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*		

								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% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***		
	Senegal		100% (3/3)	100% (3/3)	100% (8/8)	100% (13/13)	77% (10/13)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	*Hospitals*	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*		
								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% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		
	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*		
								Health centers		*Health centers*		*Health centers*		*Health centers*		
								Others		*Others*		*Others*		*Others*		
								Total		***Total***		***Total***		***Total***		
IP 4	# of countries with improved performance in core IPC components at the national level from baseline to follow-up	Annually	0%	40%	73%	83%	100%									
			(0/12)	(4/10)	(8/11)	(10/12)	(11/11)									
	Bangladesh		No	No	No	No	Yes									
	Cameroon		No	No	Yes	Yes	Yes									
	Cote d'Ivoire		No	Yes	Yes	Yes	N/A									
	DRC		No	No	No	Yes	Yes									
	Ethiopia		No	Yes	N/A	Yes	Yes									
	Kenya		No	Yes	Yes	Yes	Yes									
	Mali		No	No	Yes	Yes	Yes									
	Mozambique		No	N/A	Yes	Yes	Yes									

	Nigeria		No	N/A	Yes	No	Yes													
	Senegal		No	Yes	Yes	Yes	Yes	N/A												N/A
	Tanzania		No	No	Yes	Yes	Yes													
	Uganda		No	No	No	Yes	Yes													
IP 5	# and % of MTaPS-supported facilities implementing CQI to improve IPC	Quarterly	40% (23/57)	83% (39/47)	99% (106/107)	88% (125/141)	42% (134/315)	98% (74/75)			97% (76/78)			100% (78/78)						
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	50% (2/4)	100% (9/9)	*Hospitals*	N/A		*Hospitals*	N/A		*Hospitals*	N/A		*Hospitals*			
								Health centers			*Health centers*			*Health centers*			*Health centers*			
								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*			
								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% (12/12)		***Total***	100% (13/13)		***Total***	100% (13/13)		***Total***			
	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*			
								Animal health centers	0% (0/0)		*Animal health centers*	0% (0/0)		*Animal health centers*	0% (0/0)		*Animal health centers*			
								Others	100% (8/8)		*Others*	100% (8/8)		*Others*	100% (8/8)		*Others*			
								Total	100% (20/20)		***Total***	100% (20/20)		***Total***	100% (20/20)		***Total***			
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	N/A		*Hospitals*	N/A		*Hospitals*	N/A		*Hospitals*			
								Health centers			*Health centers*			*Health centers*			*Health centers*			
								Others			*Others*			*Others*			*Others*			
								Total			***Total***			***Total***			***Total***			
	Ethiopia		0% (0/0)	70%	N/A	0% (0/5)	100% (8/8)	*Hospitals*	N/A		*Hospitals*	N/A		*Hospitals*	N/A		*Hospitals*			
								Health centers			*Health centers*			*Health centers*			*Health centers*			
								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*		
								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% (4/4)	***Total***	67% (4/6)	***Total***	100% (6/6)	***Total***		
	Mali		0% (0/5)	0% (0/5)	94% (15/16)	100% (16/16)	100% (16/16)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*		
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		
								Total	94% (15/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***		
	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*		
								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*		
								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% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***		
	Senegal		0% (0/3)	0% (0/3)	100% (8/8)	92% (12/13)	54% (7/13)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	*Hospitals*	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*		
								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% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		
	Uganda		0% (0/7)	100% (7/7)		100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		

					100% (13/13)			*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)					
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	100% (6/6)	100% (9/9)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*			
								Health centers		*Health centers*		*Health centers*		*Health centers*			
								Others		*Others*		*Others*		*Others*			
								Total		***Total***		***Total***		***Total***			
	Cameroon		0% (0/0)	83% (5/6)	100% (12/12)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (13/13)	*Hospitals*	100% (13/13)	*Hospitals*			
								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% (12/12)	***Total***	100% (13/13)	***Total***	100% (13/13)	***Total***			
	Côte d'Ivoire		100% (4/4)	100% (4/4)	100% (12/12)	100% (22/22)	100% (20/20)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*			
								Animal health centers	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*	0% (0/0)	*Animal health centers*			
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*			
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***			
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*			
								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% (12/12)	***Total***	100% (12/12)	***Total***	100% (12/12)	***Total***			
	Ethiopia		0% (0/0)	100%	N/A	100% (5/5)	100% (8/8)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*			
								Health centers		*Health centers*		*Health centers*		*Health centers*			
								Others		*Others*		*Others*		*Others*			

								Total		***Total***		***Total***		***Total***			
	Kenya		0% (0/16)	100% (16/16)	92% (18/20)	100% (20/20)	100% (20/20)	*Hospitals*	100% (4/4)	*Hospitals*	67% (4/6)	*Hospitals*	100% (6/6)	*Hospitals*		
								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% (4/4)	***Total***	67% (4/6)	***Total***	100% (6/6)	***Total***		
	Mali		0% (0/5)	0% (0/5)	75% (12/16)	100% (16/16)	100% (16/16)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*		
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*		
								Total	94% (15/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***		
	Mozambique		43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	100% (6/6)	*Hospitals*	N/A	*Hospital*	N/A	*Hospital*	N/A	*Hospital*		
								Health centers		*Health centers*		*Health centers*		*Health centers*		
								Others		*Others*		*Others*		*Others*		
								Total		***Total***		***Total***		***Total***		
	Nigeria		0% (0/3)	N/A	0% (0/3)	86% (6/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*		
								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% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***		
	Senegal		100% (3/3)	100% (3/3)	100% (8/8)	92% (12/13)	77% (10/13)	*Hospitals*	100% (6/6)	*Hospitals*	100% (6/6)	*Hospitals*	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		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*		
								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% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		
	Uganda			100% (7/7)		100% (13/13)	100% (7/7)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		

			100% (7/7)		100% (13/13)			*Health centers*		*Health centers*		*Health centers*		*Health centers*					
								Others		*Others*		*Others*		*Others*					
								Total		***Total***		***Total***		***Total***					
IP 7	# and % of MTaPS-supported facilities with improved HH compliance	Annually	0	100% (36/36)	85% (88/104)	73% (103/141)	82% (112/137)												
	Bangladesh		0	N/A	100% (2/2)	100% (4/4)	22% (2/9)	*Hospitals*											
								Total											
	Cameroon		0	N/A	100% (12/12)	92% (11/12)	42% (5/12)	*Hospitals*											
								Total											
	Côte d'Ivoire		0	100% (4/4)	90% (9/12)	45% (10/22)	90% (18/20)	*Hospitals*											
								Others											
								Total											
	DRC		0	N/A	57% (4/7)	100% (12/12)	100% (12/12)	*Hospitals*											
								Total											
	Ethiopia		0	N/A	N/A	0% (0/5)	62% (5/8)	*Hospitals*											
								Total											
	Kenya		0	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*											
								Health centers											
								Total											
	Mali		0	N/A	94% (15/16)	75% (12/16)	86% (14/16)	*Hospital*											
								Health centers											
								Total											
	Mozambique		0	N/A	0% (0/7)	43% (3/7)	100% (3/3)	*Hospitals*											
								Total											
	Nigeria		0	N/A	0% (1/3)	14% (1/7)	100% (7/7)	*Hospitals*											
								Total											
	Senegal		0	100% (3/3)	100% (8/8)	54% (7/13)	83% (10/13)	*Hospitals*	100% (3/3)										
								Health Centers	0% (0/0)										100% (3/3)
								Total	100% (3/3)										
	Tanzania		0	100% (6/6)	100% (10/10)	100% (10/10)	100% (10/10)	*Hospitals*											
								Total											
	Uganda		0	100% (7/7)		100% (13/13)	86% (6/7)	*Hospitals*											

					100% (7/7)			***Total***		
IP 8	# and % of MTaPS-supported facilities with improved performance in core IPC components	Annually	0	35% (26/73)	75% (78/104)	80% (113/141)	89% (122/137)			
	Bangladesh		0	50% (1/2)	100% (2/2)	100% (4/4)	100% (9/9)	*Hospitals*		
								Total		
	Cameroon		0	N/A	100% (12/12)	92% (11/12)	92% (11/12)	*Hospitals*		
								Total		
	Côte d'Ivoire		0	N/A	80% (8/12)	41% (9/22)	90% (18/20)	*Hospitals*		
								Others		
								Total		
	DRC		0	N/A	0% (0/7)	100% (12/12)	100% (12/12)	*Hospitals*		
								Total		
	Kenya		0	100% (16/16)	100% (20/20)	100% (20/20)	100% (20/20)	*Hospitals*		
								Health centers		
								Total		
	Mali		0	N/A	94% (15/16)	81% (13/16)	87% (14/16)	*Hospital*		
								Health centers		
								Total		
	Mozambique		0	N/A	100% (7/7)	100% (7/7)	100% (3/3)	*Hospitals*		
								Total		
	Nigeria		0	N/A	0% (0/3)	14% (1/7)	100% (7/7)	*Hospitals*		
								Total		
	Senegal		0	100% (3/3)	100% (8/8)	100% (13/13)	54% (7/13)	*Hospitals*	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*		
								Total		
	Uganda		0	N/A	0% (0/7)	100% (13/13)	86% (6/7)	*Hospitals*		
								Total		
AS 1	# of policies, pieces of legislation, regulations, or operational documents related to	Annually	0	5	12	18	20			

	AMS developed or updated with MTaPS support																	
	Bangladesh		0	0	0	1	N/A											
	Burkina Faso		0	0	2	2	N/A											
	Cameroon		0	0	0	0	1											
	Côte d'Ivoire		0	1	0	0	N/A											
	DRC		0	1	3	1	N/A											
	Ethiopia		0	N/A	N/A	2	2											
	Kenya		0	1	3	3	5											
	Mali		0	1	N/A	1	N/A											
	Mozambique		0	N/A	1	3	6											
	Nigeria		0	N/A	0	1	1											
	Senegal		0	0	1	1	1	12										12
	Tanzania		0	1	2	1	3											
	Uganda		0	0	0	2	1											
AS 2	# and % of MTaPS-supported facilities' MTC/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework	Quarterly	10% (4/39)	81% (25/31)	60% (74/123)	72% (112/155)	86% (131/153)	84% (72/85)		94% (82/87)		99% (76/77)						
	Bangladesh		0% (0/0)	0% (0/0)	0% (0/2)	50% (2/4)	100% (9/9)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*				
								Health centers		*Health centers*		*Health centers*		*Health centers*				
								Others		*Others*		*Others*		*Others*				
								Total		***Total***		***Total***		***Total***				
	Burkina Faso		0% (0/0)	0% (0/0)	25% (3/12)	0% (0/10)	60% (6/10)	*Hospitals*	30% (3/10)	*Hospitals*	100% (10/10)	*Hospitals*	N/A	*Hospitals*				
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		*Health centers*				
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*		*Others*				
								Total	30% (3/10)	***Total***	100% (10/10)	***Total***		***Total***				
	Cameroon		0% (0/0)	0% (0/0)	92% (11/12)	100% (12/12)	100% (11/11)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*				
								Health centers		*Health centers*		*Health centers*		*Health centers*				
								Others		*Others*		*Others*		*Others*				

								Total		***Total***		***Total***		***Total***			
	Côte d'Ivoire		0% (0/0)	0% (0/0)	75% (9/12)	91% (20/22)	85% (17/20)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*			
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*			
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*			
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***			
	DRC		0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*			
								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% (12/12)	***Total***	100% (12/12)	***Total***	100% (12/12)	***Total***			
	Ethiopia		0% (0/0)	N/A	N/A	0% (0/5)	100% (8/8)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*			
								Health centers		*Health centers*		*Health centers*		*Health centers*			
								Others		*Others*		*Others*		*Others*			
								Total		***Total***		***Total***		***Total***			
	Kenya		6% (1/16)	100% (18/18)	83% (20/24)	100% (21/21)	92% (22/24)	*Hospitals*	100% (6/6)	*Hospitals*	75% (6/8)	*Hospitals*	100% (8/8)	*Hospitals*			
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*			
								Pharmacy	0% (0/0)	*Others*	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*			
								Total	100% (6/6)	***Total***	75% (6/8)	***Total***	100% (8/8)	***Total***			
	Mali		0% (0/0)	0% (0/0)	56% (9/16)	75% (12/16)	100% (16/16)	*Hospital*	89% (8/9)	*Hospitals*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*			
								Health centers	86% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*			
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*			
								Total	87% (14/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***			
	Mozambique		0% (0/7)	Data not reported	0% (0/7)	43% (3/7)	100% (6/6)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*			
								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)	100% (7/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*			
								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% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***		
	Senegal[17]		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)
								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*		
								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% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		
	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*		
								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				
	Bangladesh		0	0	0	420	260	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Burkina Faso		0	0	97	86		*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Cameroon		0	0	222	17	N/A	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Côte d'Ivoire		0	0	237	104	36	*Female*	7	*Female*	1	*Female*	22	*Female*		

[17] Senegal PY6 AMS activities are a continuation of the PY5 work plan.

								Male	55	*Male*	11	*Male*	52	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		
								Total	62	***Total***	12	***Total***	74	***Total***		
	DRC		0	0	274	91	N/A	*Female*	0	*Female*	0	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Ethiopia		0	0	N/A	180	490	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Kenya		0	165	1,333	869	895	*Female*	325	*Female*	15	*Female*	54	*Female*		
								Male	436	*Male*	11	*Male*	37	*Male*		
								Unknown	0	*Unknown*	0	*Unknown*	0	*Unknown*		
								Total	761	***Total***	26	***Total***	91	***Total***		
	Mali		0	0	136	49	6	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Mozambique		0	0	0	34	72	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Nigeria		0	N/A	18	108	50	*Female*	N/A	*Female*	N/A	*Female*	N/A	*Female*		
								Male		*Male*		*Male*		*Male*		
								Unknown		*Unknown*		*Unknown*		*Unknown*		
								Total		***Total***		***Total***		***Total***		
	Senegal[17]		0	0	0	0	61	*Female*	8	*Female*	15	*Female*	N/A	*Female*	N/A	49
								Male	15	*Male*	11	*Male*		*Male*		
								Unknown	0	*Unknown*	0	*Unknown*		*Unknown*		
								Total	23	***Total***	26	***Total***		***Total***		
	Tanzania		0	201	0	N/A	24	*Female*	53	*Female*	0	*Female*	N/A	*Female*		
								Male	63	*Male*	0	*Male*		*Male*		
								Unknown	0	*Unknown*	0	*Unknown*		*Unknown*		

								Total	116	***Total***	0	***Total***		***Total***		
	Uganda		0	70	2,513	1,776	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***	N/A	*Female* *Male* *Unknown* ***Total***		
AS 4	# and % of MTaPS-supported facilities implementing CQI to improve AMS	Quarterly	49% (24/49)	75% (41/55)	57% (71/124)	68% (106/155)	87% (137/154)	87% (74/85)		89% (78/87)		91% (70/77)				
	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***		
	Burkina Faso		0% (0/0)	100% (5/5)	25% (3/12)	0% (0/10)	100% (10/10)	*Hospitals*	30% (3/10)	*Hospitals*	100% (10/10)	*Hospitals*		*Hospitals*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	N/A	*Health centers*		
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*		*Others*		
								Total	30% (3/10)	***Total***	100% (10/10)	***Total***		***Total***		
	Cameroon		0% (0/0)	0% (0/6)	92% (11/12)	100% (12/12)	100% (12/12)	*Hospitals* *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***		
	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*		
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*		
								Others	100% (8/8)	*Others*	100% (8/8)	*Others*	100% (8/8)	*Others*		
								Total	100% (20/20)	***Total***	100% (20/20)	***Total***	100% (20/20)	***Total***		
	DRC		0% (0/0)	100% (3/3)	100% (7/7)	100% (12/12)	100% (12/12)	*Hospitals*	100% (12/12)	*Hospitals*	50% (6/12)	*Hospitals*	50% (6/12)	*Hospitals*		
								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% (12/12)	***Total***	50% (6/12)	***Total***	50% (6/12)	***Total***		
	Ethiopia		3% (1/30)	13% (4/30)	N/A	0% (0/5)	100% (8/8)	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*	N/A	*Hospitals*		

								Health centers		*Health centers*		*Health centers*		*Health centers*			
								Others		*Others*		*Others*		*Others*			
								Total		***Total***		***Total***		***Total***			
	Kenya		100% (18/18)	100% (18/18)	92% (22/24)	91% (21/23)	92% (22/24)	*Hospitals*	100% (6/6)	*Hospitals*	75% (6/8)	*Hospitals*	100% (8/8)	*Hospitals*			
								Health centers	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*	0% (0/0)	*Health centers*			
								Pharmacy	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*	0% (0/0)	*Pharmacy*			
								Total	100% (6/6)	***Total***	75% (6/8)	***Total***	100% (8/8)	***Total***			
	Mali		0% (0/5)	0% (0/5)	13% (2/16)	75% (12/16)	100% (16/16)	*Hospital*	89% (8/9)	*Hospitals*	100% (9/9)	*Hospital*	100% (9/9)	*Hospital*			
								Health centers	85% (6/7)	*Health centers*	100% (7/7)	*Health centers*	100% (7/7)	*Health centers*			
								Others	0% (0/0)	*Others*	0% (0/0)	*Others*	0% (0/0)	*Others*			
								Total	87% (14/16)	***Total***	100% (16/16)	***Total***	100% (16/16)	***Total***			
	Mozambique		0% (0/7)	Data not reported	57% (4/7)	100% (7/7)	100% (6/6)	*Hospital*	N/A	*Hospital*	N/A	*Hospital*	N/A	*Hospital*			
								Health centers		*Health centers*		*Health centers*		*Health centers*			
								Others		*Others*		*Others*		*Others*			
								Total		***Total***		***Total***		***Total***			
	Nigeria		0% (0/3)	N/A	0% (0/3)	14% (1/7)	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*	100% (7/7)	*Hospitals*			
								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% (7/7)	***Total***	100% (7/7)	***Total***	100% (7/7)	***Total***			
	Senegal[17]		0% (0/3)	0% (0/3)	0% (0/8)	0% (0/14)	8% (1/13)	*Hospitals*	50% (2/4)	*Hospitals*	75% (3/4)	*Hospitals*	75% (3/4)	*Hospitals*	N/A	75% (3/4)	
								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	50% (2/4)	***Total***	75% (3/4)	***Total***	75% (3/4)	***Total***			
	Tanzania		0% (0/6)	100% (6/6)	20% (2/10)	60% (6/10)	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*	100% (10/10)	*Hospitals*			
								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% (10/10)	***Total***	100% (10/10)	***Total***	100% (10/10)	***Total***		
	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***		
AS 5	#/% of MTaPS-supported facilities that have documented evidence of improvement in antimicrobial medicine prescribing or use	Annually		49% (27/55)	29% (35/120)	36% (57/155)	65% (88/135)									
	Bangladesh		0%	N/A	0% (0/2)	50% (2/4)	0% (0/9)	*Hospitals* ***Total***								
	Burkina Faso		0%	0% (0/5)	0% (0/12)	0% (0/10)	0% (0/10)	*Hospitals* ***Total***								
	Cameroon		0%	N/A	0% (0/12)	92% (11/12)	92% (11/12)	*Hospitals* ***Total***								
	Côte d'Ivoire		0%	0% (0/2)	0% (0/12)	14% (3/22)	75% (15/20)	*Hospitals* *Health centers* ***Total***								
	DRC		0%	100% (3/3)	0% (0/7)	58% (7/12)	100% (12/12)	*Hospitals* ***Total***								
	Kenya		0%	100% (18/18)	92% (22/24)	91% (21/23)	92% (22/24)	*Hospitals* *Health centers* *Pharmacies* ***Total***								
	Mali		0%	N/A	13% (2/16)	0% (0/16)	N/A	*Hospital* *Health centers* ***Total***								
	Mozambique		0%	N/A	71% (5/7)	28% (2/7)	100% (3/3)	*Hospitals* ***Total***								
	Nigeria		0%	N/A	0% (0/3)	0% (0/7)	57% (4/7)	*Hospitals* ***Total***								
	Senegal		0%	N/A	0% (0/8)	0% (14/14)	0% (0/13)	*Hospitals* ***Total***	N/A						N/A	

	Tanzania		0%	100% (6/6)	60% (6/10)	70% (7/10)	100% (10/10)	*Hospitals*				
								Total				
	Uganda		0%	0% (0/7)	0% (0/7)	31% (4/13)	86% (6/7)	*Hospitals*				
								Total				
DRC 1	# of quality-assured MNCH, RH/FP, and TB medicine products registered with MTaPS support	Semiannually	0	0	29	26	N/A	N/A				
DRC 2	# of community-based organization (CBO) members that have been capacitated to participate in oversight of pharmaceutical management for MNCH commodities with MTaPS support	Annually	0	0	350	344	323					
DRC 3	# of HFs that are implementing the post-training action plan	Annually	0	0	0	50	22					
DRC 4	% of facilities implementing appropriate storage of oxytocin	Quarterly	0	N/A	64% (46/72)	75% (54/72)	83% (60/72)	N/A	N/A	N/A		
DRC 5	# of Provincial Health Divisions and/or Provincial Health Inspectorates using the updated directory of registered medicines	Semiannually	0	0	7	4	8	4				
DRC 8	# of HZs involved in provincial quantification exercises with MTaPS support	Semiannually	0	0	19	10	N/A	N/A				
DRC 9	# of MNCH treatment protocols or job aids disseminated to HFs with MTaPS support	Semiannually	0	0	0	0	N/A	N/A				
DRC 10	# of contraceptive kits (reduced FP package) distributed to CCSs in MTaPS-supported HZs	Semiannually	0	0	0	0	0	N/A				
DRC 11	% of CCSs reporting contraceptive data to HFs in MTaPS-supported HZs	Semiannually	0%	0	0% (0/12)	0%	100% (152/152)	100% (151/151)				
DRC 12	# of mini awareness-raising campaigns for	Semiannually	0	0	0	2	N/A	N/A				

	active detection of TB and adherence to TB treatment supported by MTaPS											
DRC 13	# of sensitization meetings to explain the role and scope of National Supply Chain Management Professionals Association	Annually	0	N/A	N/A	N/A	N/A					
DRC 14	# of people starting e-Learning courses with MTaPS support	Quarterly	0	N/A	N/A	N/A	N/A	N/A	0	N/A		
DRC 15	Number of health products for which a quantification process is completed with MTaPS support	Semiannually	0	N/A	N/A	N/A	N/A	0				
DRC 16	# of medicines TWG meetings organized without financial/logistical MTaPS support	Quarterly	0	N/A	N/A	N/A	N/A	N/A	5	2		
BG 1	% of procurement packages of DGFP and DGHS that are on schedule	Annually	0	0	82%	50%	50% (1/2)					
BG 4	% of target HFs that keep complete TB patient information (as per national standards)	Annually	0	N/A	44%	71% (64/90)	66% (58/88)					
BG 8	# of laws, policies, regulations, action plans, or standards formally proposed, adopted, or implemented as supported by USG assistance	Annually	0	N/A	N/A	N/A	4					
BG 9	# of program approaches/initiatives adopted/changed because of evidence-based recommendations and/or advocacy by USAID-supported activities	Annually	0	N/A	N/A	N/A	3					
BG 10	# and % of district hospitals using eAMS	Annually	0	N/A	N/A	N/A	75% (46/61)					

BG 12	# of health commodities tracked through USAID-supported eLMIS	Annually	0	N/A	N/A	N/A	N/A					
BG 13[18]	# of organizations whose members/staff were trained and/or mentored through USAID support	Semiannually	0	N/A	N/A	N/A	64	12				
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		
IN 4.3.1a	# of analytical products developed and used to inform policies or guidance based on evidence	Annually	0	N/A	N/A	1	5					
IN 4.3.1b	% of TB financing expected from domestic sources	Annually	0	N/A	N/A	N/A	22%					
IN 4.3.3b	# of health personnel receiving capacity development support to optimize the management of health services	Annually	0	N/A	N/A	242	60					
IP.MP.1	# of facilities receiving MTaPS support to strengthen IPC and/or WASH practices for monkeypox	Quarterly	0	N/A	N/A	N/A	177	N/A	N/A	N/A		
	DRC[19]		0	N/A	N/A	N/A	177	N/A	N/A	N/A		
IP.MP.2	# of people trained to prevent, detect, and/or respond to monkeypox outbreak with MTaPS support	Quarterly	0	N/A	N/A	N/A	319	N/A	N/A	N/A		
	DRC[19]		0	N/A	N/A	N/A	319	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		
	DRC[19]		0	N/A	N/A	N/A	6	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		
	DRC[19]		0	N/A	N/A	N/A	10	N/A	N/A	N/A		

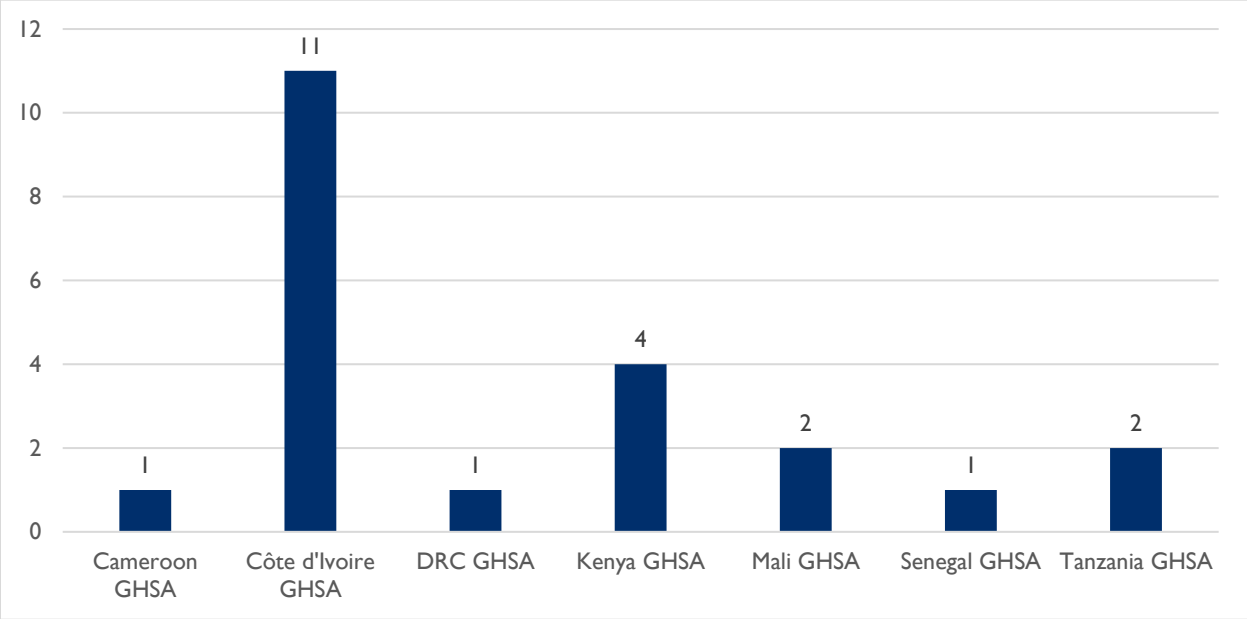
[18] Quarter 1–2 data was not reported in the Quarter 2 report due to delays in data sources. Data for Quarter 1–2 have now been collected and is included in this report.
[19] DRC monkeypox activities concluded at the end of PY5.

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		
	DRC[19]		0	N/A	N/A	N/A	6	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		
	DRC[19]		0	N/A	N/A	N/A	17	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 monkeypox	Semiannually	0	N/A	N/A	N/A	47	N/A				
	DRC[19]		0	N/A	N/A	N/A	47	N/A				
AB HL5	# of analytical products and services completed and used to advance health development goals in Asia	Annually	0	N/A	8	3	1					
	Asia Bureau		0	N/A	8	3	1					
AB HL7	# of individuals receiving capacity development support to advance health development goals in Asia	Annually	0	N/A	401	173	134					
	Asia Bureau		0	N/A	401	173	134					
AB HL8	# of institutions and/or platforms receiving capacity strengthening support to advance health development goals in Asia	Annually	0	N/A	30	15	2					
	Asia Bureau		0	N/A	30	15	2					

ANNEX 2. GLOBAL HEALTH SECURITY AGENDA—QUARTER PROGRESS FOR FY24Q3

SUMMARY OF ACTIVITIES FOR THIS QUARTER (FY24Q3)

SELECTED MTAPS GHSA INDICATOR PROGRESS



Annex figure 1. MSC1. Number of AMR-related in-country meetings or activities conducted with multisectoral participation in PY6Q3

Bangladesh, Ethiopia, Mozambique, and Uganda concluded support for GHSA activities. Nigeria did not have planned activities toward MSC1 in Quarter 3.

Annex table 2.1. IP3. Percentage of MTaPS-supported facilities that are using standardized tools for monitoring IPC and informing programmatic improvement

	Country											
Quarter	Bangladesh[1]	Cameroon[2]	Côte d'Ivoire[3]	DRC[4]	Ethiopia[5]	Kenya[6]	Mali	Mozambique[7]	Nigeria	Senegal[8]	Tanzania	Uganda[9]
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	N/A	100% (7/7)	61% (8/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	100% (12/12)	100% (20/20)	100% (12/12)	N/A	100% (4/4)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q2	N/A	100% (13/13)	100% (20/20)	58% (7/12)	N/A	67% (4/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
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

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon added support for one facility at the request of the facility director.

[3] In PY5Q4, CHR of San Pedro was not functional because the hospital IPC committee members were relocated. The facility IPC committee became functional in the next quarter.
[4] In PY6 Quarters 2 and 3, given budget MTaPS monitors 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 just began, improvement can be seen in Quarter 3.
[7] The Mozambique GHSA portfolio completed implementation in June 2023; thus, no data are reported for PY6.
[8] In PY5Q3, data were not collected at facilities and values could not be reported due to time constraints. Activities were focused on national IPC implementation. In PY5Q4, data could not be collected from five facilities. This data collection resumed in subsequent quarters.
[9] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex table 2.2. IP5. Percentage of MTaPS-supported facilities implementing CQI to improve IPC

	Country											
Quarter	Bangladesh[1]	Cameroon[2]	Côte d'Ivoire[3]	DRC[4]	Ethiopia[5]	Kenya[6]	Mali[7]	Mozambique[8]	Nigeria	Senegal[9]	Tanzania	Uganda[10]
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	100% (12/12)	0% (0/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	N/A	100% (7/7)	61% (8/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	100% (12/12)	100% (20/20)	N/A	N/A	100% (4/4)	94% (15/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q2	N/A	100% (13/13)	100% (20/20)	N/A	N/A	67% (4/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
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

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon added support for one facility at the request of the facility director.
[3] In PY5Q4, CQI assessments and meetings were not conducted at any facilities; these resumed in subsequent quarters.
[4] No CQI activities were planned in PY6 Quarters 1, 2, or 3.
[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 just began, improvement can be seen in Quarter 3.
[7] In PY6Q1 Koutiala health center did not implement CQI activities, due to competing priorities. MTaPS continued to sensitize for CQI plan implementation; in 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 PY5Q3, data were not collected at facilities and values could not be reported. Activities were focused on national IPC implementation. In PY5Q4, data could not be collected from five facilities. Data collection and activities have since resumed in PY6, targeting six facilities.
[10] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex table 2.3. IP6. Percentage of MTaPS-supported facilities with functional IPC committees

	Country											
Quarter	Bangladesh[1]	Cameroon[2]	Côte d'Ivoire[3]	DRC	Ethiopia[4]	Kenya[5]	Mali[6]	Mozambique[7]	Nigeria	Senegal[8]	Tanzania	Uganda[9]
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	N/A	100% (7/7)	61% (8/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	100% (12/12)	100% (20/20)	100% (12/12)	N/A	100% (4/4)	94% (15/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
PY6Q2	N/A	100% (13/13)	100% (20/20)	100% (12/12)	N/A	67% (4/6)	100% (16/16)	N/A	100% (7/7)	100% (6/6)	100% (10/10)	N/A
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

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY6Q2, Cameroon added support for one facility at the request of the facility director.
[3] In PY5Q4, CHR of San Pedro was not functional because the hospital IPC committee members were relocated. Activities resumed in PY6.
[4] 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 just began, improvement can be seen in Quarter 3.
[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 PY5Q3, data were not collected at facilities and values could not be reported. Activities were focused on national IPC implementation. In PY5Q4, data could not be collected from five facilities. Data collection and activities have since resumed in PY6.
[9] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex table 2.4. AS2. Percentage of MTaPS-supported facilities' medicines and therapeutics/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework

	Country												
Quarter	Bangladesh[1]	Burkina Faso[2]	Cameroon[3]	Côte d'Ivoire[4]	DRC	Ethiopia[5]	Kenya[6]	Mali[7]	Mozambique[8]	Nigeria	Senegal[9]	Tanzania	Uganda[10]
PY5Q3	100% (9/9)	60% (6/10)	92% (11/12)	95% (19/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	100% (3/3)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	40% (4/10)	92% (11/12)	85% (17/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	N/A	100% (7/7)	0% (0/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	30% (3/10)	N/A	100% (20/20)	100% (12/12)	N/A	100% (6/6)	87% (14/16)	N/A	100% (7/7)	0% (0/4)	100% (10/10)	N/A
PY6Q2	N/A	100% (10/10)	N/A	100% (20/20)	100% (12/12)	N/A	75% (6/8)	100% (16/16)	N/A	100% (7/7)	25% (1/4)	100% (10/10)	N/A
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

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] In PY5Q3, four facilities did not receive site visits to document achievements. In PY5Q4, MTaPS only had budget to implement CQI in four facilities. In PY6Q1, MTaPS provided supportive supervision to three facilities; in Quarter 2, all facilities received visits and implemented activities as planned. GHSA activities completed in March 2024 for PY6, thus no Quarter 3 data.

[3] In PY5Q3, activity implementation was not optimal in Mbalmayo District Hospital because the trained personnel were posted to different HFs. PY5Q4 Mbalmayo Hospital became nonfunctional, as the hospital director DTC members were transferred to other facilities; thus, the facility was dropped. In PY6, no facility-level AMS activities are planned.
[4] In PY5Q3, San Pedro's AMS committee was not functional. San Pedro received a new CHR. This has led to a suspension of the AMS committee's activities. PY5Q4, data reports were not obtained for three facilities. In PY6, activities and data collection resumed as planned.
[5] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[6] In PY5 Quarters 3 and 4, 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. MTaPS engagement at the facilities has just begun, with no data to be reported until Quarter 3.
[7] In PY6Q1, Point G hospital and the Gavardo health center did not implement AMS activities due to competing priorities. MTaPS and the DPM continue to encourage CQI implementation to improve AMS, and in Quarter 2, activities resumed as planned.
[8] Mozambique GHSA support for IPC activities concluded in June 2023; therefore, Quarter 4 and subsequent data are not reported.
[9] AMS activities continued at the national level in PY5Q3; implementation of facility-level AMS activities started in July 2023 after approval of the STGs and training materials. In PY5Q4, AMS training was completed in one facility, and in PY6Q1, one other facility completed AMS training; however, no improvement plans were created. In PY6Q2 and Q3, progress was made in three facilities. PY6 activities are a continuation of the PY5 work plan.
[10] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

Annex table 2.5. AS4. Percentage of MTaPS-supported facilities implementing CQI to improve AMS

	Country												
Quarter	Bangladesh[1]	Burkina Faso[2]	Cameroon[3]	Côte d'Ivoire[4]	DRC[5]	Ethiopia[6]	Kenya[7]	Mali[8]	Mozambique[9]	Nigeria	Senegal[10]	Tanzania	Uganda[11]
PY5Q3	100% (9/9)	N/A	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	100% (3/3)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q4	100% (9/9)	N/A	92% (11/12)	85% (17/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	N/A	100% (7/7)	7% (1/13)	100% (10/10)	100% (7/7)
PY6Q1	N/A	30% (3/10)	N/A	100% (20/20)	100% (12/12)	N/A	100% (6/6)	87% (14/16)	N/A	100% (7/7)	50% (2/4)	100% (10/10)	N/A
PY6Q2	N/A	100% (10/10)	N/A	100% (20/20)	50% (6/12)	N/A	75% (6/8)	100% (16/16)	N/A	100% (7/7)	75% (3/4)	100% (10/10)	N/A
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

[1] Bangladesh GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[2] There was no related activity included in the PY5 work plan. In PY6Q1, MTaPS provided supportive supervision to three facilities; in Quarter 2, all facilities received visits and implementing activities as planned. GHSA activities concluded in March 2024 for PY6, thus there are no Quarter 3 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 PY5Q3, San Pedro's AMS committee was not functional. San Pedro got a new CHR, which led to a suspension of the AMS committee's activities. In PY5Q4, data reports were not obtained for three facilities. In PY6, activities and data collection resumed as planned.
[5] In PY6Q2, six facilities did not share the CQI report; thus, data were unable to be collected and verified. In PY6Q3, due to budget, only six facilities could be monitored.
[6] Ethiopia GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.
[7] In PY5 Quarters 3 and 4, 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. MTaPS engagement at the facilities has just begun, with no data to be reported until Quarter 3.

[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] In PY5Q3, four facilities were dropped due to budget constraints. Mozambique GHSA support for IPC activities concluded in June 2023; therefore, Quarter 4 and subsequent data are not reported.
[10] AMS activities continued at the national level through PY5 Quarters 2 and 3; however, implementation of facility-level AMS activities continued to experience challenges because of stakeholder support. In PY5Q4, AMS trainings were completed in one facility and CQI was implemented. In PY6Q1, one additional facility completed AMS training and implemented CQI, and in PY6 Quarters 2 and 3, progress was made in three facilities. PY6 activities are a continuation of the PY5 work plan.
[11] Uganda GHSA support for IPC activities concluded in September 2023; therefore, PY6 data are not reported.

ANNEX 3. QUARTERLY COVID-19 INDICATORS, FY24Q3[20]

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	April–June 2024
	Kenya	1,111
	Rwanda	9
	Total	**1,120**
Sex	Male	620
	Female	500
	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	1,111
	Recording and monitoring COVID-19 vaccination	0
	Communication with the community about COVID-19 vaccination	0
	Other	9

*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	April–June 2024
	Madagascar	1
	Rwanda	3
	Total	**4**
Technical area	Risk communication and community engagement	0
	Surveillance, rapid response teams, case investigation	0
	Laboratory systems	1
	Case management	0
	IPC	0
	Coordination and operations	0
	Vaccines	3

[20] 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 US Government (USG) support among those submitted to country monitoring systems (COV1 [CV.1.5–9])

Portfolio/ disaggregation	Country	April–June 2024
	Kenya	16
	Total	**16**
USG support	Direct support	0
	Indirect support	16
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 health workers who were remunerated by MTaPS to support workload required for COVID-19 vaccine delivery in the reporting period (COV14 [CV.1.3–4])

Portfolio/ disaggregation	Country	April–June 2024
	Côte d'Ivoire	351
	Total	**351**
Sex	Clinical	174
	Community/law	0
	Data management	30
	Supervision and logistics	147

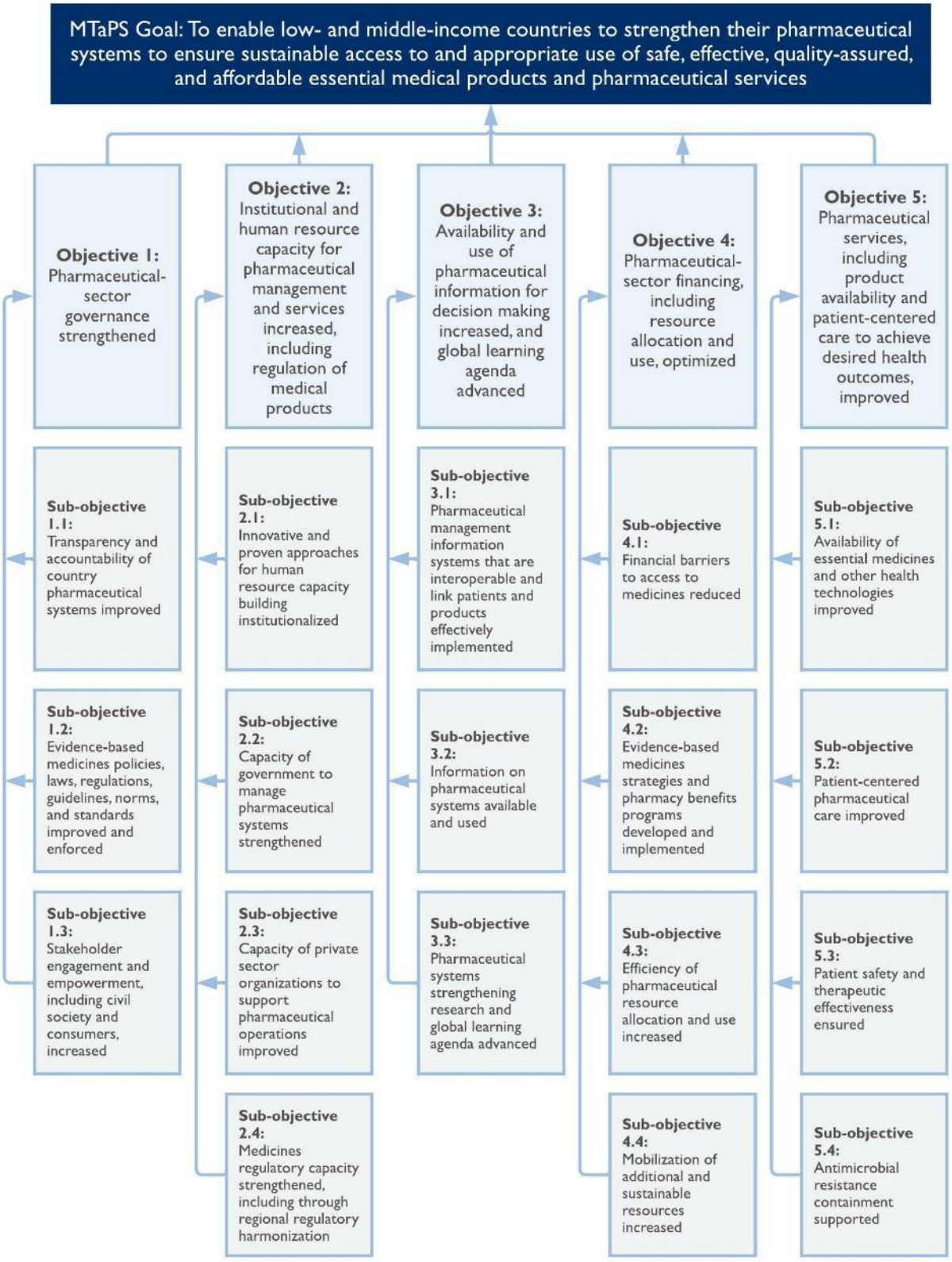
Annex table 3.5. Number of tools (ex. reporting forms, checklists, and job aids) for planning and conducting safety monitoring developed, adapted, or disseminated with MTaPS' support (COV 3. [.7])

Portfolio/ disaggregation	Country	April–June 2024
	Kenya	2
	Total	**2**
Technical area	Establishing surveillance systems	0
	Monitoring and responding to AEFIs	0
	Monitoring and responding to AEs of special interest	0
	Safety data management systems	2
	COVID-19 vaccine safety communication	0

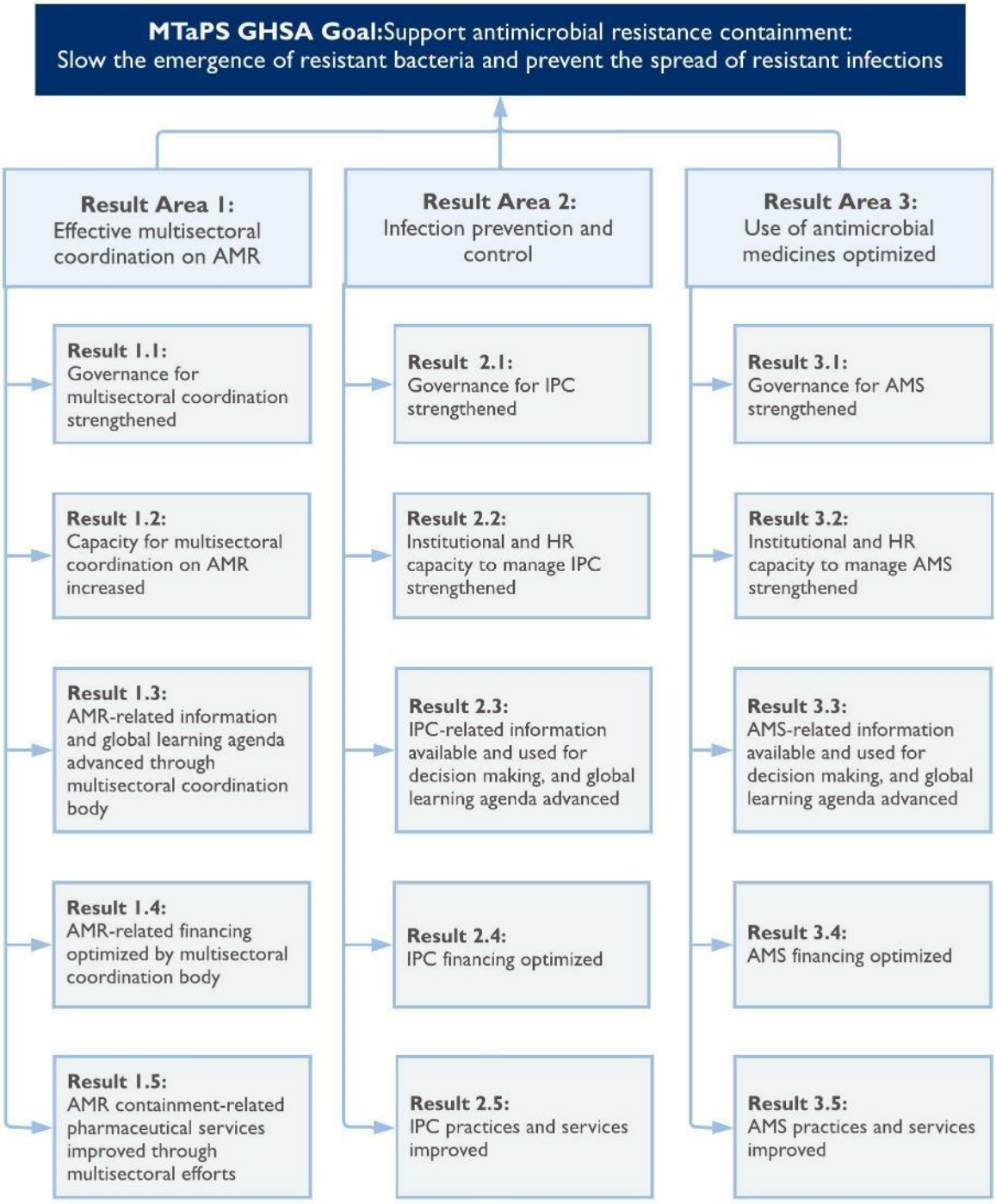
Annex table 3.6. Country has improved the regulatory and/or policy environment for COVID-19 vaccines with MTaPS support (COV 9. [C.2])

Country	April–June 2024
Kenya	Yes

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